

Research Portfolios Primer

Philosophy and Process

Primer

Insight into our approach

This primer is a reference for anyone investing in or considering an investment in the Equity Research Portfolios. It provides a comprehensive look at how we think about investing and risk.

Portfolios for different objectives

The Portfolio Strategy team, with approximately 20 years of experience on average, manages a diverse set of equity portfolios across six different strategies: Large Cap Defensive, Growth, Income, Income & Growth, International and Mid-Cap.

Bottom-up approach with top-down overlay

Our goal is to maximize risk-adjusted returns, while staying true to the individual portfolio objectives. Portfolios are constructed using bottom-up fundamental analysis along with top-down sector views.

Leverage our global research department

BofA Global Research has a robust global research platform and our team leverages its expertise with the goal of generating performance through stock selection.

Alpha: focus on stock selection, less on sector allocation

We look to generate excess returns from stock selection rather than sector allocation. Accordingly, we typically keep our portfolio sector weights within a reasonable band around the relevant benchmark sector weights. However, we maintain the flexibility to deviate from the benchmark weights in the event of extraneous market events.

Concentration = Conviction

We tend to construct more concentrated portfolios, typically holding 30-45 stocks. Holding fewer stocks allows us to gain a deeper understanding of companies and more conviction in an investment idea. We remain diversified through owning stocks across many different sectors and geographies.

Managing risk is integral to our process

Risk management is an integral component of the team's investment process. We think the ability to manage risk during different market conditions is often times a better indicator of successful portfolio management. We have an in-house, independent risk manager who informs us of the implications of decisions we make around the portfolios.

Low turnover and tax efficiency

We want to keep portfolio turnover at modest levels. This will vary depending on portfolio strategy; less for conservative, more for aggressive. Under each circumstance, we remain mindful of tax efficiency in order to ensure the best investor experience.

Trading ideas and investment strategies discussed herein may give rise to significant risk and are not suitable for all investors. Investors should have experience in relevant markets and the financial resources to absorb any losses arising from applying these ideas or strategies.

BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Refer to important disclosures on page 16 to 18.

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United States

Research Portfolios
BofAS

Derek Harris
Portfolio Strategist
BofAS
derek.harris@bofa.com

Evan Morris
Portfolio Strategist
BofAS
evan.morris@bofa.com

Andrew Shields, CFA
Portfolio Strategist
BofAS
andrew.shields@bofa.com

Thomas Hopkins
Portfolio Strategist
BofAS
thopkins2@bofa.com

Justin Devery
Portfolio Strategist
BofAS
justin.devery@bofa.com

Julia Saravalle, CFA
Portfolio Strategist
BofAS
julia.saravalle@bofa.com

Shadab Shahzad Ali
Portfolio Strategist
BofAS
shadab.ali@bofa.com

Honorat Guidi
Portfolio Strategist
BofAS
honorat.guidi@bofa.com

[See Team Page for List of Analysts](#)

Exhibit 1: Equity Research Portfolio Codes

Portfolio codes

Investment Strategy	Code
Equity Income	28S00868
Equity Income & Growth	28S02572
Equity Large Cap Defensive	28S00872
Equity Growth	28S00870
Equity Mid Cap	28S00876
Equity International	28S00873

Source: BofA Global Research

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Overview

Exhibit 2: Portfolio Risk Spectrum and Investment Styles

The Research Portfolios span from conservative to more aggressive risk profiles

Most Conservative

Most Aggressive

Portfolio	Large Cap Defensive	Income	Income & Growth	Growth	International	Mid-Cap
Investment Style	Defensive Core	Income/Value	Core	Growth	International	Mid-Cap

Source: BofA Global Research

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The Equity Research Portfolio team consists of eight investment professionals who sit alongside the BofA Global Research department in New York, where the majority of our US analysts are based. Central to the team's decision making process is strict adherence to the Global Research Risk framework.

As a team, we manage a diverse set of equity portfolios across six different strategies: *Large Cap Defensive*, *Growth*, *Income*, *Income & Growth*, *International* and *Mid-Cap*.

Our team's average tenure in the financial industry is approximately 20 years and our backgrounds are diverse, across Portfolio Management, Equity Research, Portfolio Risk, Credit Risk, Trading, Audit and Marketing. It is important to look at the entire capital market structure in order to gain a real appreciation of risks evolving in the market. The varied industry experience of our team lends well to their understanding and implementation of this approach.

Each Portfolio Strategist has built strong relationships with individual equity research analyst teams across different industries and sub-sectors. We think that taking this wider approach to sector coverage, rather than having a more narrow, sector specific focus, allows for a broader knowledge base that is more beneficial to managing diverse portfolios.

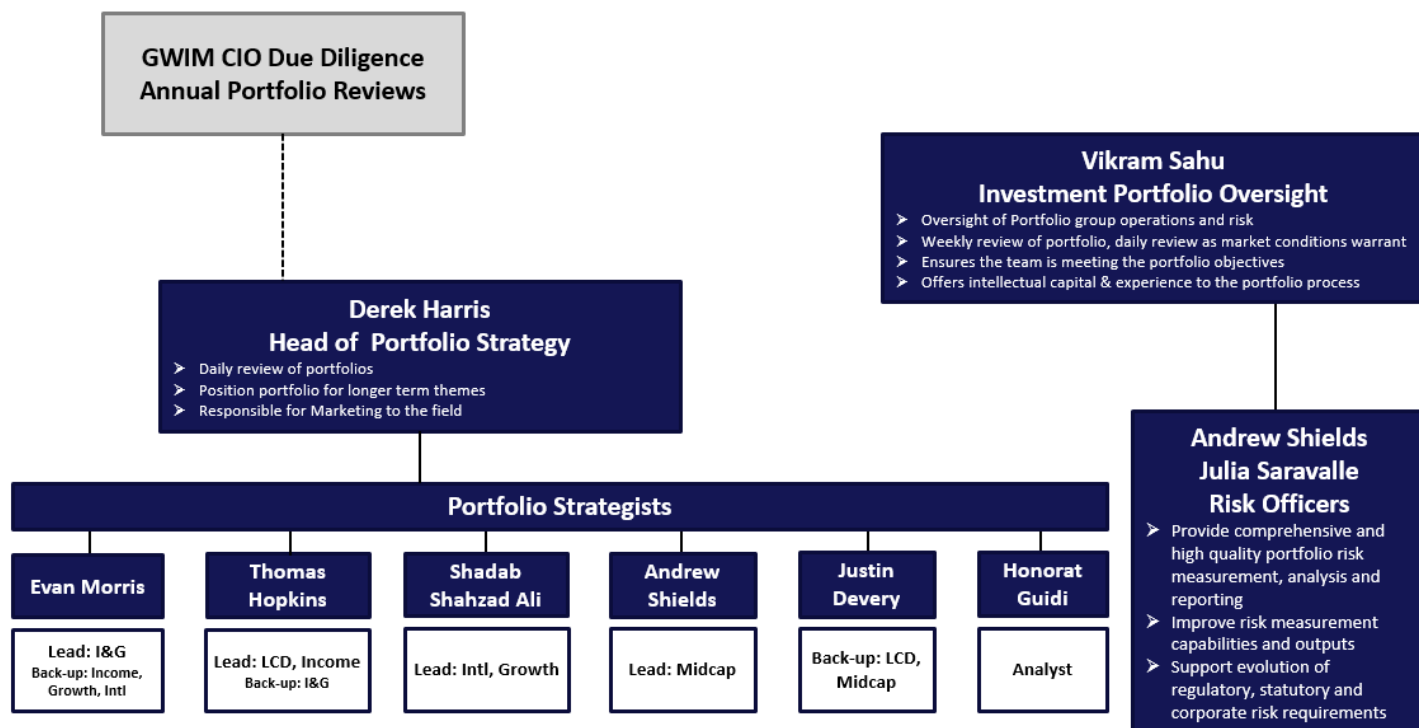
The Portfolio Strategist(s) reads research published by the respective analyst teams to gain a deeper understanding of industries and companies. The Strategist engages in regular dialogue with the analysts either to get an update on current holdings or to have more in depth analytical conversations about potential additions or deletions to a portfolio.

Andrew Shields and Julia Saravalle are the Portfolio Strategy team's Risk Managers. They act as independent, unbiased advisors to the portfolio team and inform us on the implications of the decisions we make around the portfolios. To maintain this independence, they report directly into Vikram Sahu, a member of research management who provides independent governance for the portfolios. He regularly reviews the actions of the group to ensure the team is conforming to the Global Research Risk framework and is taking the proper steps to achieve the portfolio objectives. Julia Saravalle acts as the risk manager for the Midcap strategy which Andrew Shields manages to maintain independent risk oversight.

Risk oversight also is conducted at the team level, as portfolio holdings are constantly being monitored by the team, with each Strategist responsible for one or more portfolios (Exhibit 3). This includes reviewing and communicating to the team incremental news flow or uncharacteristic stock price moves. To aid in this process, we leverage our technology to deliver regular customized alerts from sources such as Bloomberg, FactSet, Omega Point or the BofA Global Research department.

Exhibit 3: Portfolio Strategy and Risk Management team

Team structure



Source: BofA Global Research

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Investment Philosophy

Our goal is to maximize risk-adjusted returns, while staying true to the individual portfolio objectives. We strive to generate consistent returns with lower volatility than the commensurate benchmarks.

Our primary focus is to generate performance through stock selection. We achieve this by leveraging BofA Global Research's Risk framework and its robust global research team. Generally our approach is to avoid sizeable variations in sector weightings from the benchmark. However, at times, we may deviate from benchmark weights to reflect our broader market views or to better position a portfolio to meet its objective.

We marry fundamental analysis with a valuation framework, all while considering both absolute and relative metrics. This framework, along with our conviction in a fundamental thesis, help to create a consistent buy and sell discipline that also assists in position sizing. This also may allow us to capitalize on market dislocations.

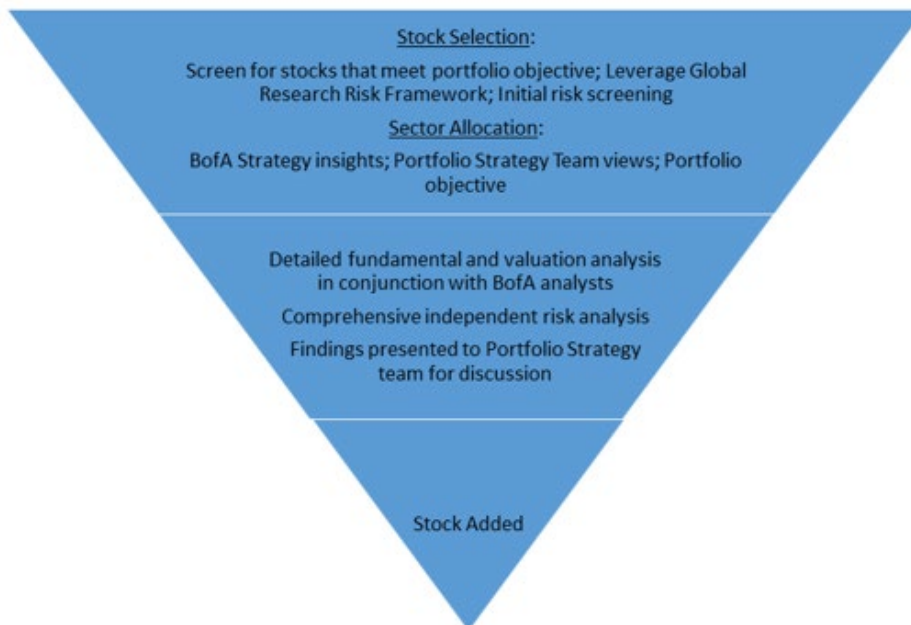
We manage our portfolios with fewer stocks than the relevant benchmarks, but remain keenly aware of the importance of diversification, which we achieve by owning stocks across many sectors, subsectors and geographical locations. Holding fewer stocks allows us to gain a deeper understanding of a company's fundamentals and in turn, greater conviction in an investment idea.

Generating performance is only one part of portfolio management, in our view. Risk management is of equal importance in an attempt to minimize losses and provide the best investor experience. We think the ability to manage risk during different market conditions is a better indicator of a successful portfolio manager, rather than taking unnecessary risks to drive performance.

We view risk management as an integral component of the team's investment process and use a defined framework to provide guardrails for the portfolio. We view risk in four primary categories; Absolute, Relative, Forward-Looking and Backward-Looking. The team employs a number of tools to help mitigate known and unknown risk, including trade simulation, portfolio optimization and stress testing.

Exhibit 4: Investment decision process

How stocks are added



Source: BofA Global Research

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Process and Framework

Investment Selection

1. Stock Selection:

- Run proprietary screens to identify stocks which alone or in conjunction with other stocks, help to meet the objective of an individual portfolio. For example, in the Income & Growth Portfolio, we screen for companies that meet our dividend yield, sales and earnings growth thresholds. This is in contrast to the Income Portfolio where dividend yield is the primary variable.
- As part of the screening process, we leverage the BofA Global Research Risk Framework. We can only hold stocks which are either Buy or Neutral rated by BofA Global Research analysts. We also consider BofA Global Research's income and volatility ratings.
- If a stock(s) passes the initial screen(s), the Portfolio Strategy team works very closely with the covering analyst(s) to perform more detailed fundamental analysis. This collaborative process allows us to determine if a stock helps to meet the objective of a portfolio.
- For the stock or stocks which are to be considered for inclusion into a portfolio, a member of the Portfolio Strategy team will do a summary write up, which includes items such as company description, investment thesis, upside/downside risks and valuation.
- Simultaneously, the Strategist sends stock or stocks to the Risk Manager who runs simulations to provide an unbiased analysis on the potential impact that the proposed changes will have on the risk profile of a portfolio. He also examines whether the changes are additive in meeting the portfolio objective.
- The fundamental write-up and risk analysis are presented to the entire Strategy Team and a collective determination is made as to whether those securities should be added to a portfolio.
- If a stock in the portfolio is downgraded to an Underperform rating by the BofA Global Research department, it must be sold. Other reasons for selling a stock include: 1) our conviction in the fundamental thesis has changed, regardless of stock performance, and 2) We sell or reduce a position when the risk/reward is no longer skewed favorably.

2. Sector Allocation:

- The Portfolio Strategy team has the ability to deviate from benchmark sector weightings.
- However, our philosophy is not to deviate meaningfully from the benchmark sector weights as we do not look to take large sector stances. We see this as potentially adding unintended risks over time and create more volatility.
- We maintain the flexibility to deviate at times if it helps to meet the portfolio objective, see market dislocations, or during periods of market excess or shock.
- Our sector weights are determined based on a combination of three factors:
 - The collective views of the Portfolio Strategy team on macro and micro factors such as the outlook for the global economy, global risks/opportunities, sector and/or market valuations and sector trends



- The objective of the individual portfolios. For example, the Income portfolio may be weighted more toward income-oriented sectors such as Consumer Staples or Financials, whereas the Growth portfolio may be weighted more toward Technology.
- The views of BofA Global Research's strategists

Exhibit 5: Sector weights by portfolio strategy

As of 12/31/2023

	Large Cap Defensive	Income	Income & Growth	Growth	Midcap	International
Communication Services	6.0%	5.4%	5.6%	11.8%	1.0%	1.8%
Consumer Discretionary	11.9%	8.1%	14.6%	15.2%	8.4%	13.5%
Consumer Staples	5.0%	5.2%	9.1%	2.8%	4.8%	6.5%
Energy	5.1%	11.0%	5.0%	1.8%	3.9%	6.2%
Financials	17.2%	22.3%	14.7%	6.1%	17.2%	16.1%
Health Care	11.8%	12.5%	10.7%	11.7%	9.9%	10.7%
Industrials	8.5%	10.8%	10.9%	5.3%	17.1%	10.4%
Information Technology	26.9%	14.0%	25.3%	44.3%	17.3%	15.8%
Materials	0.0%	0.0%	0.0%	0.9%	8.2%	6.7%
Real Estate	4.6%	8.8%	4.1%	0.0%	6.3%	0.0%
Utilities	3.0%	1.8%	0.0%	0.0%	5.9%	3.4%
ETF	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%

Source: BofA Global Research

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Valuation Framework:

- In conjunction with our fundamental analysts, we employ a valuation framework in our investment selection process. This is used when determining whether to add a position to a portfolio, but also whether to exit or reduce a position.
- We leverage BofA Global Research analysts' expertise and use their price objectives as a key input in determining the value of a stock. In addition, we review upside and downside scenarios to better understand the potential risk/reward.
- Both relative and absolute valuations are considered. We review key valuation metrics relative to the broader market or benchmark, to its sector and subsector peer group and to an individual stock's historical range. We view looking at a range of comparisons across key valuation metrics as an important tool in helping us to determine the potential upside and downside of a stock.

Each industry has different operating characteristics, which may require different valuation metrics to be used to value a stock. Unfortunately, there is no "one size fits all" approach, in our view. For example, we do not think an investor should approach valuing a slower growth, high cash flow generating sector, such as Consumer Staples, in the same way it should a faster growth, more disruptive sector, such as Technology.

Exhibit 6: Valuation framework

Key valuation metrics by sector (GICS)

Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials
Price/Earnings (P/E)	Price/Earnings	EV/EBITDA	Price/Earnings	Price/Earnings	Price/Earnings
EV/EBITDA	EV/EBITDA	Discounted Cash Flow	Price/Tangible Book	Discounted Cash Flow	EV/EBITDA
PE/Growth	Sum of the Parts		Discounted Cash Flow	EV/Sales	Free Cash Flow Yield
Information Technology	Materials	Real Estate	Communication Services	Utilities	
Price/Earnings	EV/EBITDA	Price/Funds from Ops.	Price/Earnings	Sum of the Parts	
EV/Free Cash Flow	Discounted Cash Flow	Net Asset Value (NAV)	EV/EBITDA	Price/Earnings	
EV/Sales	Sum of the Parts		Dividend Yield Spread		

Source: BofA Global Research. Note: EV = Enterprise Value (Market capitalization + Net debt)

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Portfolio Construction/Position Sizing:

- The portfolios tend to hold fewer stocks (30-45) than the relevant benchmarks. Holding fewer stocks allows us to gain a deeper understanding of companies and in turn, greater conviction in an investment idea.
- Despite managing more concentrated portfolios in terms of the number of positions, we understand the importance of diversification and attempt to achieve it by investing across many sectors, subsectors and geographies.
- In structuring portfolios we consider position sizing, liquidity, concentration risk (sector or geographic), factor bias and stock and/or sector correlations. We leverage our risk management capabilities in an attempt to deliver returns that are consistent and have a better risk/reward profile than the benchmark.
- A stock's active weight will be limited to 5% or less, but its absolute weight may be greater. We prefer to initiate a position at the lower end and then scale up if warranted. Position sizes are determined through 1) the team's conviction level, which incorporates elements of fundamentals and valuation, and 2) the analysis of the risk manager on the potential impact to a portfolio.

Rebalancing:

- We view rebalancing as a prudent exercise in risk management. Though we may rebalance after quarters, we do not have a definitive rebalancing schedule. In our view, rebalancing may be necessary at any time as an exercise in prudent portfolio management.
- We follow a similar approach to rebalancing as we do to position sizing: a combination of applying a conviction level and leveraging our risk management tools.
- Our risk manager runs a portfolio optimization, which provides an unbiased view of optimal position weightings within the context of meeting the portfolio objective and minimizing risk. We find this exercise helps to position the portfolios better to maximize risk-adjusted returns.

Cash:

- If a stock in the portfolio is downgraded to an Underperform rating by the BofA Global Research department, it must be sold. The weighting may be allocated to cash for up to seven business days in order for research on a new or existing investment. The proceeds may also be reinvested in a new security or existing position(s) at the time of sale. We also have the ability to sell a name at our discretion, and in this case we also have seven business days to research a replacement.

Turnover:

- With an average investment time horizon of two to three years, we strive to keep portfolio turnover at modest levels. The two exceptions are Mid-Cap, where stocks are initially screened by a quantitative model, and International, which inherently has more volatility given the diversity of countries.
- Turnover rates will vary depending on the portfolio strategy, with more conservative strategies typically experiencing lower turnover than more aggressive strategies. The team may increase turnover at times to capitalize on market dislocations. That said, under each circumstance, we remain mindful of tax efficiency in order to ensure the best investor experience.

Exhibit 7: Turnover by portfolio strategy

As of 12/31/2023

	12 Month Turnover	Full History (Annualized)
Large Cap Defensive	43%	34%
Income	51%	42%
Income & Growth	59%	42%
Growth	47%	48%
International	50%	50%
Mid-Cap	99%	84%

Note: Full History dates LCD: 11/2000; Income, Income & Growth, Growth: 10/1999; International: 10/2008; Midcap: 04/2010

Source: BofA Global Research, S&P Compustat

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Risk Management

Philosophy:

- Risk management is a vital component of the team's investment process. Our risk management framework serves to provide risk-aware guardrails for the portfolios, and also is an important input into the portfolio construction process.
- We contend that successful portfolio management must combine the ability to generate returns with a prescribed approach to avoiding unnecessary risk.
- The risk manager engages in constant dialogue with each Portfolio Strategist, while maintaining a macro level view of risk across the portfolios. It is important to note, however, that the risk manager's mandate is to remain objective, and as an independent party does not make individual security selection decisions.
- It is from this vantage point that the risk manager keeps the team abreast of developments in the global markets and helps to ensure that the portfolios are meeting their objectives while minimizing uncertainty and providing stable returns.

Key Risk Metrics:

- We break down risk into four primary categories:
 - a. **Absolute risk:** We can describe this concept in simple terms such as standard deviation, or volatility of returns. It is the team's objective to maximize the portfolio's return while minimizing the variability of the return stream.
 - b. **Risk relative to a benchmark:** It is in this light that we look at the sources of attribution for risk & return, and further decompose these sources into factor risk & stock specific risk. Factor risk can arise from having an overweight or underweight tilt towards style factors such as value, momentum, quality, and other market features.
 - c. **Forward-looking risk (ex-ante):** This approach enables the team to project portfolio volatility in the future. We have at our disposal a wide array of risk tools to assist us in our analysis.
 - d. **Backward-looking risk (ex-post):** We use metrics with which much of the financial community is familiar: Sharpe ratio, up/down capture and historical beta. These statistics can be used to judge our past performance or compare our performance and risk vs. other funds with similar objectives.
- In addition to these four categories, the team monitors correlations across stocks, portfolios, and macro variables in an attempt to increase diversification, another tenant of portfolio risk management.

Risk Management Tools:

- **Trade simulation:** We use this mechanism to project how a portfolio's risk changes when we make small changes to the portfolio. For example, we would like to ask the question: "What happens to the risk profile of our portfolio if we were to add AAPL at a two percent weight and simultaneously reduce the weight of JPM by two percent?" It is important to note that the total risk of a portfolio changes are due not only to the standalone risk of a particular stock, but also due to that stock's relation to the other assets in the portfolio.
- **Stress testing:** This exercise allows us to simulate how the portfolio would perform when assets or factors are stressed. Here we would like to ask the question: "How much would a portfolio or stock gain or lose if crude oil were to decline to \$30/barrel?", or "How much would our portfolio lose if a situation like the 2008 financial crisis was repeated?"



Individual Portfolio Objectives

Large Cap Defensive

Benchmark: Russell 1000

Investment Objective: Protection of Principal

The Research Large Cap Defensive Portfolio is designed for relatively conservative investors who seek to protect principal with a focus on risk adjusted returns across all market cycles and some emphasis on income, from what are considered relatively lower-risk, liquid, highest quality stocks.

Risk Profile: Conservative

The investor is relatively averse to risk. To minimize portfolio volatility, a lower-than-average absolute return should be acceptable though risk adjusted return is a key metric.

Investment Philosophy/Strategy:

The Large Cap Defensive portfolio will typically hold between 30-50 stocks, favoring large cap, liquid equities with consistent earnings and high profitability metrics. Large Cap Defensive's philosophy is: a diversified portfolio with a lower volatility than the broader US equity market plus a significant overweight to high quality, less cyclical companies should provide a better risk-adjusted return across all market cycles.

Large Cap Defensive implements this philosophy by combining traditional portfolio (standard deviation, beta, stress tests) and fundamental risk management in its portfolio construction. Key metrics in assessing fundamental risk include the consistency of earnings and cash flow growth, credit health, historical earnings volatility, and profitability metrics such as returns on invested capital, operating margins, and returns on equity. Typical holdings are industry leaders with investment grade credit, low financial leverage, consistent earnings growth, and relatively high barriers to entry.

A strict risk management process drives stock selection, sector allocations, and overall portfolio construction with risk adjusted returns and downside protection key metrics. Most position sizes mostly range from 2% to 4%, though may be up to a 5% active weight vs the Russell 1000 benchmark. Position sizes are determined through 1) the team's conviction level, which incorporates elements of fundamentals and valuation, and 2) the analysis of the risk manager on the potential impact to a portfolio.

Stock Selection Methodology:

Stocks rated Buy (1) are preferred, but those rated Neutral (2) may be selected for diversification purposes, as long as they exhibit characteristics that fulfill the objective and tolerance for risk. Stocks rated Underperform (3) will not be held in the portfolio. Liquid, large cap industry leading companies are preferred. If a stock in the portfolio is downgraded to an Underperform rating by the BofA Global Research department, it must be sold. The weighting may be allocated to cash for up to seven business days in order for research on a new or existing investment. The proceeds may also be reinvested in a new security or existing position(s) at the time of sale.

Income

Benchmark: Russell 1000 Value

Investment Objective: Current Income

The primary objective is to obtain an above average and ongoing secure income stream from dependable sources, with some emphasis on protection of principal. Equity focus is not just on the current dividend yield, but also on the potential for dividend growth as an offset against inflation.

Risk Profile: Moderately Conservative

Moderate risk of principal and volatility associated with changing interest rate conditions will be accepted to satisfy yield requirements.

Investment Philosophy/Strategy:

The Income portfolio will typically hold between 30-50 stocks, favoring large cap, high dividend yielding equities with above market dividend growth. While current income is the primary portfolio objective, we will adjust sector weightings to reflect the portfolio strategy team's fundamental and macro views with a focus on sector diversification for optimal risk management.

The Income portfolio seeks to provide current income and high risk adjusted returns regardless of the interest rate cycle while maintaining a moderately conservative risk profile. Managing the portfolio's interest rate sensitivity and maintaining a moderately conservative risk profile are key risk management components. Given the potential interest rate sensitivity of high dividend yielding stocks, the Income portfolio may have a relative preference for income generating stocks with relatively high dividend growth in sectors that are potential beneficiaries of rising interest rates and economic growth such as Financials and Industrials. At the same time, the Income portfolio will maintain a significantly above market yield with allocations to high dividend yielding stocks in sectors such as Utilities, REITs, Communication Services and Energy.

Sustainability of a company's dividend is paramount to security selection with a primary emphasis on dividend payment through free cash flow. Additionally, above average historical and estimated dividend growth are key factors in security selection. Other important metrics are projected, current, and relative valuations, free cash flow sustainability, earnings stability, and some revenue and earnings growth. Most position sizes are from 2% to 4%, though may be up to a 5% active weight vs the Russell 1000 Value benchmark. Position sizes are determined through 1) the team's conviction level, which incorporates elements of fundamentals and valuation, and 2) the analysis of the risk manager on the potential impact to a portfolio.

Stock Selection Methodology:

Stocks rated Buy (1) are preferred, but those rated Neutral (2) may be selected for diversification purposes, as long as they exhibit characteristics that fulfill the objective and tolerance for risk. Stocks rated Underperform (3) will not be held in the portfolio. To be included in the portfolio the dividend distribution must be considered secure (Income rating of 7). A dividend yield higher than the current yield on the S&P 500, along with the potential for dividend growth in excess of the inflation rate, is preferred but not required. Large cap companies are preferred. If a stock in the portfolio is downgraded to an Underperform rating by the BofA Global Research department, it must be sold. The weighting may be allocated to cash for up to seven business days in order for research on a new or existing investment. The proceeds may also be reinvested in a new security or existing position(s) at the time of sale.



Income & Growth

Benchmark: S&P 500 Index

Investment Objective: Total Return

The primary objective is to utilize a total return approach, with a cross section of stocks that combine income and dividend growth for inflation protection and earnings growth for wealth accumulation.

Risk Profile: Moderate

Despite the balanced nature of the objective, some measure of risk will be assumed to achieve growth, as long as income is not disturbed.

Investment Philosophy/Strategy:

The Income & Growth (I&G) portfolio will typically hold between 30-50 stocks. The model provides a total return approach from liquid, well-known industry leaders. We expect the average market cap of the portfolio to remain consistent with that of large capitalization stocks.

The portfolio will have diverse sector exposures, often with limited deviation from the benchmark sector weights. Position sizing is based on conviction level in a stock idea, which is a combination of the fundamental outlook, risk/reward and consideration for the portfolio objective. Our strategy is to have the majority of the portfolio meet or exceed the earnings growth and dividend yield of the benchmark, at any given time. The balance of the portfolio should achieve one of the above two criteria, depending on the market views of the Portfolio Strategy team.

Stock Selection Methodology:

Stocks rated Buy (1) are preferred, but those rated Neutral (2) may be selected for diversification purposes, as long as they exhibit characteristics that fulfill the objective and tolerance for risk. Stocks rated Underperform (3) will not be held in the portfolio. There are no restrictions regarding volatility risk rating. No minimum yield is required for the portfolio, but stocks with potential for dividend growth are favored. An estimated 3-year earnings growth rate above the benchmark S&P 500 index is preferred. Stocks here generally involve less volatility than assumed by the pure growth investor and may offer a lower yield than sought by the pure income investor. If a stock in the portfolio is downgraded to an Underperform rating by the BofA Global Research department, it must be sold. The weighting may be allocated to cash for up to seven business days in order for research on a new or existing investment. The proceeds may also be reinvested in a new security or existing position(s) at the time of sale.

Growth

Benchmark: Russell 1000 Growth Index

Investment Objective: Capital Appreciation

The primary objective is to achieve above-average growth of principal by focusing on companies with consistent and above-average earnings growth demonstrated over time under a variety of economic circumstances. Investors are willing to consider a higher price/earnings multiple for a faster pace of future earnings per share growth. Income is of no concern.

Risk Profile: Moderately Aggressive

A relatively high level of price volatility and risk of principal loss may be necessary in order to achieve potentially above-average returns.

Investment Philosophy/Strategy:

We seek to produce long-term excess returns versus the benchmark over a full market cycle (at least 5 years) investing in companies that have strong sustainable sales and earnings growth, dominant market shares, strong balance sheets and defensible business models. The portfolio will have a bias for secular growth sectors over cyclical growth and will incorporate companies that benefit from disruptive trends within industries. Key operating metrics considered include return on equity (ROE), return on invested capital (ROIC), projected three-to-five year sales and EPS growth rates. Other considerations during the stock selection process will include both absolute and relative valuations.

The portfolio tends to be concentrated, typically holding between 30-45 stocks with a market cap of \$5 billion or more. Sector allocations are based on the views of the Portfolio Strategy team. Generally, sector weightings will have a stricter adherence to the benchmark weightings in order to reduce dispersion of returns due to factor tilts. However, the team can deviate from this if it better helps to meet the portfolio objective or in times of crisis, such as 2008.

Stock Selection Methodology:

Low volatility risk (A) or Medium volatility risk (B) stocks are preferred. High volatility risk stocks (C) may be chosen for diversification purposes provided that their earnings per share growth rates estimates compensate for the higher degree of risk. Stocks rated Buy (1) are preferred, but those rated Neutral (2) may be selected for diversification purposes as long as they characteristics that fulfill the objective and tolerance for risk. Stocks rated Underperform (3) will not be held. An estimated 3-5 year earnings growth rate of in-line to above its benchmark for (A) or (B) rated stocks, and higher for (C) rated stocks, is recommended. If a stock in the portfolio is downgraded to an Underperform rating by the BofA Global Research department, it must be sold. The weighting may be allocated to cash for up to seven business days in order for research on a new or existing investment. The proceeds may also be reinvested in a new security or existing position(s) at the time of sale.



International

Benchmark: MSCI AC World, Ex. US Index

Investment Objective: Capital Appreciation

For investors who seek growth through international investments, while maintaining broad regional diversification.

Risk Profile: Moderately Aggressive

Even though the portfolio model primarily includes ADRs, the portfolio is exposed to currency and geopolitical risks. Furthermore, the tax withholding policies of various countries can affect the receipt of dividend income by investors following the portfolio. Many stocks, especially in emerging markets, tend to be highly volatile—therefore, this portfolio's risk profile is considered Moderately Aggressive.

Investment Philosophy/Strategy:

The strategy is to generate returns through bottoms-up individual stock selection. We target a broad range of industry and country exposures as to provide diversification and mitigate risk. Profitability, consistency, and growth are key drivers of security selection in International. Unlike our other portfolios, International has unique risks, such as currency and geopolitical risks.

The portfolio will typically hold between 35-60 stocks, slightly higher than the US large cap portfolios in order to manage country and currency risk. Position sizes will be smaller on average to account for the unique risks. Although we expect the majority of the portfolio to be exposure to developed markets, we will also invest in emerging markets based on fundamental and country specific views.

We also have the ability to deploy a small portion of the portfolio into country ETFs to allow better risk management and increase the International portfolio's ability to gain exposure in jurisdictions that have limited individual stocks available for inclusion. Any ETFs used will be covered by the BofA Global Research department. For initial inclusion in the International portfolio, an International ETF must have an ETF Outlook of 1 (More Attractive). If the ETF Outlook of an ETF holding in the International portfolio falls to 3 (Less Attractive), it will be removed from the portfolio. The weighting may be allocated to cash for up to seven business days in order for research on a new or existing investment or may also be reinvested at the time of sale. An ETF outlook dropping from 1 (More Attractive) to 2 (Attractive) will not be a sell requirement.

Stock Selection Methodology:

Stocks that are listed on US exchanges are preferred; however this portfolio model may at times hold positions in non-listed securities. For inclusion, stocks must be domiciled outside of the US. ADRs will likely comprise the majority of holdings; ADRs are quoted in US dollars, are easily traded, and stock-related information is readily available. Investors should understand that there may be currency risks as ADRs are based on a set conversion rate to the locally traded security. US listed common stocks with a country of domicile outside of the United States and country specific ETFs are also eligible for the International portfolio.

The model portfolio includes international stocks that meet the following selection criteria: those rated Buy (1) by BofA Global Research fundamental analysts are preferred, but stocks rated Neutral (2) may also be included; low (A), medium (B) and high (C) volatility risk-rated stocks may be chosen; and preference will be given to those with a market capitalization in excess of US\$5 billion and an average daily traded value of at least \$5 million. If a stock in the portfolio is downgraded to an Underperform rating by the BofA Global Research department, it must be sold. The weighting may be allocated to cash for up to seven business days in order for research on a new or existing investment. The proceeds may also be reinvested in a new security or existing position(s) at the time of sale.

Mid-Cap

Benchmark: Russell Midcap Index

Investment Objective: Capital Appreciation

For investors who seek to build wealth over a multi-year growth period through investment in stocks in the mid-cap range of capitalization (currently with a market capitalization ranging from \$3 billion to \$40 billion).

Risk Profile: Moderately Aggressive

Given the higher volatility of mid-cap stocks and potential for a number of changes, this portfolio should be considered for moderately aggressive or aggressive investors who can tolerate a higher degree of turnover.

Investment Philosophy/Strategy:

The strategy is to generate returns through bottom-up individual stock selection. Quantitative scores are used to create a stock selection universe with the Aurora (growth) model measuring a stock's growth potential by focusing mainly on changes in earnings estimates and stock prices. The Enhanced Contrarian (value) model is more value-oriented, focused on a stock's relative value within its sector based on price-to-cash flow. Portfolio selection does not rely solely on the highest-ranked quantitative score.

The portfolio will be concentrated in nature, typically holding between 35-50 stocks, slightly higher than the large cap portfolios given Mid Cap stocks' more volatile nature. The Research Portfolios team considers industry discipline in choosing stocks for the portfolio, with a preference for inclusion of various industries within each sector for diversification purposes. Other qualitative factors such as a company's position in its industry, product development or technological expertise, strength of management, and regulatory or legislative trends may be considered in the stock selection process.

Stock Selection Methodology:

Stock selection for the Mid-Cap portfolio involves using a unique combination of fundamental, quantitative, and portfolio management skills. We start with the universe of mid-cap stocks followed by BofA Global Research fundamental equity research (currently around 450 stocks), and include for consideration Buy or Neutral. Stocks that are rated Buy (1) are preferred, but those rated Neutral (2) may be selected for diversification purposes. Stocks rated Underperform (3) will not be held in the portfolio. Proprietary quantitative screens for both growth and value characteristics are applied to these Buy and Neutral stocks to further refine the eligible stock universe. The Research Portfolios team then builds the portfolio from a universe of those candidates, with a preference for those stocks that have scores above the 50th percentile on both screens, and selects stocks from complementary industries and with attractive business models. Global Research Low volatility risk (A), Medium volatility risk (B) stocks or High volatility risk (C) stocks may be chosen.

Stocks in the portfolio will generally have market caps between \$3 and \$40 billion when first added. However, the Research Portfolios team has the flexibility to include a small percentage of stocks outside of this capitalization band if necessary to achieve desirable sector diversification. Stock liquidity will also be considered in selecting new additions to the portfolio. Stocks with an average 3-month daily trading volume of at least \$5 million will be preferred for selection. If a stock in the portfolio is downgraded to an Underperform rating by the BofA Global Research department, it must be sold. The weighting may be allocated to cash for up to seven business days in order for research on a new or existing investment. The proceeds may also be reinvested in a new security or existing position(s) at the time of sale.



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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R1}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{R1} Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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Research Analysts

Research Portfolios

Derek Harris

Portfolio Strategist
BofAS
derek.harris@bofa.com

Justin Devery

Portfolio Strategist
BofAS
justin.devery@bofa.com

Thomas Hopkins

Portfolio Strategist
BofAS
thopkins2@bofa.com

Evan Morris

Portfolio Strategist
BofAS
evan.morris@bofa.com

Julia Saravalle, CFA

Portfolio Strategist
BofAS
julia.saravalle@bofa.com

Shadab Shahzad Ali

Portfolio Strategist
BofAS
shadab.ali@bofa.com

Andrew Shields, CFA

Portfolio Strategist
BofAS
andrew.shields@bofa.com

Honorat Guidi

Portfolio Strategist
BofAS
honorat.guidi@bofa.com

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