



ALLIANCEBERNSTEIN®

AB Systematic Fixed Income

Seeking to Deliver:
Attractive
Repeatable
Uncorrelated
Active Returns

September 2024

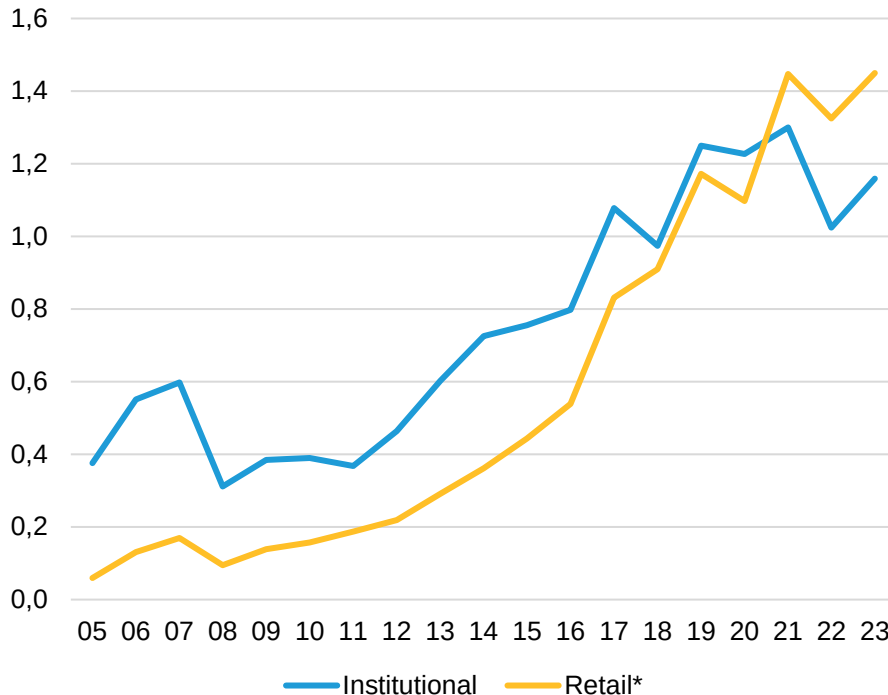
Arnaud Mounier – Global co-Head of Fixed Income Business Development

Introduction to Systematic Fixed Income

Systematic Fixed Income: The New Frontier for Investors

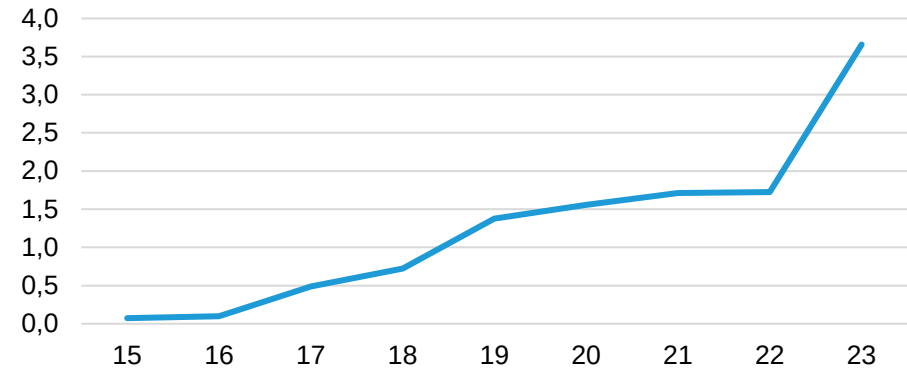
The Quantitative Equity Market Has Experienced Massive Growth Over the Past 20 Years

Total AUM in USD Trillions



Systematic Credit Poses A Significant Growth Opportunity

Total Retail AUM in USD Billions



Total estimated size of Fixed Income strategies using partly or fully a Systematic investment approach:
US\$120 Billion

*Retail equity includes funds that include "Systematic", "Quant", or "Factor" in their name. Institutional represented by active strategies only. Systematic Credit AUM represented by funds that include "Systematic" or "Quant" in their name and either "Corporate", "Credit", "Bond", or "Fixed Income".

As of December 31, 2023. Source: Barclay's Research, eVestment, Lipper, Morningstar and AB

Estimated sized of FI Systematic assets: Investment vehicles are long-only and fixed income benchmarked and the definition of systematic is made subjectively based on an understanding of which asset managers have described themselves as having a systematic approach to their investment philosophy. Using this subjective criteria and fund data from eVestment, the total size of the systematic fixed income investing universe is about \$120bn (as of Dec 2020). Source: "Systematic Fixed Income: An Investor's Guide" by Scott A. Richardson

Systematic Fixed Income Differs from Other Solutions

Systematic Fixed Income Performance is Attractive, Repeatable, and Uncorrelated with Traditional Strategies



Different Objectives of Passive and Active Strategies

Passive Solutions		Active Solutions	
Pure Passive	Smart Beta	Systematic Alpha	Traditional Alpha
Objective: Passive index replication	Objective: Replicate “smart index” based on either single/ multi-factors or non-market-cap index weights	Objective: Outperform the market using a dynamic multifactor approach	Objective: Outperform the market using macro and credit fundamental research

Factor Investing

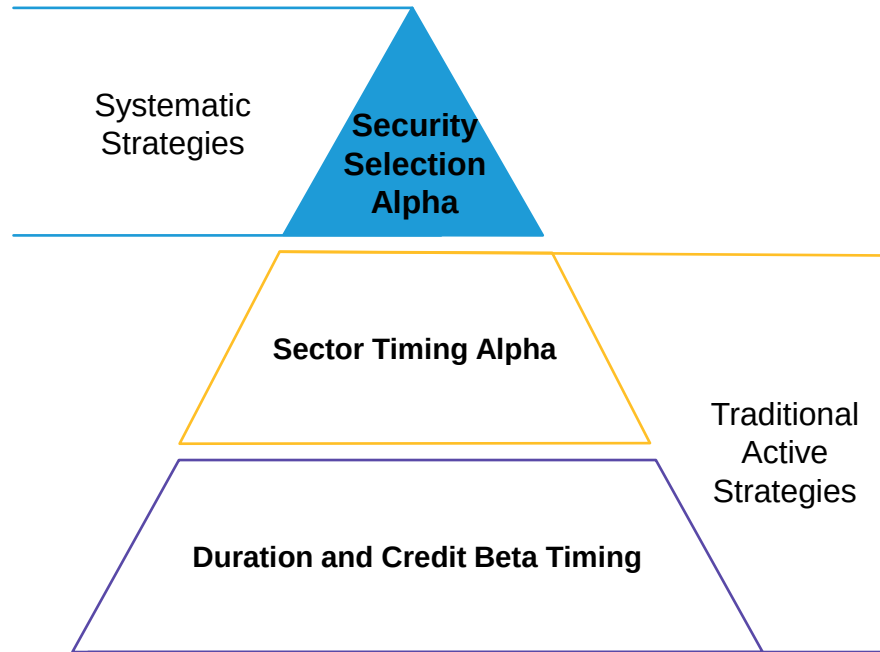
For illustrative purposes only. There can be no assurance that any investment objectives will be achieved.

Source: AB

Systematic Fixed Income: Alpha Generation Process

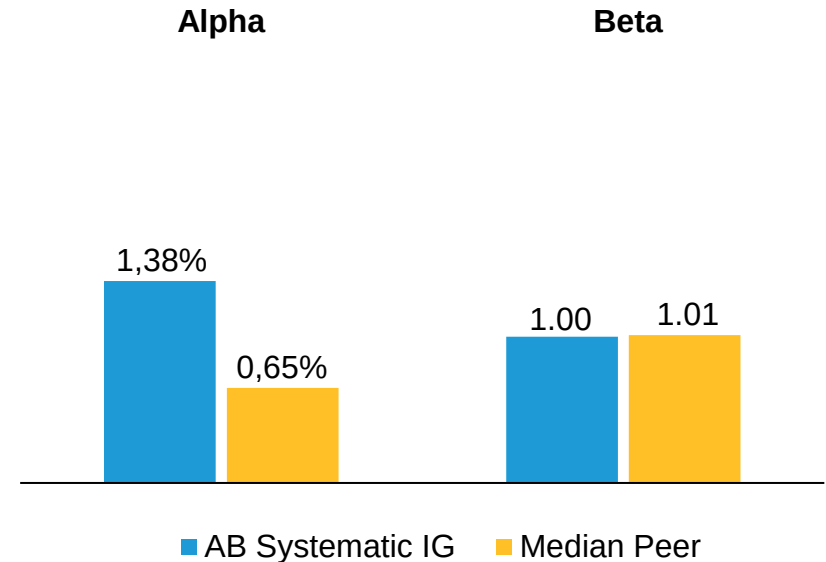
US IG Credit

Systematic Strategies Prioritize Security Selection While Most Traditional Active Strategies Prioritize Sector/Beta Decisions



AB Systematic IG Has Generated Similar Beta and More Alpha Than Peers

Since Live Inception: July 2020



Past performance does not guarantee future results. Historical information provided for illustrative purposes only.

Alpha returns are returns not explained by beta. AB US Investment-Grade Credit performance is shown net of a maximum 0.15% annual managed account fee. Benchmark is Bloomberg US Corporate Investment Grade Index. Median Peer is represented by the eVestment US Corporate Fixed Income Universe median and utilizes manager's preferred benchmark. This is supplemental information to the net-of-fees returns shown on the standardized Performance Summary page and the GIPS-compliant performance and disclosure page. Compensation was provided for this analysis.

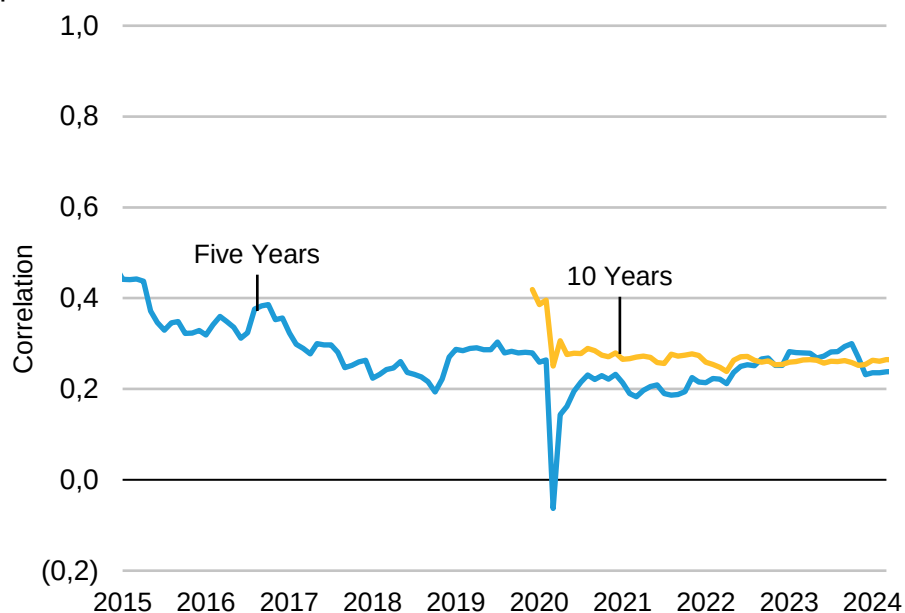
As of June 30, 2024. Source: Bloomberg, eVestment and AB

Including Systematic Strategies Can Improve the Existing Allocation

US IG Credit

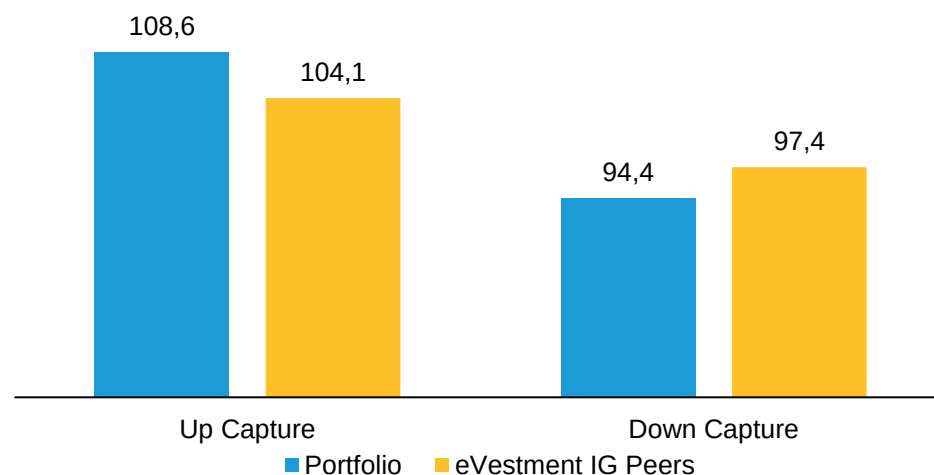
Systematic Strategies Can Diversify Existing Exposure

Correlation of excess returns: AB Systematic US IG Credit vs. peers



Systematic Strategies Offer Strong Up/Down Capture

10-year up/down capture (percent)



Past performance does not guarantee future results. Historical information provided for illustrative purposes only.

Based on the monthly returns from December 31, 2009, to June 30, 2024. Returns are for a combination of back-tested and live results. AB US Investment-Grade Credit includes returns for the back-tested portfolio prior to July 2020 and returns for the live strategy starting in July 2020. Performance shown is net of a maximum 0.15% annual managed account fee. Benchmark is Bloomberg US Corporate Investment Grade Index. Peers are represented by the eVestment US Corporate Fixed Income Universe. Simulated, back-tested or hypothetical performance results have certain inherent limitations. Simulated, back-tested or hypothetical trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. No representation is being made that any account will or is likely to achieve returns or a volatility profile similar to those being shown. This is supplemental information to the net-of-fees returns shown on the standardized Performance Summary page and the GIPS-compliant performance and disclosure page. Compensation was provided for this analysis.

As of June 30, 2024. Source: Bloomberg, eVestment and AB

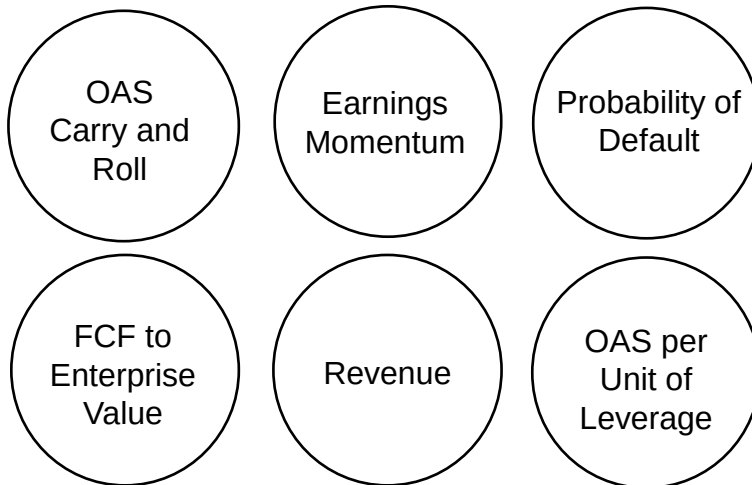
Factor Investing at AB Fixed Income

Systematic Fixed Income: Introduction to Factors

What Is a Factor?

Characteristic that helps to repeatably identify securities with best risk-adjusted future returns

Factor Examples



For illustrative purposes only.

FCF: free cash flow; OAS: option-adjusted spreads

Source: AB

Process of Developing a Factor



Idea Generation: idea typically originates from academia, research, or other sources



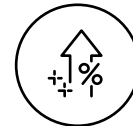
Intuition: factor should have reasonable meaning for how or why it may predict returns



Data Collection: access to large volume of current and historical data to test factor



Testing: test that factor has above-average probability of outperforming a benchmark



Performance: combine with other factors to generate alpha and continually test efficacy

AB Fixed-Income Factors vs. Traditional Equity Factors

AB Fixed-Income Factors

Factor Categories	Description	Traditional Equity	AB Fixed-Income Alphas
Value	Cheap securities outperform	Price to book ratio	OAS to probability of default, FCF to EV
Momentum	Trailing outperformers keep doing so	Three to 12 months equity return	Equity momentum, credit momentum, analyst sentiment
Size	Small companies outperform	Market cap	Revenue
Quality	Higher-quality companies outperform	Return on equity	Profitability, working capital accruals
Carry	High yielders outperform	Dividend yield	OAS carry and roll
Volatility	Lower-volatility companies outperform	Realized volatility	Probability of default, excess return volatility
AB Proprietary	Factors developed internally by AB	—	OAS Residual, OAS Reversal

For illustrative purposes only. There can be no assurance that any investment objectives will be achieved.

EV: enterprise value; FCF; free cash flow; OAS: option-adjusted spreads

As of December 31, 2023

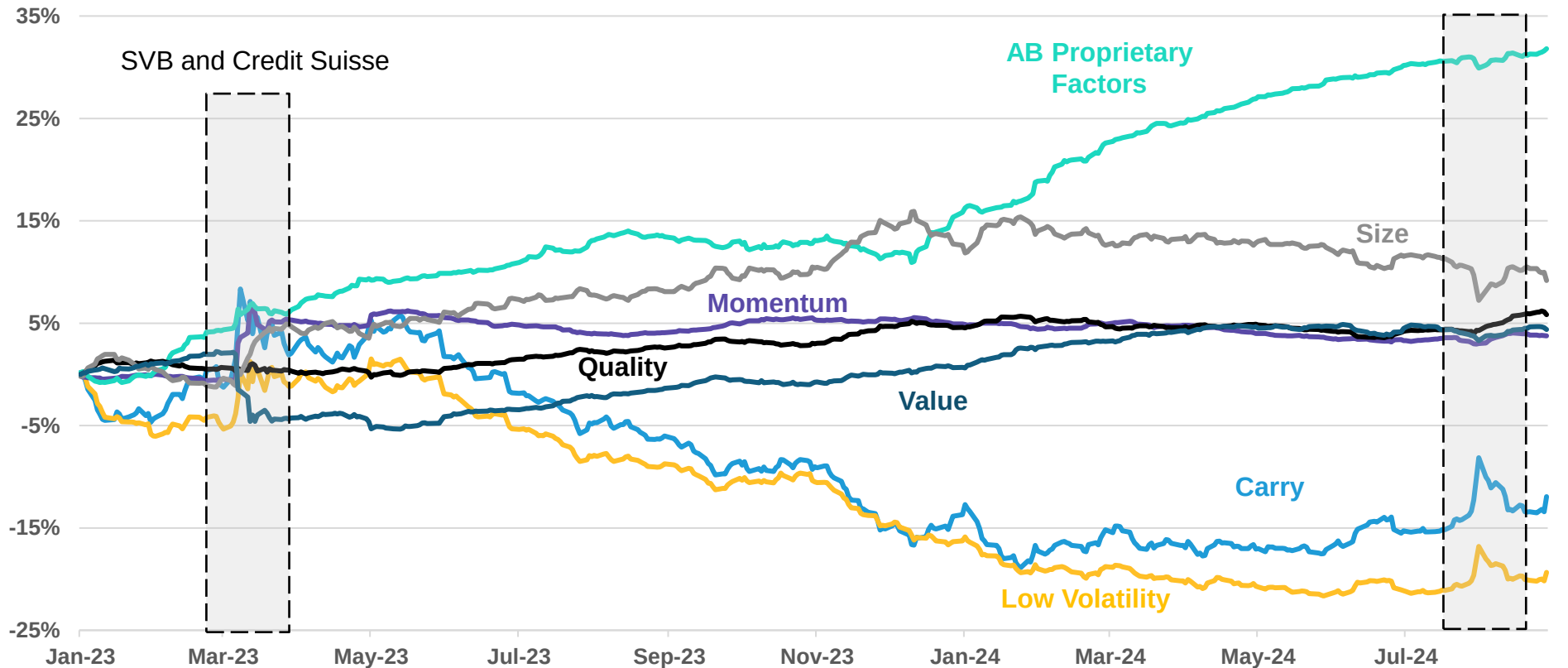
Source: AB



How Factors React To Periods Of Market Stress

Benefit of A Dynamic Multi-Factor Approach

Cumulative growth of factors (Jan 2023 – Aug 2024)

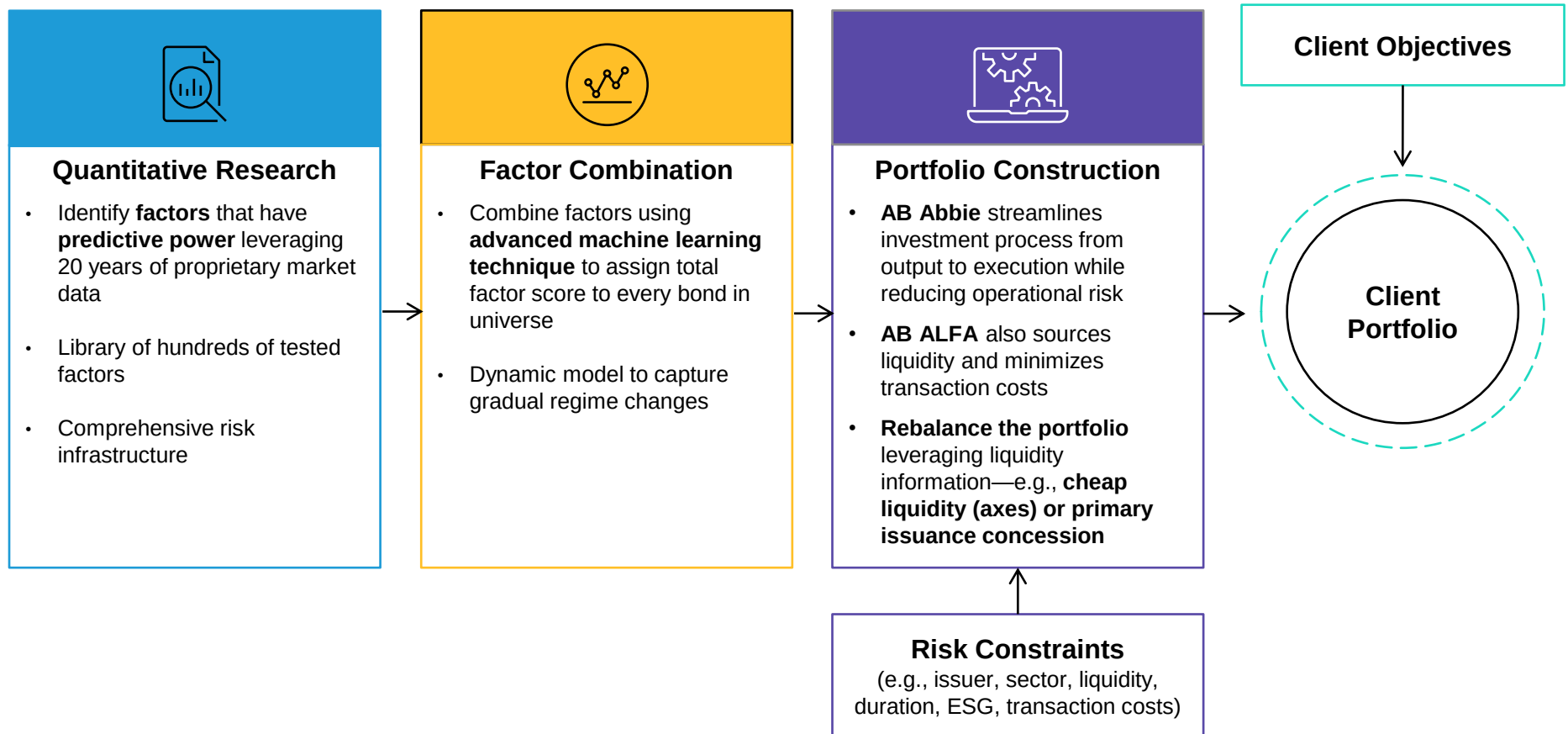


Past performance does not guarantee future results. Historical information provided for illustrative purposes only.

Factor returns are based on daily live returns of AB US Investment-Grade Credit from January 3, 2023 to August 31, 2024. No representation is being made that any account will or is likely to achieve returns or a volatility profile similar to those being shown. Source: AB

AB Systematic Fixed Income Investment Process

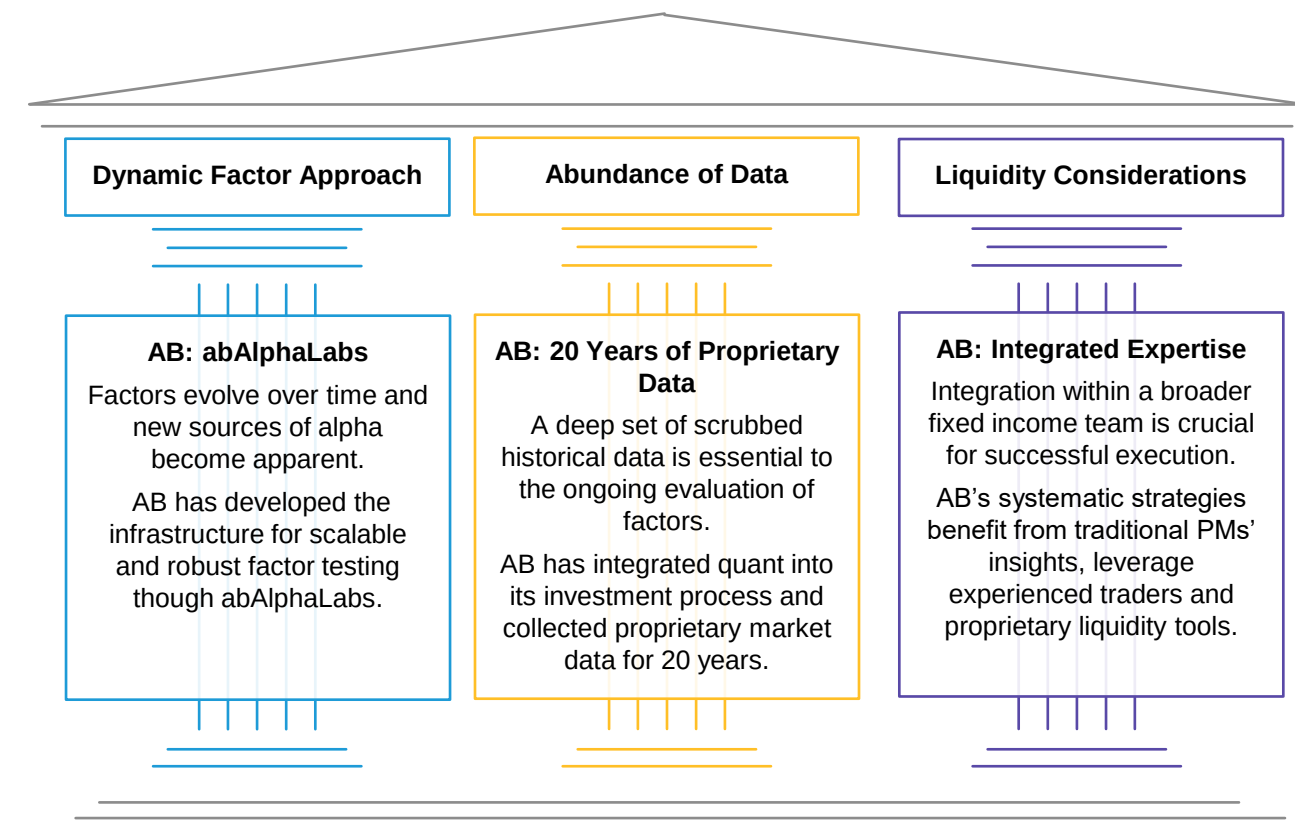
From Factors to Portfolio Holdings



Source: AB

Three Key Pillars to Successful Systematic Fixed Income Approach

AB Systematic Fixed Income



For illustrative purposes only.

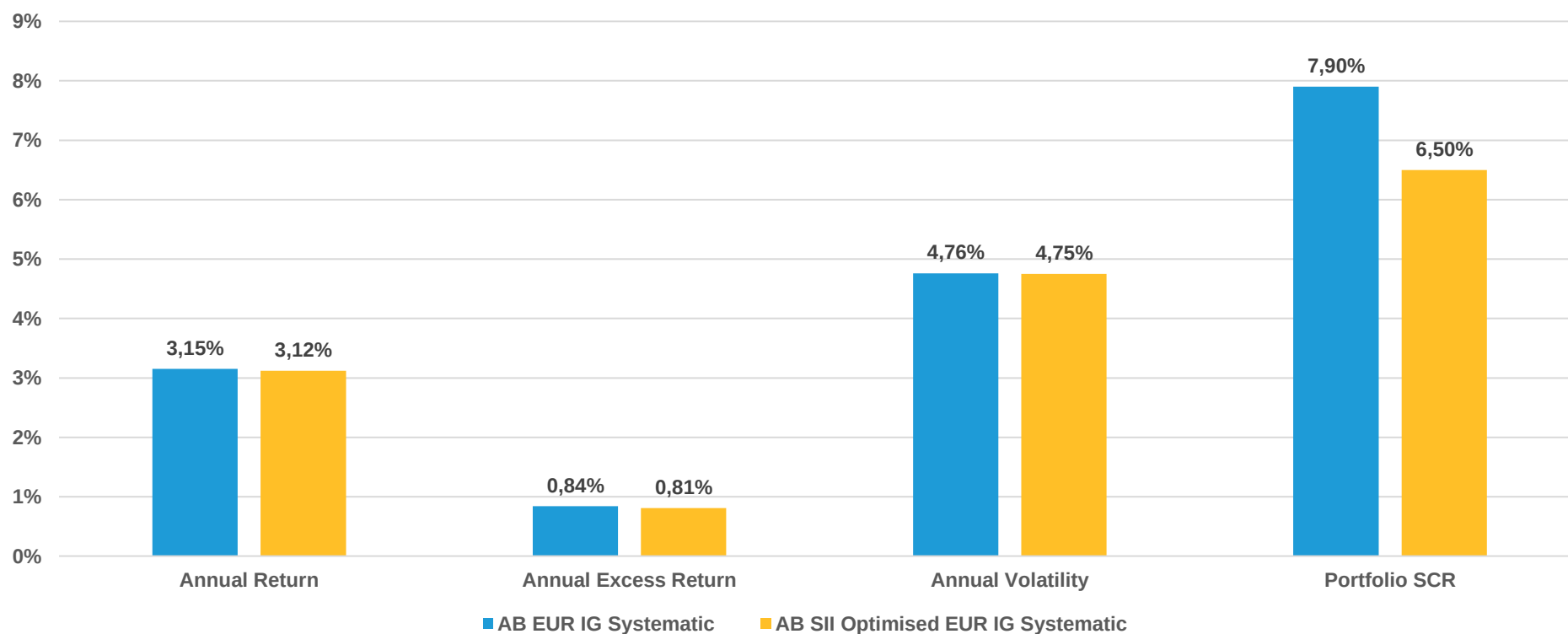
Source: AB

Examples of Customization For Institutional Clients

European Insurers: Solvency II Optimized Portfolio Construction

Significant Capital Saving for limited risk and return impact

AB Systematic European Investment Grade Backtest Results



Source: AB, 12 Year Backtest to June 2023

Systematic US High Yield: Restricting CCC-rated Investing

Summary of Results

Strategy	Annual Relative Return	Annual Volatility	Information Ratio	Max Drawdown	CCC Weights Range
USHY [Baseline]	1.53%	0.73%	1.96	-1.14%	10%-20%
USHY [Do not buy CCCs]	1.35%	0.67%	1.88	-1.10%	4%-8%
US HY [Do not buy & do not hold CCCs]	0.95%	0.76%	1.18	-1.68%	0%-2%
US HY [Do not buy & hold $\leq 1\%$ CCCs]	1.14%	0.65%	1.63	-1.62%	1%-3%
USHY [Do not buy & hold $\leq 3\%$ CCCs]	1.26%	0.69%	1.70	-1.06%	2%-5%
USHY [Do not buy & hold $\leq 5\%$ CCCs]	1.36%	0.69%	1.84	-1.09%	4%-7%

- The above simulations of our Systematic US HY strategy compares our baseline strategy (which is allowed to invest in CCC+ rated bonds) to simulations that exclude CCC+ and lower-rated bonds.
- Not allowing the purchase of any CCC & below bonds results in performance that slightly decreases by about 20 bps annually. However, this strategy has lower volatility and a smaller max drawdown, thus resulting in a similar Sharpe

Past performance does not guarantee future results. Simulated or hypothetical performance results have certain inherent limitations. Unlike the results shown in an actual performance record, these results do not represent actual trading. Results include estimates of trading costs and market impact; however, because these trades have not actually been executed, results may have under- or overcompensated for these costs. Simulated or hypothetical trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. No representation is being made that any account will or is likely to achieve returns or a volatility profile similar to those being shown. As of June 2024. Source: AB

Recap

Executive Summary: Systematic Fixed Income at AB

Systematic strategies may provide **attractive, repeatable, and uncorrelated returns**. They rely on the **bottom-up factor approach** to **outperform the benchmark through security selection and structure**. They deliver **attractive risk-adjusted returns**.

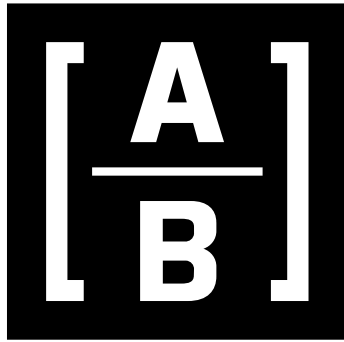
Systematic strategies rely on a **dynamic investment process**. Factors evolve over time, and their efficacy changes. We have a **library of hundreds of factors** that we monitor continuously to capture regime changes and identify areas of enhancements.

AB systematic fixed income benefits from the **broad AB fixed-income capabilities, 20 years of proprietary market data**, and cutting-edge in-house technology such as **ALFA and Abbie**.

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Q&A





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