

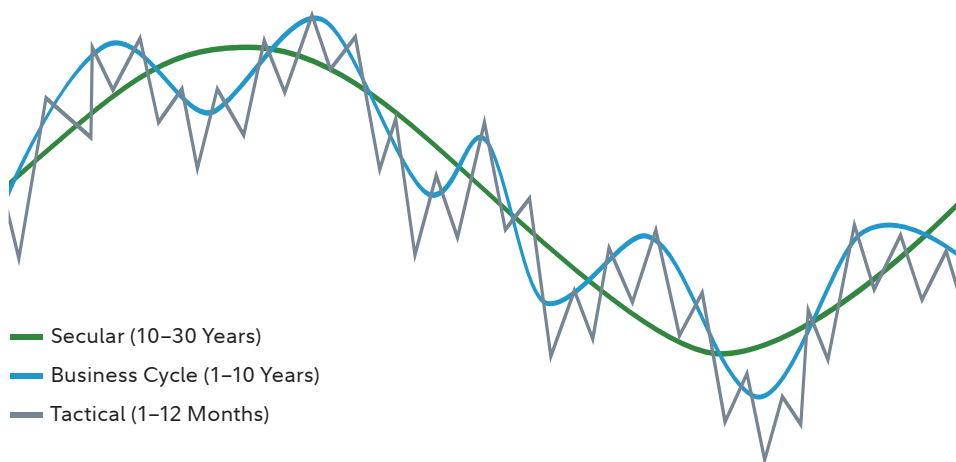
The Asset Allocation Research Team Framework

Asset Allocation Research Team

Multi-Time Horizon Asset Allocation Framework

Our framework begins with the premise that long-term historical averages provide reasonable baselines for portfolio allocations. However, over shorter time horizons—30 years or less—asset price fluctuations are driven by a confluence of various short-, intermediate-, and long-term factors that may cause performance to deviate significantly from long-term historical averages. For this reason, incorporating a framework that analyzes underlying factors and trends among the following three temporal segments can be an effective asset allocation approach: tactical (1 to 12 months), business cycle (1 to 10 years), and secular (10 to 30 years).

MULTI-TIME HORIZON ASSET ALLOCATION FRAMEWORK Dynamic Asset Allocation Timeline



Portfolio Construction

Asset Class | Country/Region | Sectors | Correlations

For illustrative purposes only. Source: Fidelity Investments (Asset Allocation Research Team).

Philosophy

The Asset Allocation Research Team believes that economic fundamentals provide the backdrop for asset markets, influencing corporate earnings, interest rates, inflation, and many other factors that affect the returns of stocks, bonds, and other asset classes. The methodology for our approach combines empirical research with foundational principles underlying relationships between economic growth and asset performance.

We believe that by understanding the fundamental drivers of each asset class—based on historical observations and interrelationships spanning several decades and countries in different stages of development—we can execute a more comprehensive, global, and forward-looking approach to asset allocation, providing better risk-adjusted returns for different investment needs and time horizons.

We assign individual analysts and particular streams of research to each of the three specific durations, allowing clearer investment conclusions when short-, medium-, and long-term trends move in different directions.

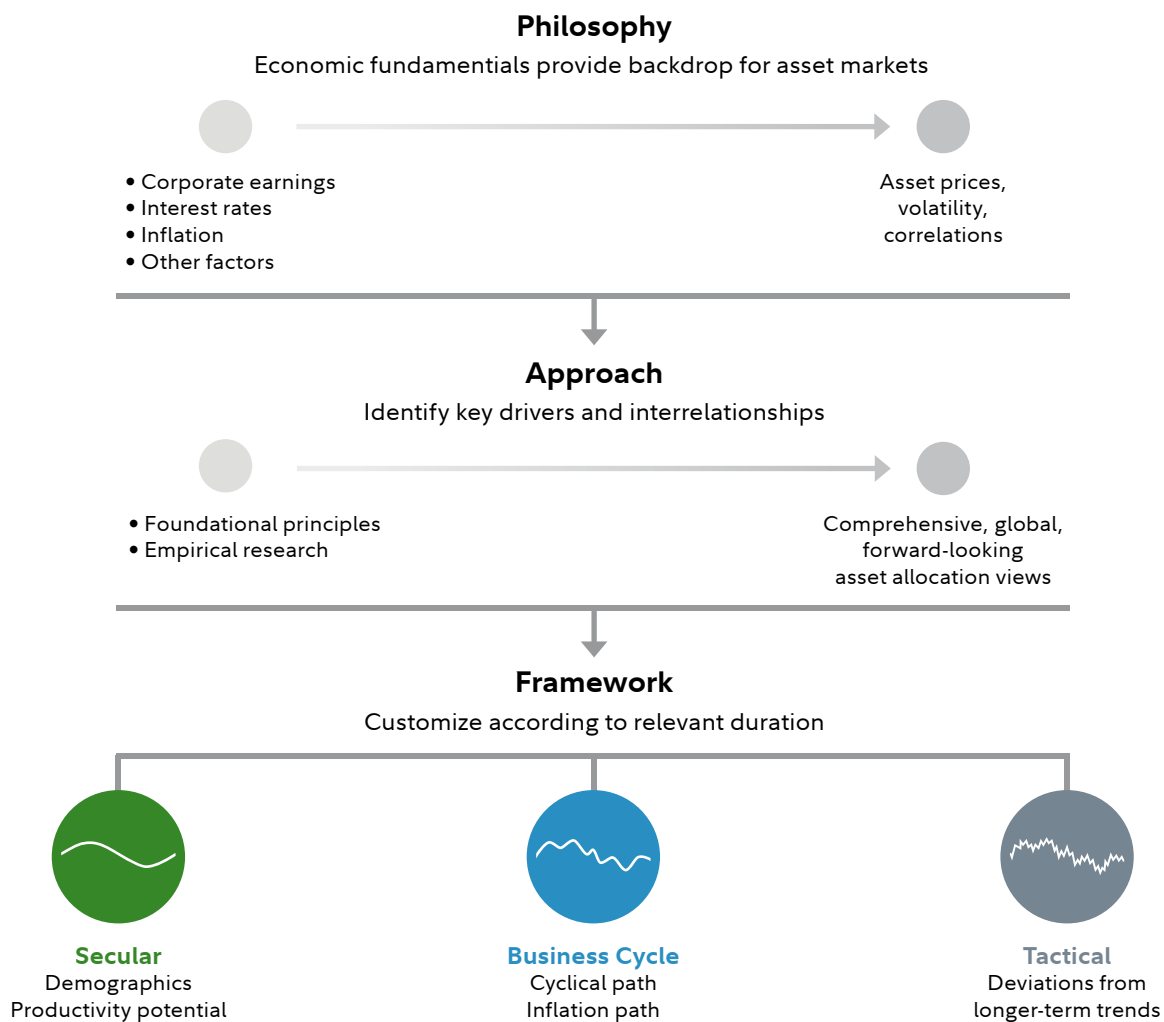
This duration-based approach allows us to formulate conclusions customized to the specific objectives and time horizons of particular investment strategies, while also allowing us to synthesize our analysis to provide holistic asset allocation recommendations. The following sections provide more detail about the different time horizons within the overall framework.

Secular

Over the long-term, asset performance is heavily influenced by economic trends that evolve over

extended periods of time, such as demographic changes and productivity growth. Our secular approach employs a research-based, multifaceted process to develop 20-year capital market assumptions for our asset allocation strategies. This comprehensive global approach is underpinned by fundamental analysis, across all geographies, of the core drivers and the principal linkages between economic trends and how they affect the performance of various asset classes.

Because we view the economy as the backdrop for equity and bond markets, we begin developing our long-term asset return and volatility assumptions by establishing 20-year forecasts of each country's real gross domestic product growth (described in "Secular



For illustrative purposes only. Source: Fidelity Investments (Asset Allocation Research Team).

Outlook for Global Growth: The Next 20 Years”). Next, we identify the connections between GDP growth and asset class performance and translate them into specific asset assumptions. For example, economic growth and government bond yields tend to be highly correlated, so our real GDP forecasts provide the basis for our 20-year government bond forecasts. For equity markets, we refine our economic forecasts into return on equity estimates for each country that incorporate measures of leverage, sector composition, and corporate market productivity, which may be different from economy-wide averages. We then apply valuation adjustments for both bonds and stocks that consider the starting point for bond yields and price-to-earnings ratios, in addition to their expected convergence to secular levels over time.

Business Cycle

Over the intermediate term, asset performance is often driven largely by fluctuations in the economy, specifically, the swings in cyclical factors such as corporate earnings, interest rates, and inflation. The business cycle, which is the pattern of these cyclical fluctuations in an economy over many months or a few years, can therefore be a critical determinant of asset market returns and the relative performance of various asset classes. Our quantitatively backed approach utilizes high-quality economic indicators to identify the shifts and inflection points between the business cycle’s four distinct phases: early cycle, mid-cycle, late cycle, and recession (see “The Business Cycle Approach to Asset Allocation”). Every business cycle is different in its own way, but certain patterns have tended to repeat themselves over time. Fluctuations in the business cycle are essentially distinct changes in the rate of growth in economic activity, particularly changes in three key areas—the corporate profit cycle, the credit cycle, and the inventory cycle—as well as changes in the employment backdrop and monetary policy. Business cycle fluctuations have different effects on asset classes, with more economically sensitive assets (e.g., stocks and high-yield bonds) performing well when the economy is improving and more defensive assets (e.g., investment-grade bonds and cash) performing well when economic conditions

are deteriorating. Our approach provides a framework for making asset allocation decisions according to the probability that assets will outperform or underperform in a given business cycle phase.

Tactical

Over shorter time periods, markets can deviate from their longer-term trends. When market biases and perceived asset values diverge from fundamental factors, these dislocations can offer opportunities for attractive entry and exit points. Our tactical approach seeks to understand the fundamental drivers of each asset class, which then allows us to identify tactical opportunities. Crucial to our approach is the ability to recognize catalysts and inflection points as markets move toward longer-term trends identified in our business cycle and secular research. In a portfolio context, we apply our understanding of asset class fundamentals and their correlations to improve trade recommendations once we identify the market dislocations. Our rigorous framework allows us to modify our tactical recommendations based on our level of conviction, while managing risk through our familiarity with the relationships among the different market factors and asset classes.

Portfolio Construction

Our duration-based asset allocation framework provides a thorough understanding of asset characteristics across various time horizons, which we then use to derive conclusions about portfolio construction. By analyzing the returns, risk, and correlation characteristics of various asset classes across different durations, we can draw conclusions about how changing macro and market conditions may affect the relationships among the various asset categories, and we can develop insights on how to combine assets based on these expectations. Because our analysis disaggregates economic drivers across asset classes for short-, intermediate-, and long-term time horizons, portfolio managers can use our research to focus on the signals that are most relevant to the individual objectives and constraints of a particular investment strategy.



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