

Assessing the various business risks, sector disruptions and investment opportunities brought on by COVID-19, AllianceBernstein chief risk officer Andrew Y. Chin does not merely scan the regular run of financial and market data, company filings, earnings calls and other, fundamental datasets.

Chin, who is also the asset manager's head of quantitative research, brings alternative data into the mix. No longer the novelty that it was a few years ago, but still blazing new trails in terms of growth and creativity, alt-data can draw from geolocation or foot-traffic patterns, website activity, credit card transactions, and data derived from electronic receipts, supply chains, sensors, social media, news feeds and more. Such diverse and oftentimes unstructured data can be synthesized and, with the analytical power of artificial intelligence and machine learning, fed into models and ultimately into investment processes.



Alt-data can reinforce confidence in decisions or raise "a contradictory point to consider," says AllianceBernstein's <u>Andrew Chin</u>.

To Chin, the techniques can bring out trends and insights and provide a competitive edge in predicting, for example, how various businesses and sectors will show signs of revival as the pandemic runs its course.

Alt-data flows in ways that conventional indicators, which appear only periodically and lag on-the-ground reality, do not. The near-real-time results have come to be known as "nowcasting." They might deliver insights on consumer or business confidence well in advance of polling, or on corporate earnings before they are released. "Alternative data can give me a better perspective on the risks associated with a particular company or sector before traditional financial data is made available," Chin says. "It can often help me make both faster and better decisions, giving me more confidence about a decision I've reached or, in some cases, a contradictory point to consider."

"Alternative data is not a substitute for standard risk analysis," explains Angelo Ovidi, principal of alt-data and Al technology company FinScience. Rather, "it is an excellent way to identify something that is unexpected and avoid blind spots in one's analysis."

Chin adds that over the three and a half years that he has been employing alternative data, it has become a fixture in the risk and investment analysis arsenal.

Hundreds of Sources

Alt-data spending by buy-side firms jumped from \$232 million in 2016, to \$1.1 billion in 2019, and a projected \$1.7 billion in 2020, according to <u>AlternativeData.org</u>, a trade group whose statistics come from YipitData.

A JPMorgan <u>Big Data and Al Strategies</u> report, in 2017, took a broader view, estimating annual spending by asset managers at \$2 billion to \$3 billion on alternative data, including dataset purchases, big data technology and talent. The annual growth was pegged at 10% to 20%.

A survey on <u>artificial intelligence in financial services</u>, published in February by the University of Cambridge Judge Business School and World Economic Forum, found that majorities of both incumbent and fintech firms use "AI to generate new insights from non-traditional datasets."

The most-used source: social media. No surprise, the report said, because the behavioral data "contain rich (albeit unstructured) information encompassing the identity of individuals and other attributes. These may be beneficial for applications such as credit analytics, although this use case might not yet be at a stage of mainstream adoption."



Most Widely Used Alternative Data Types

Source: Cambridge Judge Business School, World Economic Forum

According to results of a global <u>hedge fund industry survey</u>, announced May 4 by the Alternative Investment Management Association and SS&C Technologies, 53% use alternative data, and 25% of those were considered "market leaders," making use of this type of data for more than five years.

The vendor landscape includes alt-data pioneers Dataminr, Eagle Alpha, Neudata, Orbital Insight, Predata and Quandl (which was acquired by Nasdaq in 2018); newer start-ups such as Apptopia, Cognovi Labs and Enigma; and long-established incumbents such as Bloomberg, FactSet, Refinitiv and S&P Global. There is even an alt-data service for individual investors, from Verizon's Yahoo Finance.

AlternativeData.org counted more than 400 alt-data providers as of 2018. Refinitiv today says it is more than 1,000.

Booming Demand

Initially embraced by signal-seeking quantitative or algorithmic traders, alternative data has spread throughout the institutional investment world and into the corporate sector. The COVID-19 crisis is not only an unprecedented test for businesses and governments, but also a new phase for alt-data.

"We are four times busier than usual," says Neudata founder and CEO Rado Lipuš. Clients are asking: "What are the early signs of recovery from the pandemic? What sectors are coming back? And to what degree are prices holding up or heavily discounted?"

Four-year-old Neudata offers over 3,500 datasets; those most in demand pertain to employment indicators, ESG (environmental, social and governance) performance, and transactional activity.

"It's been a really interesting time for the alternative data industry, with many different groups reaching out for data, including central banks, ministries of finance and government Treasury departments in addition to the hedge funds we usually work with," says Emmett Kilduff, CEO and founder of Eagle Alpha. "All of them are seeking more real-time information on economic, business and consumer activity during COVID-19," as well as signs of recovery.

"Every call we get these days is about how to monitor for COVID-19 impact," says Charles Poliacof, CEO of Knoema, which provides access to 52,000 datasets. For instance, clients look to WARN (Worker Adjustment and Retraining Notification) Act data for unemployment trends. Also geolocation, search engine, medical portal information – "any type of alternative data that can indicate when are we going back to life as it was before," Poliacof says.

Specifically for COVID-19, Knoema has partnered with other alt-data firms – including geolocation data provider Advan Research Corp. and digital data specialist SimilarWeb – to offer a free "<u>situation room</u>" dashboard. 1010data along with Exabel, an AI and machine learning platform, similarly display "<u>live views</u>" of U.S. consumer spending.

Predictive analytics specialist Predata has tracked a <u>pessimism index</u> showing consumer psychology and sentiment alongside European lockdown policies.



Geolocation, ESG

Data providers report a significant uptick in interest for geolocation data for purposes ranging from tracing the spread of the virus to indicating business slowdown or revival. The data can show where consumers are going and businesses they are frequenting, which, even though said to be anonymized, raises privacy questions that legal teams have had to address.

Another data type attracting attention is ESG. AllianceBernstein's Chin says this area is "exploding," as it can reveal if a business is complying with pollution regulations. Data entered on the Glassdoor recruiting site can indicate where companies stand in terms of culture and governance.

"ESG is definitely one of the topical categories of the year," says Eagle Alpha's Kilduff, pointing to employe e health and safety, labor practices and supply chain management.



"It is an excellent way to . . . avoid blind spots in one's analysis," says Angelo Ovidi of *FinScience*.

Hendrick Bartel, CEO of ESG analytics company Truevalue Labs, believes "this is really the time for ESG data to shine," as many risks associated with COVID-19 – ranging from supply chains to labor to model resilience – are being closely watched.

Others active in this ESG segment include FinScience, RepRisk and Sustainalytics, which is in the process of being acquired by <u>Morningstar</u>.

Combination Offerings

A growing alt-data trend is so-called fusion offerings, combining two or more datasets. For example, Advan has partnered with data-insights provider Consumer Edge to overlay foot traffic and credit card transaction data.

Another new alt-data category seeks to quantify consumer intent or behavior. Firms active in this field include Cognovi Labs and Prosper Insights & Analytics.

Companies such as Sequentum, Thinknum and Vertical Knowledge facilitate web scraping, harvesting or data extraction, for insight into pricing, sales, public sentiment and, at times, government data releases.

Others say they can relieve clients from having to hire teams of data scientists and machine learning experts. It amounts to what Knoema's Poliacof calls productization of alternative data, which can be found from the likes of FinScience, M Science and 7Park Data.

Some, such as ScrapeHero and WebHose.io, go so far as to mine the dark web, which is beyond the reach of conventional search engines, to uncover cybersecurity or criminal vulnerabilities. For those selling alternative datasets in the cloud, Snowflake and Amazon Web Services offer security and compliance controls.

Data-Management Risks

For now, alternative data remains a young industry, and there are risks and challenges as it moves toward maturity.

"Problems that have been shaken out of more traditional or fundamental types of datasets can and do arise in newer categories of alternative data," states Elizabeth Pritchard, founder and CEO of consulting firm White Rock Data Solutions.



"We are four times busier than usual," says <u>Neudata</u> CEO Rado Lipuš.

According to Pritchard, formerly of Goldman Sachs Group and a company it helped fund, Crux Informatics, risks to be aware of can involve:

- Having the legal right to sell or access data, and compliance with laws such as the EU General Data Protection Regulation (GDPR) and California Consumer Privacy Act.

- Inaccuracies or inconsistencies in datasets, leading to faulty signals or conclusions.

- Failing to monitor for drift in datasets, particularly when applying machine learning processes, thereby resulting in faulty signals.

"There is always the risk of receiving information from an alternative data provider that is not well an alyzed and generates a wrong decision," says Yiannis Tsiounis, CEO of Advan. "You always need to determine, what is the reputation of the data provider? What is the true history of the data? Is the data being analyzed properly? Is the data being cooked and improperly altered in some way to make it look good? And is there any bias in the analysis of the data?"

Practices and Standards

A report in April from Refinitiv and the Open Data Institute, <u>Building an Open and Trustworthy Alternative Data</u> <u>Ecosystem</u>, highlights some of what the industry is lacking: rules, guidance and best practices; ethical and legal clarity; and standardization.

Recommendations include "ethics assessments that go beyond compliance and legal issues" for all alt-data providers and users; and agreement on "a road map for standard adoption to improve technical integration and dataset due diligence."

At what Refinitiv global head of quants and feeds Austin Burkett said is "an inflection point when it comes to understanding, sourcing and applying these datasets to add greater insight and investment value . . . alternative data ought to be standardized and, where possible, normalized in order to improve data quality and reliability to better serve clients with the highest ethical and legal considerations."

"Investors increasingly recognize that with the use of these new datasets come accompanying operational, compliance and regulatory risks," says Jason Scharfman, managing partner of Corgentum Consulting, which performs operational due diligence for fund managers. "Allocators are now beginning to tailor their due diligence processes and resources towards analyzing this growing research avenue."

A Corgentum <u>survey</u> released in January showed 83% of fund investors "continuing to increase the resources allocated to analyzing compliance procedures surrounding alternative investment managers' use of third-party research," and security and privacy considerations around hedge fund and private equity managers' use of alternative data is a key focus.

An Industry Initiative

Pritchard, who sits on the <u>FISD Alternative Data Council</u>, says that the group is working on best practices and standards, as "I think there is going to be more interest by regulators, beyond GDPR, as well as by activist groups representing privacy concerns."

The council has issued a Data Vendor Tear Sheet to guide alt-data buyers. Also available on the council web page is a Compliance Due Diligence Questionnaire.



There is hunger for "data that can indicate when are we going back to life as it was before," says Charles Poliacof of <u>Knoema</u>.

Alternative data "will be very difficult to standardize," cautions Abraham Thomas, chief data officer of Quandl. While it would be ideal if all data arrived in a globally recognized, privacy- and compliance-optimized format, at this point "it will be like trying to fit a square peg into a round hole."

He adds, "Alternative data is a very powerful addition to the risk management toolbox, especially in these uncertain times when the limitations of historical data and traditional metrics are very clear."

"There are so many different types of alternative data that I think that the only way to create standards would be at each level of vertical data," says Alexandra Mihailescu Cichon, executive vice president of RepRisk. That firm gives clients the option of using the UN Global Compact or the Sustainability Accounting Standards Board framework in assessing companies' ESG practices.

Competitive Considerations

Kilduff of Eagle Alpha, while favoring best practices and supportive of the FISD effort, notes that big firms that hire inhouse teams of data scientists and technologists to work with large data sets would oppose standardization if threatens their competitive advantage.

Wherever these discussions may lead, Chin of Alliance Bernstein maintains his own set of standards. He poses a long list of questions that include: How is the raw data captured and collected? What biases exist in the data? Can you confirm that the data was sourced legally? Can you confirm that the data can be sold and used by third parties? How do you verify the raw data? What is your quality control process?

Chin expects ever more datasets will be coming out, particularly as the Internet of Things generates vast volumes of data from billions of home, business and remote devices. "Increasingly," he says, "risk managers will have to have dexterity around working with alternative data and know how to draw conclusions from it."

He adds: "The opportunities far outweigh the risks."

Katherine Heires is a freelance business journalist and founder of MediaKat llc.