LPL Financial Research Who We Are What We Do

A TRUSTED PARTNER



our **goal** is to be your advisor's trusted partner

Our team consists of more than 35 seasoned and accomplished industry veterans, comprising one of the largest and most experienced research groups among independent brokerage firms.

LPL Financial Research applies its portfolio construction process to more than 270 portfolios that your financial advisor may choose from or take into consideration when creating your investment plan. For advisors who just want some assistance with the due diligence on managers, we approve for use or recommend more than 800 of the thousands of managers available on our platforms.

meet our **team**

who we are

Investment Strategy

Manager Strategy

Portfolio Strategy Market Strategy

Custom Solutions

Communications

what we do

Determines economic and asset allocation positioning

Provides due diligence on all our recommended or approved managers

Manages our recommended portfolios

Creates market commentaries and investment ideas

Customizes our research offering to meet the needs of different advisors and clients

Ensures all advice is effectively communicated for a variety of media



LPL Financial Research Investment Philosophy

We are an opportunistic, all-market, all-weather due diligence provider and portfolio manager. Through our investment and portfolio recommendations, we aim to avoid downside and capture upside. To this end, we are conservative when markets are tough and aggressive when they are rising. Though a very broad investment mandate, we believe this is the only way to effectively provide recommendations for our advisors and their clients.

Our mission is to be a trusted partner to our advisors who provide investors like you with choices to help meet your financial goals. In this endeavor, our sole motivation is to provide stellar due diligence and investment management advice — as a partner for those advisors who manage client assets themselves, or as a portfolio manager for those advisors who want to leverage our experience.

LPL Financial Research Is an Opportunistic, All-Market, All-Weather Portfolio Manager

We believe the right posture is to seek opportunities in positive markets and be cautious in down markets to try and avoid those large downdrafts. We seek to add value in all conditions, so we negotiate ever-changing markets using a dynamic and active management style.

We construct portfolios that are very opportunistic, which are considered for tactical positioning (trading as often as daily), and others that are more strategic, which are monitored often, but typically only trade every couple of years.





Independence Is Essential

We believe being independent, unrestricted, and not conflicted by business interests is the only way to provide exceptional advice. The structure of LPL Financial — not having proprietary products, investment banking, or market making facilities — provides the backdrop for unbiased decision making. Our investment team is not involved with the business arrangements of the firm.



Tactical Tilt With a **Strategic** Offering

We believe we can effectively take advantage of opportunities that are presented to us by the markets. Therefore, we believe in tactical portfolio and recommended list management. However, we know that this is not ideal for all clients and, consequently, we offer strategic portfolios and recommendations as well.



Combinations Matter

We believe that how investments combine together is one of the key considerations in investing. Investments have biases—we seek to create portfolios that pair complementary investments together to offset those biases with the goal of a portfolio that performs better than the simple sum of its parts would imply.





Adaptability Is Key

We believe the processes by which investments are run through due diligence and positioned for model inclusion must be evolving. We believe markets, investment options, and data availability change quickly and a process that does not integrate adaptability, flexibility, and subjectivity will miss some key opportunities.



Transparency Is a Must

We believe that we have to be transparent in our input, output, and decision-making process so that our advisors and their clients can be confident in what we are doing. We do not believe in a "black box" approach, as we seek to put as much information out as possible to allow for an understanding of what we are doing, how we are doing it, and why we are doing it.



Versatility Is Critical

We need to offer a broad range of investment advice. The advice we provide is designed to meet the needs of our advisors: some that is asked for specifically, or some that is meant to be leading edge in the investment landscape.



Diversity of Thought

Our overarching beliefs remain the same as does our consistent underlying philosophy and process, with respect to items like the inputs, decision-making committees, monitoring requirements, and other facets. However, we do modify our advice and recommendations as needed to help meet different advisors' and clients' needs.

We believe in the diversity of thought. Therefore, our team is highly collaborative and interactive in the way we manage our recommended list and portfolios. While each organizational team has its individual role, communication among the teams is constant, which is further promoted by our decision-making structures. Our collaborative process between members of our team with specific experience ensures that all of our advice is well diversified, but is also managed and communicated to ensure your trust.

In order to accomplish our goal of being a trusted portfolio manager, we are not conflicted in our decision making. We do not believe that you can make reliable investment decisions if conflicts are present. LPL Financial Research has no conflicts that may impede us from providing unbiased research. We are compensated based on what is most important to you: the performance of our recommended models and investments.

LPL Financial Research as Due Diligence Provider

Some investments appear sound, but are really based on luck instead of skill—and, at some point, luck does run out. Other investments are only appropriate for those who understand the complexities and issues involved and are financially and emotionally willing to take on those risks. Our goal is to help vet the vast universe of available products and provide guidance about which ones we believe are sound and what type of investor they may appeal to.



A Closer Look at What We Recommend

A plethora of investment products are available to investors including mutual funds, exchange-traded products, variable annuities, and alternative investments—all of which have many moving parts that can be a daunting task to track and monitor. Mutual fund managers may alter their investment style or switch from managing one fund to another. Exchange-traded products (ETPs), the term we use to include exchange-traded funds (ETFs), exchange-traded notes (ETNs), and closed-end funds (CEFs), are growing quickly. Newer, more exotic products that invest in derivatives, such as futures contracts or swaps, or use leverage, may behave differently than your expectations due to features of their underlying holdings. Variable annuity subaccounts are ever changing, and requirements about what can be held where continue to evolve with annuity riders and other considerations. Some alternative investments may not offer sufficient transparency, which can be worrisome considering all the mistrust that has surfaced in recent years.

Our analysts conduct traditional due diligence, which consists of both quantitative and qualitative research. Our main goal is to learn about the firm, portfolio managers and other investment personnel, as well as their investment strategy and process. We use both proprietary and third-party analysis to accomplish these goals. Both recommendations and approvals are important—there are times when we feel comfortable making a formal recommendation and there are others, when additional factors are in place, where we simply provide manager approvals. We provide in-depth due diligence and recommendations on open-end mutual funds, separately managed accounts, variable annuity subaccounts, and ETPs. Additionally, we approve all other separately managed account managers, third-party investment advisors, and alternative investments with assistance from internal business partners.

LPL Financial Research

Due Diligence Process

Initial Screening

Refining the Investment Universe

The investment universe is comprised of thousands of mutual funds, separate accounts, exchange-traded products, subaccounts, and more. Our initial screens focus on identifying managers within the universe that meet the criteria we are seeking. We may be seeking an individual manager for our recommended list or a complementary manager for one of our portfolios.

Quantitative Analysis

Look At All the Numbers

The goal of the quantitative screen is to take our list of initially screened managers down to a short list of managers we believe have the correct characteristics we are searching for. Quantitative analysis plays a large role, as we can assess the market environment and screen on those factors we believe are the most relevant to our search. We screen on a variety of statistics—which ones we focus on depends on the reason for our search. With quantitative analysis, we will greatly reduce the list.

3. Qualitative Analysis

Develop an Investment Thesis

At this point, we need to dig deeper to find out how the manager has arrived at its track record, understand why that track record has acted the way it has in the past, and get a sense of how it may act going forward. Each manager tends to have a different investment approach, and it is important for our team to know what that is and if it is the correct approach we are looking for in a certain search. Once we have a short list of managers we deem have the right characteristics, we need to visit with the key decision makers. By visiting with the team, we can look at the quantitative data and see if its historical performance can be understood. We want to walk away with knowledge of how the team and process work, management's biases and philosophy, and expectations of how the investment will act in all market environments. After this phase, we should have intimate knowledge of the manager we believe is the most appropriate for this search.

4. Stress Tests

Presenting to the Committee

Now we are ready to present the manager to the internal decision-making committee for the final decision. The committee stress tests the analyst's investment process and recommendation. This collaborative effort allows us to be confident that the recommendation is correct for this search. The final recommendation is made to advisors and their clients.

5. Ongoing Monitoring

Our Work Continues

The ongoing monitoring of any recommended manager and why we would remove our recommendation is as paramount to our process, as the initial decision to recommend the portfolio. Continuous monitoring of performance, the investment management team, and the firm is conducted. The performance of the manager has to fall in line with our expectations. Changes in the performance profile, team, process, or philosophy are all causes for us to reassess the investment's suitability. Should a change occur in which we are uncomfortable going forward, the analyst will present the details to the internal decision-making committee with a recommendation on further actions. If warranted, your advisor will be promptly notified of said decision.

LPL Financial Research Portfolio Theme Descriptions

Alpha Focused

Alpha Focused portfolios seek higher excess return but with higher overall volatility.

Capital Appreciation

Capital Appreciation portfolios aim to derive the majority of their excess return from exploiting tactical opportunities in the market.

Downside Risk Aware

Downside Risk Aware portfolios seek to outperform, especially in down markets, by lowering overall volatility and minimizing surprises.

Income Focused

Income Focused portfolios attempt to generate significantly higher overall yields with a secondary goal of moderating volatility.

Quad-Core

Quad-Core portfolios are based on our four-pronged approach, which provides a more diversified portfolio management process and includes LPL Financial opportunistic ideas, diversifying strategies, counterbalancing alternative strategies, and hedging strategies.

Socially Responsible

Socially Responsible portfolios utilize socially responsible investments and adhere to differing sets of social objectives or constraints.

Tactical Opportunities

The Tactical Opportunities portfolio seeks to be highly concentrated in our best ideas and has the most broad investment mandate and flexibility. It aims to be among our most aggressive in up markets and among our most conservative in down markets.

Tax Aware

Tax Aware portfolios seek to minimize the impact of taxes and are made up of investments that explicitly pursue a tax aware strategy or have historically shown a penchant for minimizing realized taxes.



They've Got Style Part of a Manager's Bias Can Be Driven by Style

Within an asset class, there can be multiple styles and variations, and each will act independently in a given market condition. LPL Financial Research focuses on finding the managers that best represent each sub-style within an asset class. Even the best sub-style manager may underperform when market conditions cause its sub-style to be out of favor. Therefore, we also try to find all-weather managers, who tend to perform well regardless of what sub-style is out of favor.

Portfolio Construction and Management

When viewing an overall portfolio, its characteristics and behavior are more important than any one of the individual pieces of which it is comprised. We believe this is the most important concept in portfolio construction. In building portfolios, the Portfolio Strategy Group heavily leverages Manager Strategy analysts to understand and track manager biases. We believe that even the best managers exhibit biases such that they perform in certain ways during different market conditions. When we have a strong understanding of which factors drive performance and are confident they can persist, we can then combine managers to exploit opportunities we see in the market and create robust combinations that we believe can outperform in numerous market environments.

A key instrument utilized in this process is the Scenario Attribution Tool (SAT), which LPL Financial Research has developed in order to assist in this endeavor. It has the power to combine different return streams of individual and combinations of investments to determine which arrangement makes the most sense for the market environment we expect, as well as help to determine what margin of safety we might have if our predictions are wrong. Collaboration and the right tools are integral to mastering this process.

Portfolio Monitoring

There is a high degree of monitoring of the portfolios once they are constructed. Portfolio construction helps us buy and dashboard analysis helps us track what we actually bought and now own. The goal is to have a deep understanding of what the portfolio holds, what external factors it is exposed to, how explicit risks are being rewarded by the market, and what implicit risks are being taken for which we need to watch out. The Portfolio Strategy Group has developed a series of internal dashboards, some of which we make available to your advisor, that address each of these aspects individually.

A Dashboard for All Occasions

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Monitors relative performance	
Determines rolling excess return trends	
Monitors our allocations to underlying model holdings in dollars	
Provides a snapshot of our positioning	
Tracks our underlying holdings	
Examines breadth of returns-based factor exposures	
Determines our overall risk stances relative to market conditions	
Highlights the figures that are rolling off our rolling performance totals	
Compares our models' characteristics versus the universe	
Details how valuations are trending	

Types of Asset Allocation Strategic/Tactical

LPL Financial Research provides advice on both strategic and tactical asset allocation models across the investment platforms that are available to you and your advisor. The key difference between these two types of advice is the timeframe over which we are targeting investment opportunities. Our strategic asset allocation process looks out over a three- to five-year time period. Quarterly, we retest the strength of our asset allocation recommendations. However, we do not anticipate making adjustments until "halftime" of our strategic timeframe, which generally is about every two to three years. If significant market fluctuations warrant a change, however, we may make adjustments sooner, though we anticipate this being a very rare occurrence. In contrast, our tactical asset allocation looks out over a three- to 12-month time horizon.

Building Blocks of Strategic Asset Allocation

The essential building blocks of any asset allocation process and its subsequent recommendations are to first understand the overarching philosophy of the process. This helps drive the LPL Financial Research strategic asset allocation process detailed on page 14.

Price Matters

There is really only one rule that works in investing: buying low and selling high garners positive returns. We believe knowing the price of an asset class relative to its historical trends may help to determine the future price of that asset class. In the end, one can only achieve an average rate of return if one starts at an average price, by focusing on market opportunities that are poised to benefit from reversion to the mean*. Thus, we believe that where one starts is a key determinant of where one ends up.

No Value Premium

We do not agree with an industry misconception that there exists a value premium, which implies that the value style is a fundamentally better investment than growth. In the end, the value style is not always undervalued relative to growth. Thus, our price matters belief drives our process to focus on the style, value, or growth, which has the best opportunity for future success. We believe that allocations between value and growth should not be predicated on an imbedded value premium, but rather which offers the better chance of future success.

No Small Cap Premium

Similar to the value premium argument, the industry has a misguided belief that small cap stocks offer a return premium over large cap stocks. Small and large company stocks can be attractive under different market conditions, but neither offers a consistent return premium over the other. Thus, we believe allocations between different market caps should not be based on an implied premium, but rather which offers the better future investment opportunity.



More Diversification

Though we aim to position the portfolios toward the most attractive asset classes, there is always the risk of being wrong. A hedge for being wrong is to diversify. We believe allocating assets to more investments than less—if done with consideration to how those investments combine—is prudent.

No International Premium or Discount

With continued globalization, some of the inherent risk exposure and return benefits historically present in international investing are becoming more negligible. Therefore, international investments should be viewed as another option in the asset allocation puzzle—on par with other domestic equity investments. We believe there is not an inherent premium or discount in international investing.

Implementation Matters

There are three levels of asset allocation: strategic asset allocation, tactical asset allocation, and implementation. The best strategic asset allocation or tactical asset allocation is irrelevant if one cannot invest to take advantage of potential opportunities. We believe in creating an asset allocation recommendation, and we must ensure the resulting strategy can be optimally implemented.

Spotlight Individual Asset Classes

Each asset class being considered for usage in our asset allocation models deserves its own set of internal expected return and risk assumptions. Simply making assumptions for the core asset class and then dividing the consequent allocation to get style or cap allocations is not effective. We believe all asset classes are not equal—nor should their expected risk and return assumption be.

Manage Cash Too

Cash is an important component of a portfolio. It can offer downside protection qualities and reduces the need for multiple transactions when clients need distributions. However, our goal is to garner long-term returns above those attained by cash. We believe, therefore, that the right balance of return potential and distribution convenience needs to be weighed at all times when establishing the strategic and tactical weights to cash.

LPL Financial Research

Strategic Asset Allocation Process



Investment Philosophy

Review beliefs that provide guideposts to assure constant application of a disciplined investment philosophy.



Building Blocks

Establishment of investment objective definitions, terminology, and timeframes.



Baseline Assumptions

Perform a high-level analysis of stocks, bonds, nontraditional asset classes, and cash allocations, along with benchmark compositions.



Determine the Opportunity Set of Asset Classes

Focus on asset classes to analyze.



Make Adjustments to Baseline Allocations

Adjust the baseline calculations on where strategic allocations should be regarding style, size, and other factors.



Calculate the Preliminary Strategic Weights

Calculate the initial strategic weights for each investment objective using parameters and variables set in prior steps.



Incorporate Capital Market Assumptions

Analyze expected return, expected volatility of returns, and expected correlation for the various asset classes available as potential model components.



Fire Up the Optimizer

Input capital market assumptions and let the software highlight various complements of risk and return for each investment objective.

- Set common sense limits on the amount of allocations.
- Output of initial asset allocation lead to sensibility check and investment tweaks.



Determine the Final Strategic Asset Allocation Model Weights

- Apply "art" to the science and shift weights to ensure that models can be effectively implemented and meet client needs.
- Roll out optimal asset allocation models.

Basics of Our Tactical Asset Allocation

LPL Financial Research believes fundamental, technical, and valuation factors form the basis of a sound tactical investment decision-making process. How they combine and which takes precedence when making an optimal investment decision changes depending on the scenario. The reason is that successful investing does not always follow a basic "rules-based" decision-making framework. Rather, a better way to make investment decisions is to follow a structure that offers the rigidity of a process, but the flexibility to identify which factors are the most significant given the market environment and the investment opportunity being considered.

Within this tactical multi-pronged framework, we are essentially trying to answer four questions:

How Should an Investment Act?

What Is the **Market** Telling Us About the Investment?

What Price Are We Willing To Pay for the Investment?

At What Price Would We Sell?

No single approach to investing has proven to always be best. Therefore, we believe the discipline of our Fundamentals/Technicals/Valuations approach is a great model to help maximize the reward/risk relationship.

Fundamental Analysis

The profit outlook for an underlying investment based on earnings and the economic cycle.

Technical Analysis

Potential market trends revealed through the analysis of market data.

Valuation Analysis

The price of an investment relative to what it is or will be worth.

IMPORTANT DISCLOSURES

The opinions voiced in this material are for general information only and are not intended to provide any specific advice or recommendations for any individual. To determine which investment(s) may be appropriate for you, consult your financial advisor prior to investing.

Past performance is no quarantee of future results.

Tactical portfolios are designed to be monitored over a shorter time frame to potentially take advantage of opportunities as short as a few months, weeks, or even days. For these portfolios, more timely changes may allow investors to benefit from rapidly changing opportunities within the market.

The strategic asset allocation process projects a three- to five-year time period. While the strength of the asset allocation decisions is retested often, we do not anticipate making adjustments until midway through the strategic time frame, which generally is about every two to three years. If significant market fluctuations warrant a change, adjustments may be made sooner.

International and emerging market investing involves special risks such as currency fluctuation and political instability and may not be suitable for all investors.

Small Cap stocks may be subject to a higher degree of risk than more established companies' securities. The illiquidity of the Small Cap market may adversely affect the value of these investments

Stock investing involves risk including loss of principal

Nontraditional investments may not be suitable for all investors and should be considered as an investment for the risk capital portion of the investor's portfolio. The strategies employed in the management of alternative investments may accelerate the velocity of potential losses.

*Reversion to the mean: The tendency for high or low prices and returns to eventually move back toward their long-term average.

There is no assurance that the techniques and strategies discussed are suitable for all investors or will yield positive outcomes. The purchase of certain securities may be required to effect some of the strategies. Investing involves risks including possible loss of principal.

This research material has been prepared by LPL Financial.

To the extent you are receiving investment advice from a separately registered independent investment advisor, please note that LPL Financial is not an affiliate of and makes no representation with respect to such entity.

Not FDIC/NCUA Insured | Not Bank/Credit Union Guaranteed | May Lose Value | Not Guaranteed by any Government Agency | Not a Bank/Credit Union Deposit

