INNOVATION-DRIVEN INVESTING IN FIXED INCOME

By Sam Finkelstein

The goal is simple: make smarter investment decisions faster and more costeffectively to deliver better outcomes for clients. The route to achieving this is also straightforward: collaboration between humans and machines.

SMARTER, FASTER AND COST-EFFECTIVE INVESTING

Engineering the investment process to be data-driven and technology-informed can drive efficiency to deliver better outcomes for client portfolios. One example of innovation in recent years is the implementation of investment signals in fixed income portfolios. Traditionally, fundamental fixed income investors form a macro outlook and then implement investment decisions based on this expected backdrop. But economic, market, policy and political conventions - and in turn macro outlooks - are subject to considerable uncertainty.

As the 2020s progress, managers implementing this approach believe



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successful investment decisions will be increasingly based on disaggregated drivers of asset prices and returns.

The ability to form a perspective on the global economy, to understand market structure, to recognize fundamental drivers of investment returns, and to digest policy responses and political outcomes will still be vital. However, investment decisions will be optimized for any given backdrop rather than for an expected outcome that is subject to considerable uncertainty.

In practice, fixed income managers will derive investment signals that are informed by disaggregated drivers of asset prices and returns, which can be macro-oriented and may include statistical relationships, market dynamics or security-level traits. Consideration of investment signals can ignite investment discussions, overcome behavioural biases and increase the breadth of investment views being undertaken. This helps to build more resilient and diversified portfolios.

Risk management¹ is central to the decision to act upon an investment signal and there will be occasions where the decision is made to discount investment signals or implement contrarian views. For example, ahead of the June 2019 G20 meetings, a directional rates investment signal proposed to be underweight global duration. Given unstable US-China relations and potential for a rally in rates, a portfolio manager could choose not to act on this signal.

Another example could be to omit the British pound from the current currency signals due to the binary and highly unpredictable nature of Brexit negotiations. Importantly, data analysis is systematized, but not investment decision-making.

In addition to the implementation of investment signals, managers have created proprietary indicators that digest various data into metrics, that help to formulate views faster and digitize investment views in a centralized 'information warehouse'. This enhances intellectual cross-pollination and communication both across and within teams.

Lastly, a manager could deploy the technology to obtain trading intelligence to invest cost-effectively, either through

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lower transaction costs or by being rewarded for providing liquidity.

HUMANS AND MACHINES: IN COLLABORATION, NOT COMPETITION

Admittedly, fixed income investing has lagged other asset classes in its use of new technologies and automation. Part of the explanation is industry-specific: bond pricing data has existed for less than 20 years and the bond market is larger and more heterogeneous than the stock market. But data availability and advances in automation are narrowing the gap. Activities initially in scope for automation tend to be mundane.

Assigning these sorts of tasks to computers enables investors to spend more time on activities that - at the moment - cannot be automated. This includes abstract thinking, such as the consideration of novel macro or market conditions that may pose upside or downside risks to a current investment view, or discussions with policymakers and corporate executives.

Similarly, algorithmic pricing for liquid fixed income securities and electronic trading for smaller size bond transactions allows traders to allocate more time to higher value-add tasks, like the acquisition of deeper market expertise, the management of larger or more complex trades and the development of proprietary toolkits.

The value of automation is magnified when several tasks coalesce; digitized research views combined with trading intelligence can result in faster investment decision-making and better portfolio construction. Value is also realized when tools or datasets unite. In the retail sector, data analysis can provide a consumer with grocery shopping recommendations based on prior purchases, available budget and shopping frequency. In investing, similar data-driven insights can provide a portfolio manager with a recommended list of bonds to purchase consistent with a client's investment objectives, but also optimized for the prevailing market environment.

Apart from automation, managers are currently focussing on another humanmachine collaboration: an integrated investment ecosystem. In the past, portfolio managers, research analysts and traders undertook many activities using a certain toolkit. In the current era of investing, toolkits and data-driven insights are combined into one integrated investment ecosystem (or platform) providing two important capabilities: constant connectivity and real-time updateability. A single integrated platform is able to connect information from each function or team in real-time, and can also be updated for any change in views in a split second.

There seems to be a growing application of data-analysis techniques, such as artificial intelligence, machine learning and natural language processing across fixed income investing². However, while technology may drive better, faster and cost-effective investment decisions, a key distinction for active investment management is that humans will remain at the wheel. «

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This article was written by Sam Finkelstein, Co-Chief Investment Officer, Global Fixed Income and Liquidity Solutions Business, Goldman Sachs Asset Management.

- Innovation can provide a dynamic investing edge;
- New technologies and an engineered investment process allow us to make smarter investment decisions faster and more costeffectively:
- A collaboration between humans and machines can deliver better client outcomes.

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The portfolio risk management process includes an effort to monitor and manage risk, but does not imply low risk.

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² For more information, see GSAM Perspectives: Big Data Edition (July 2016).