

David Bianco
Chief Investment Officer &
Strategist, Americas



In a nutshell

- The trinity of Alpha: positive, reliable, uncorrelated
- A rigorous investment process considers macro and micro factors as well as fundamental and quantitative assessment
- Every deviation from benchmark should be for a well-justified fundamental reason
- Portfolio-risk-attribution tools help to identify and optimize the risks in a portfolio
- Systematic vs. discretionary active strategies are not so dissimilar when done well
- Active share and concentration are descriptive but not performance or risk metrics

All opinions and claims are based upon data on 5/21/18 and may not come to pass. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Deutsche Asset Management Investment GmbH

R-050029-53.2 (5/18)

Americas CIO View

What do investors want from active managers?

The trinity of alpha: positive, reliable, uncorrelated

Investors want alpha that is: 1) positive, 2) reliable and 3) preferably uncorrelated to underlying benchmarks and other active strategies. Pure alpha must be achieved without any persistent risk-factor tilts, such as beta above one or a small size or value tilt vs. benchmark. Investors know that producing such alpha is challenging and that it takes specialized skills to achieve. Thus, they expect rigor in the investment process and transparency in the objectives, including targets for the alpha and risks (tracking error) of the active strategy overall and each segment or layer of the strategy. Knowing how much alpha and risk should come from stock picking vs. sector tilts or market timing, or anything else, helps investors build a portfolio of active strategies.

Alpha is more valuable when reliable, so sophisticated investors focus on the information ratio. The information ratio is alpha divided by tracking error. Thus, it gauges alpha vs. reliability as tracking error is the standard deviation or reliability of alpha. An information ratio above the long-term sharpe ratio of the underlying benchmark is very valuable. Note that a low tracking error doesn't mean that alpha is normally low. It just indicates the active risk via alpha volatility.

A rigorous investment process: macro + micro and fundamental + quantitative

We think active equity strategies should be based on fundamental analysis of macro and micro issues that determine value and influence total-return potential in a conceptually robust way. We do not rely on technical or just empirical analysis. We believe that fundamental analysis is most effective and efficient when implemented in a well-organized research framework and decision-making process. A process that includes quantitative tools that organize data to help identify and forecast the drivers of value. Such quantitative tools include many information databases and metrics organized for screening purposes, factor-based ranking, discounted-cash-flow (DCF) models, etc.

Every deviation from benchmark should be for a well-justified fundamental reason

Every deviation from benchmark should be for a well-justified fundamental reason that aligns with where that deviation occurs from top to bottom. Beta deviations for macro reasons and relative asset-class preferences, sector deviations for sector-level reasons and relative sector preferences, and securities-weight deviations for micro and relative stock-specific preferences. Every overweight comes with an underweight, so both sides of any deviation must be justified.

Micro reasons include industry trends and company-specific operating and financial forecasts. Macro reasons include views on the economy, inflation, interest rates, currencies, commodities, capital expenditure (capex) and credit conditions, etc. Macro considerations, including the relative valuations of other asset classes and key asset-class sub-segments, tend to determine desired asset-class or beta exposure and also equity-sector and other macro factor tilts in the portfolio. Micro considerations, including the relative valuation of securities, tend to determine the stocks selected within sectors and within other macro-factor clusters. We refrain from sector or macro-factor tilts for bottom-up reasons, but this can be justified if the micro assessment of large-weight companies warrants it.

Portfolio-risk-attribution tools help to identify and optimize the risks in a portfolio

Bottom-up and top-down methods work best in their respective areas of benchmark deviation and will complement each other when they meet in the middle. Understand all risks in a portfolio from both its top-down and bottom-up architecture. Quantitative portfolio-construction tools help ensure that all tilts from the top to the bottom of the benchmark are as intended and within risk budgets.

Systematic vs. discretionary active strategies: Not so dissimilar when done well

Both systematic and discretionary active strategies seek alpha vs. benchmarks. Like our discretionary strategies, our systematic strategies are based on fundamental frameworks. Systematic investing can be thought of as the codification of a fundamental portfolio manager's (PM) decision-making process. Systematic strategies can be well-suited for investing in core and value categories, whereas more PM discretion is often required with growth stocks. Systematic strategies are usually better suited for well-diversified portfolios from large eligible investment universes of mature industry stocks with long operating and valuation histories. More concentrated portfolios tend to require more PM discretion. Discretionary strategies are usually better suited with smaller and newer companies with short operating and valuation histories.

Active share and concentration are descriptive, but not performance or risk metrics

Active share is not a reliable indication of likely alpha or even active risk, in our view. We believe 'where different from benchmark' is more important than 'how much different'. Different in the right places counts. Active management should be selective and deliberate in its deviations from benchmark. The two ways to raise active share are to underweight big-benchmark-weight stocks or to be concentrated. But underweighting big-weight stocks must be fundamentally justified, not automatic. Concentration is a two-edged sword. It also usually adds volatility to performance and makes it harder for investors to distinguish luck from skill. It makes sense to budget tilt sizes vs. benchmark weights on conviction, but it is wise to balance concentration and contrarianism.

All opinions and claims are based upon data on 5/21/18 and may not come to pass. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Deutsche Asset Management Investment GmbH

R-050029-53.2 (5/18)

Glossary

Active Share

Active Share measures the percentage of stock holdings in a manager's portfolio that differ from the benchmark index. Active Share is calculated by taking the sum of the absolute value of the differences of the weight of each holding in a portfolio versus the weight of each holding in the benchmark index and dividing by two.

Alpha

Alpha refers to returns in excess of a benchmark's return.

Beta

Beta is a measure of volatility that captures a security's systematic risk according to the capital asset pricing model.

Capital expenditures (capex)

Capital expenditure (Capex) are funds used by a company to acquire or upgrade physical assets such as property, industrial buildings or equipment.

Concentration

Portfolio **concentration** measures single stock exposures of a portfolio. There are different metrics to measure concentration. A few examples are:

(1) Concentration ratios, calculated as aggregate weight of a given number (3, 5, 10, etc.) of stocks in the portfolio;

(2) Acar-Bhatnagar concentration index is a measure of market concentration. It has two alternative approaches: (i) A calibrated summation of the absolute departures from the uniform distribution case (A1); and (ii) A summation of the absolute differences among segment shares P_i and P_j (A2).

(3) The Herfindhal-Hirschman Index (HHI) is a measure of market concentration by summing up the square of each stock's weight in a portfolio. The HHI index is always below 1 and a number close to 1 indicates high concentration.

Contrarian

Contrarian investing is an investment strategy that is characterized by positioning oneself in the opposite direction of prevailing sentiment.

Discounted cash flow (DCF)

Discounted cash flow is a method used to gauge the value of a company by finding the present value of projected future cash flows.

All opinions and claims are based upon data on 5/21/18 and may not come to pass. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Deutsche Asset Management Investment GmbH

R-050029-53.2 (5/18)

Inflation

Inflation is the rate at which the general level of prices for goods and services is rising and, subsequently, purchasing power is falling.

Information Ratio

Information Ratio is excess return (Alpha) divided by Tracking Error. It is a measure of a portfolio manager's ability to generate excess returns and the consistency of such.

Sharpe Ratio

The **sharpe ratio** puts an asset's excess return (the return above the risk-free rate) in relation to the asset's risk as measured by its standard deviation.

Standard deviation

Standard deviation is often used to represent the volatility of an investment. It depicts how widely an investment's returns vary from the investment's average return over a certain period.

Tracking Error

Tracking error is an unwanted deviation between, for example, an index fund and a portfolio.

Volatility

Volatility is the degree of variation of a trading-price series over time. It can be used as a measure of an asset's risk.

All opinions and claims are based upon data on 5/21/18 and may not come to pass. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Deutsche Asset Management Investment GmbH

R-050029-53.2 (5/18)

Important Information

The brand DWS represents DWS Group GmbH & Co. KGaA and any of its subsidiaries, such as DWS Distributors, Inc., which offers investment products, or DWS Investment Management Americas Inc. and RREEF America L.L.C., which offer advisory services.

This document has been prepared without consideration of the investment needs, objectives or financial circumstances of any investor. Before making an investment decision, investors need to consider, with or without the assistance of an investment adviser, whether the investments and strategies described or provided by Deutsche Bank, are appropriate, in light of their particular investment needs, objectives and financial circumstances. Furthermore, this document is for information/discussion purposes only and does not and is not intended to constitute an offer, recommendation or solicitation to conclude a transaction or the basis for any contract to purchase or sell any security, or other instrument, or for Deutsche Bank to enter into or arrange any type of transaction as a consequence of any information contained herein and should not be treated as giving investment advice. Deutsche Bank AG, including its subsidiaries and affiliates, does not provide legal, tax or accounting advice. This communication was prepared solely in connection with the promotion or marketing, to the extent permitted by applicable law, of the transaction or matter addressed herein, and was not intended or written to be used, and cannot be relied upon, by any taxpayer for the purposes of avoiding any U.S. federal tax penalties. The recipient of this communication should seek advice from an independent tax advisor regarding any tax matters addressed herein based on its particular circumstances. Investments with Deutsche Bank are not guaranteed, unless specified. Although information in this document has been obtained from sources believed to be reliable, we do not guarantee its accuracy, completeness or fairness, and it should not be relied upon as such. All opinions and estimates herein, including forecast returns, reflect our judgment on the date of this report, are subject to change without notice and involve a number of assumptions which may not prove valid.

Investments are subject to various risks, including market fluctuations, regulatory change, counterparty risk, possible delays in repayment and loss of income and principal invested. The value of investments can fall as well as rise and you may not recover the amount originally invested at any point in time. Furthermore, substantial fluctuations of the value of the investment are possible even over short periods of time. Further, investment in international markets can be affected by a host of factors, including political or social conditions, diplomatic relations, limitations or removal of funds or assets or imposition of (or change in) exchange control or tax regulations in such markets. Additionally, investments denominated in an alternative currency will be subject to currency risk, changes in exchange rates which may have an adverse effect on the value, price or income of the investment. This document does not identify all the risks (direct and indirect) or other considerations which might be material to you when entering into a transaction.

All opinions and claims are based upon data on 5/21/18 and may not come to pass. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Deutsche Asset Management Investment GmbH

R-050029-53.2 (5/18)

The terms of an investment may be exclusively subject to the detailed provisions, including risk considerations, contained in the Offering Documents. When making an investment decision, you should rely on the final documentation relating to the investment and not the summary contained in this document.

This publication contains forward looking statements. Forward looking statements include, but are not limited to assumptions, estimates, projections, opinions, models and hypothetical performance analysis. The forward looking statements expressed constitute the author's judgment as of the date of this material. Forward looking statements involve significant elements of subjective judgments and analyses and changes thereto and/or consideration of different or additional factors could have a material impact on the results indicated. Therefore, actual results may vary, perhaps materially, from the results contained herein. No representation or warranty is made by DWS as to the reasonableness or completeness of such forward looking statements or to any other financial information contained herein. We assume no responsibility to advise the recipients of this document with regard to changes in our views.

No assurance can be given that any investment described herein would yield favorable investment results or that the investment objectives will be achieved. Any securities or financial instruments presented herein are not insured by the Federal Deposit Insurance Corporation ("FDIC") unless specifically noted, and are not guaranteed by or obligations of Deutsche Bank AG or its affiliates. We or our affiliates or persons associated with us may act upon or use material in this report prior to publication. DB may engage in transactions in a manner inconsistent with the views discussed herein. Opinions expressed herein may differ from the opinions expressed by departments or other divisions or affiliates of Deutsche Bank. This document may not be reproduced or circulated without our written authority. The manner of circulation and distribution of this document may be restricted by law or regulation in certain countries. This document is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, including the United States, where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Deutsche Bank to any registration or licensing requirement within such jurisdiction not currently met within such jurisdiction. Persons into whose possession this document may come are required to inform themselves of, and to observe, such restrictions.

Past performance is no guarantee of future results; nothing contained herein shall constitute any representation or warranty as to future performance. Further information is available upon investor's request. All third party data (such as MSCI, S&P & Bloomberg) are copyrighted by and proprietary to the provider.

Deutsche Bank AG is authorised under German Banking Law (competent authority: European Central Bank and the BaFin, Germany's Federal Financial Supervisory Authority) and by the Prudential Regulation Authority and subject to limited regulation

All opinions and claims are based upon data on 5/21/18 and may not come to pass. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Deutsche Asset Management Investment GmbH

R-050029-53.2 (5/18)

by the Financial Conduct Authority and Prudential Regulation Authority. Details about the extent of our authorisation and regulation by the Prudential Regulation Authority, and regulation by the Financial Conduct Authority are available from us on request.

© 2019 DWS Investment GmbH, Mainzer Landstraße 11-17, 60329 Frankfurt am Main, Germany. All rights reserved.

All opinions and claims are based upon data on 5/21/18 and may not come to pass. This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Deutsche Asset Management Investment GmbH

R-050029-53.2 (5/18)