BlackRock.

The case for active equities in the U.S.

Using a systematic approach to target consistent alpha





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The arguments against active management in the U.S. have become well known: The U.S. market is too efficient, no single manager can gain a consistent information advantage, the cost of active is too high, and so forth. Even in the most efficient markets, a systematic active approach can potentially give investors the ability to uncover alpha opportunities. With growing sources and sets of unstructured data, a quantitative process that rapidly transforms information into valuable insight makes a case for active investing in the U.S.

Not just active, systematic active

In decades past, investors have largely relied on information supplied by companies themselves to understand how business conditions and fundamentals were evolving.

Financial statements, meetings with management and regulatory filings were the primary sources of company information. With the digitization of the economy, a step change in the availability of information has occurred. Now we can uncover alternative sources of information to understand a variety of topics. Nowhere has this trend in the availability of unstructured data been as broad and far-reaching as in the U.S. Driven by the steady increase of firms collecting and generating huge amounts of digital information, the U.S. market has arguably the best availability of alternative data sources of anywhere in the world. As a result, in the Systematic Active Equity (SAE) team, our U.S. strategy has evolved over the years to complement traditional analysis and company-supplied sources of information with alternative data and modern scientific analysis to help better understand how businesses are performing.

At a high level, the notion of generating alpha is simple. You need to have a view that is different from the consensus and you need to be right.



1 New data

In SAE, a huge part of our collective time is spent evaluating new data sources.

The increasing digitization of all aspects of everyday life has meant that thousands of new information-rich data sources are now available to those with the scale and resources required to harness them. In the following, we provide a glimpse into the types of data and techniques that we use across our U.S. strategy. Specifically, we detail examples of how data can be used to evaluate consumer and corporate activity across dynamic market environments.

Consumer activity

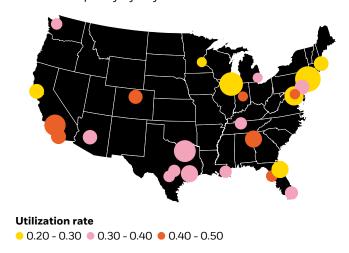
The COVID-19 pandemic presented investors with uncertainty as they tried to determine the shape of the recovery and which businesses would emerge the strongest. Finding an information advantage was essential for identifying opportunities and navigating risk.

Consumer activity leaves a digital trail that can help predict outperformance even in unprecedented times. For example, monitoring trends in online search terms provided a lens into consumer behavior in the early days of the economic reopening. As restrictions were lifted, were consumers more comfortable traveling to certain regions than others? Which businesses and services were they most eager to visit post lockdown? This data helped us understand the evolution of mobility and where consumer spending would potentially be increasing the most.

Similarly, we could determine the regions where travel demand was starting to grow and identify hotel operators with properties in those geographies. Shown below, the Taking Reservations map reveals New York's high hotel capacity with very low utilization in the early months of the economic reopening. Despite tremendous capacity, we could see that travelers were less likely to visit heavily populated cities most impacted by the virus. Taking our analysis beyond travel and mobility. GPS based foot traffic data provided an even more granular view of which businesses were most likely to benefit and outperform throughout the recovery. New and alternative sources of consumer data provided a bridge between the unprecedented pandemic and subsequent reopening.

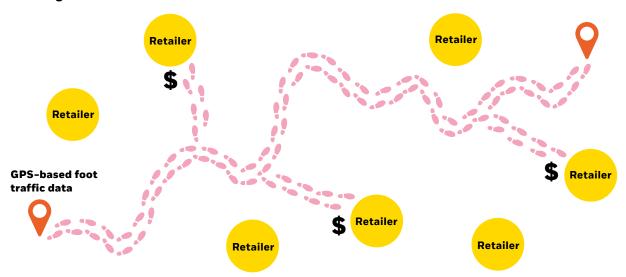
Taking reservations

Total room capacity by city vs. room utilization rate



Source: BlackRock, with data from TravelClick as of September 2020. Based on one month forward bookings. The size of the dots represent room capacity.

Tracking foot traffic



Source: BlackRock. For illustrative purposes only.

Corporate activity

Just as we monitor consumer activity, corporate activity can be similarly tracked and evaluated. We can again look to alternative data sources to help better understand how companies are being run and how well businesses are performing. For example, we can look to online and social media sources to see how employees are referencing the company. Do the employees hold a positive opinion of the firm and corporate culture? Are they receiving adequate benefits and compensation? Do they view the firm as innovative and an industry leader?

Additionally, we can monitor corporate activity to help assess the sentiment of management teams. Hiring data may be able to provide insight on the pace of a company's growth and their strategic initiatives. We can see if they're looking for unique

skillsets relative to the industry or hiring in research-based roles that could potentially drive future innovation.

The COVID-19 pandemic served as a catalyst for businesses to evolve, separating winners from losers across sectors and industries. Our analysis helped provide a lens into which companies were the most nimble and ready to adapt to a changing world. Lockdown restrictions forced employees to work from home, revealing which organizations were best positioned to compete in a virtual environment. Which firms had the adequate technological infrastructure to stay connected? Were they successful in reaching clients, meeting financial goals and innovating during an unprecedented time? The answers to these questions and many more could be estimated by combining the right data with expert human insight and analytical tools.

2 Better processing of data

Conference calls and machine learning

To understand how better processing of existing information can help generate alpha in the U.S., consider quarterly conference calls as an example. In the U.S., nearly every public company hosts a call with investors where executives highlight what they thought was most relevant and provide color and context above and beyond what can be garnered from financial statements. Additionally, a freeform question and answer session is typically held where the analyst community can ask questions of the management team and delve deeper into particular areas. Immediately after the call, transcripts are written and made available.

A simple way to process this text-based information is to score the sentiment of the document by writing an algorithm that searches for and tallies all the positive and negative descriptive words. Then a simple ratio of the number of positive to negative words can be computed to give a rough estimate of the sentiment on the call.

Now, how can we extract more information above and beyond what this simple sentiment scoring algorithm can provide? If we take this same basic idea, but instead deploy a machine learning algorithm, we find many different dimensions to explore. Rather than treating every single positive and negative word the same, for example, the machine learning framework allows us to differentiate among words and place varying levels of importance depending on the strength of its historical predictive power. Consider words like "good" and "great." How much more positive is a word like great? Is it twice as positive as good? Three times more positive? In the machine learning framework, we can let the data determine the importance of one word over another depending on how predictive it has been through time.

Machine learning also allows us to incorporate more sophisticated concepts including things like contextual information and historical comparisons. For example, we can account for the corporate title of the speaker to adjust biases across roles. If we find that CEOs on average are more positive than CFOs, then we can adjust for these types of subtleties to better parse information from noise. We can look at historical sentiment at the individual level and identify subtle changes. For example, is an executive typically more neutral in his or her tone, but then gradually shifts to a more positive stance? If so, this can be helpful in understanding changes in underlying business performance.

With the right tools at hand, the possibilities are only limited by our collective insights and creativity.

Text analysis of annual reports

Over the years, improvements in financial reporting requirements have led to more frequent and higher quality regulatory filings, particularly in the U.S. The average U.S. listed firm is now submitting one financial regulatory filing every other business day. This is roughly twice the pace of filings from just a decade ago. See the *More reports* chart below. At the same time the quantity of information released is increasing, the quality of that information has improved as well. The median U.S. firm now writes a 7,600-word description of its business detailing all the various products, divisions and drivers of results. The *More words in each* chart shows the increase since 2008.

Higher frequency, content rich filings present an opportunity to extract more information and make better forecasts. Consider the risk disclosure section in the annual reports for U.S. companies as an example. All U.S. listed firms are required to disclose the largest risks, in order of significance that could impact their business. This section tends to be very detailed, often filling multiple pages. The text of the disclosure is frequently very similar year after year, but from time to time, prior disclosures are amended

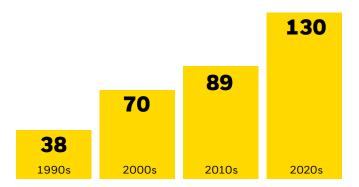
and new disclosures are added. We can potentially identify these changes by systematically comparing a company's disclosures from one period to the next. Is the company adding a new risk item that could impact its business? Is this because of a potential upcoming litigation? Has the ordering of those risks changed over time? This type of analysis allows us to construct probabilistic models assessing the likelihood of future negative events such as product recalls or organizational restructurings.

Better than benchmarks

Despite significant advances in data and technology, many investors believe that the U.S. equity market is too efficient for managers to consistently outperform. With growing availability of alternative data and the unique capabilities within SAE, there's a significant opportunity for generating alpha with an active approach. Through constant evolution and innovation over the course of 30 years, SAE has demonstrated an ability to evolve and achieve outperformance in the U.S. through a powerful combination of human insight alongside data and technology.

More reports...

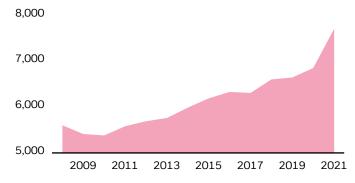
Average number of SEC filings annually, per U.S. firm



Source: BlackRock, with data from the U.S. Securities and Exchange Commission. As of January 2022.

More words in each...

Average words in U.S. company business descriptions



Source: BlackRock, with data from company 10-K filings and EDGAR. As of January 2021.

Learn more at blackrock.com/SAE

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