BlackRock

Alternative data: The informational advantage in growth equity

Applying predictive data science to chart a new path in private markets



Summary

- Alternative (or big) data is physical, unstructured (text) or non-financial data generated by every day activities such as internet searches, GPS networks, and online and in-person transactions; the volume and availability of such data on both public and private companies has grown immensely over the last decade as companies and customers increasingly transact and communicate online and through mobile devices.
- Today's disruptive companies are staying private for a decade or longer, amassing significant valuation appreciation and creating increasingly large digital footprints prior to IPO.
- While alternative data has been embraced by leading systematic investors to gain an
 informational advantage in public markets, its application in growth equity is nascent
 and has the potential to revolutionize the way investors identify and due diligence
 investment opportunities.
- Investors pioneering the integration of alternative data and a systematic process alongside fundamental due diligence and sourcing may stand to benefit sustained advantages over traditional approaches.



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The value of alternative intelligence

The amount of data produced each day is staggering. It's estimated by the International Data Group that nearly 100 trillion gigabytes of data were created and consumed in 2022, a sum equivalent to 4.5 trillion times the entire text contents of Wikipedia.¹ Consumers and businesses alike are producing enormous data sets, and savvy investors are finding ways to gain an investment advantage by exploiting these sources of information that were not available before. Despite imprecise comparisons between today's sprint toward discoveries in "big data" and prior discoveries of gold or oil, the analogy still rings true: "Data is like crude [oil]. It's valuable only once refined, but if left unrefined it cannot really be used."²

For investors able to refine this growing stream of raw data into tradeable intelligence, the hurricane of data has been a windfall. Investors, now armed with diverse information sources and streams of alternative data, can more accurately pinpoint a company's probability for investment success.

Online job posting coverage of public vs. private companies

Private companies 5.6 million

Public companies 14,221

Number of companies

Source: BlackRock, Burning Glass Technologies, September 2023.

Systematic investment managers have been exploiting alternative data sources in public markets for years. Alternative data — sometimes called big data — is unstructured (text) or non-financial data generated by the technologies of our everyday lives like smartphones, GPS or other smart IoT devices. When aggregated and analyzed the right way, alternative data can provide valuable insights into the growth prospects of individual companies, sectors or themes. Innovative investors are beginning to extend to private markets the same systematic, data-driven processes that have been successful in public markets for decades. These techniques can now be applied to growth equities in private markets to quickly home in on, and to guide, fundamental due diligence on those firms that may have the highest probability of a successful exit.

To illustrate this point, consider the insights available through online job postings. This rich data set can reveal many granular details about an industry, a sector or a specific company — providing real-time insights to assess which sectors are positioned for outperformance, which companies are experiencing increases in demand and what opportunities executives are positioning for strategic growth. What's more, the coverage of private company job posting data is nearly 400 times greater than that of public companies.

In this paper, we'll assess the current opportunity in growth equity investing, review examples of how investors are applying data science to this universe, and offer our thoughts on why we believe the future of growth equity investing will be in the hands of those with the ability to refine "crude" data into meaningful and actionable investment decisions.

Defining the growth equity opportunity

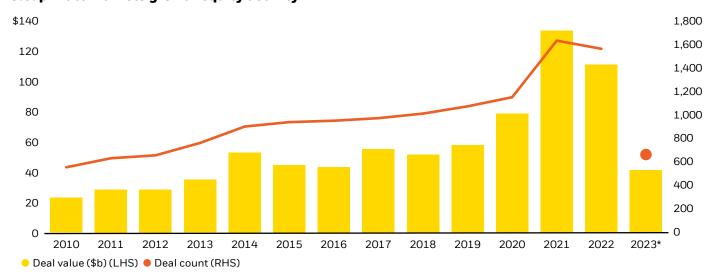
Until quite recently, growth equity was a nascent area of the private equity market where technology companies were bootstrapped prior to IPO. Today, the growth equity market has matured to USD 112 billion of deal activity last year, up from USD 23 billion in 2010 (see chart below). In years past, it was exceedingly rare for companies to achieve a USD 1 billion valuation without access to public capital (hence the name "unicorn" to describe the statistical rarity). Today there are over 1,200 companies boasting this status, turning their once mythical status into a more common sighting.³

The diversity of the opportunity set in growth equity has grown as well. Disruptive technologies dominate the growth equity space, but there are now disruptors across many sectors beyond traditional technology such as healthcare, transportation, financial services and education. And while U.S. firms have typically dominated growth equity, activity over the past five years has significantly increased in Europe and Asia. Growth equity investors can now access opportunities in innovation in a robust and diversified marketplace in seeking to achieve attractive risk adjusted returns.

There is a mutually beneficial relationship between companies and institutional capital that is driving the strong development of the growth equity market. Young companies with attractive revenue growth, and limited debt, are catching the eye of large-scale private capital providers. These companies no longer see the need to rush to the public markets to finance their growth plans. The founders of growth companies can dedicate their efforts to a long-term strategic vision rather than the relentless focus on quarterly results that are demanded by public investors. At the same time, working with investors in the private space, companies can focus on the relevant governance and institutional improvements that will allow them to continue their journey.

Capital providers that seek higher levels of return than are available in the public markets are responding by awarding these young companies with meaningful access to capital, and therefore the luxury to remain private. The growth equity sector has delivered some of the most attractive risk-adjusted returns within the private equity market (see chart on page 5).

U.S. private markets growth equity activity



 $Source: Pitchbook \ data \ as \ of \ June \ 30, 2023. \ Above \ information \ represents \ private \ equity \ growth \ equity \ investment \ from \ 2010 \ to \ 2023 \ in \ the \ United \ States.$

3 CB Insights, 'The Complete List of Unicorn Companies,' September 2023, https://www.cbinsights.com/research-unicorn-companies.

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^{* 2023} data as of June 2023.

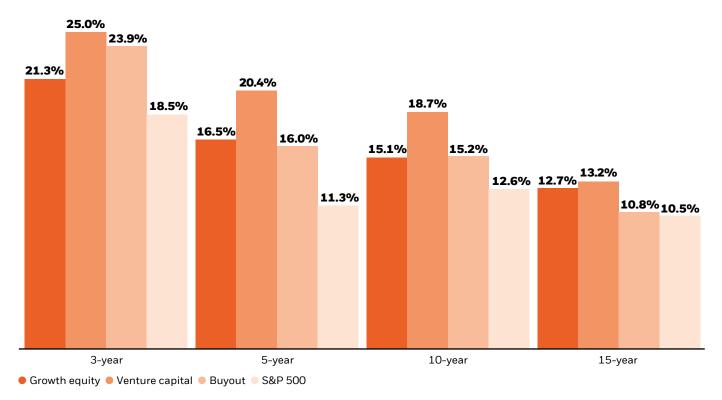
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This feedback loop of better governance driving better returns and thus more capital flows is extending the time horizon for private ownership, and more importantly is shifting much of the value creation to occur before companies make public market debuts. Said another way, the growth premium is being captured in the private market, leaving less excess return potential for post-IPO investors. This can be illustrated in a recent study of unicorn (>USD 1 billion valuation) performance pre- and post-IPO between 2015 and 2020.4 In the sample set of 107 companies, the median unicorn generated private investment performance equal to six times initial invested capital, while returns to public shareholders for the same firms post-IPO generated a modest 1.1x on average. Almost half of the companies in the sample produced a negative return after their public listing.

This dynamic is driving some convergence between public and private equity ownership. Investors seeking exposure to companies creating value via innovation and disruption cannot wait for these companies to enter the public arena. The growth equity space has become a prime hunting ground for opportunity: growth equity has arrived, and it's here to stay.

Alternative data seeks to unlock the information embedded in the digitized world to identify opportunities missed by traditional models. Today, companies are raising more private capital and creating more value earlier in their lifecycle. Tech trends have accelerated, and there is no debate that technological innovation is touching every industry and will continue to disrupt traditional business models. At the same time, private market valuations are rising, making it more critical for investors to discern potential winners from hyped-up future losers.

Historical performance rate of returns'



Index performance returns do not reflect any management fees, transaction costs or expenses. Indices are unmanaged and one cannot invest directly in an index. Important Information. The figures shown relate to past performance. Past performance is not a reliable indicator of current or future results. Indices are unmanaged and one cannot invest directly in an index. *Source: Cambridge Associates LLC as of March 31, 2023. The "Growth Equity" index is a horizon calculation based on data compiled from 419 U.S. growth equity funds, including fully liquidated partnerships, formed between 1986 and 2023. The "Buyout" index is a horizon calculation based on data compiled from 2,350 U.S. venture capital funds, including fully liquidated partnerships, formed between 1981 and 2023. The "Buyout" index is a horizon calculation based on data compiled from 1,086 U.S. buyout funds, including fully liquidated partnerships, formed between 1986 and 2023. Private indexes are pooled horizon internal rate of return (IRR) calculations, net of fees, expenses, and carried interest. CA Modified Public Market Equivalent (mPME) replicates private investment performance under public market conditions. The public index's shares are purchased and sold according to the private fund cash flow schedule, with distributions calculated in the same proportion as the private fund, and mPME NAV is a function of mPME cash flows and public index returns. "Value-Add" shows (in basis points) the difference between the actual private investment return and the mPME calculated return.

4 The Journal of Applied Corporate Finance, "The Growing Blessing of Unicorns: The Changing Nature of the Market for Privately Funded Companies," Keith C. Brown and Kenneth W. Wiles.

Applying a data-driven approach to private markets

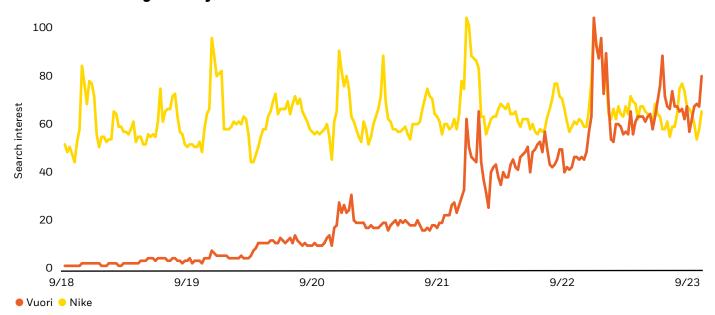
If growth equity companies are staying private longer, it may be no surprise that private and public company data footprints are increasingly similar. While private companies have the luxury of forgoing the formal data disclosures required of publicly traded companies, digital footprints are not obscured by the difference in capital markets construct.

The data imprints of private and public companies are strikingly similar. Consider for example Nike,⁵ the world's largest athletic apparel manufacturer, and a publicly traded company with a total market cap of \$137 billion. A private competitor, Vuori, a Southern California-based athletic and performance apparel company, has grown to a market valuation of \$4 billion in less than 10 years. Despite these differences, similar data exists on both companies. Consumers interested in buying performance apparel are

likely to do a quick internet search before purchase — regardless if their athletic wear is made by a public or private company. Google maintains that search history the same way for Nike as it does for Vuori, providing a powerful measure of consumer intent and purchase activity at both the product and company level.

While many investment insights translate well across public and private markets, some characteristics remain unique to private markets. A data-driven process can also be trained on aspects specific to private companies: Fundraising trends in private markets can help identify dislocations, detect overheated segments and provide a pulse on the viability of growth equity investments. The quality of other limited partners investing in private firms can also imply positive or negative connotations for a company.

Vuori vs. Nike - Google weekly search interest



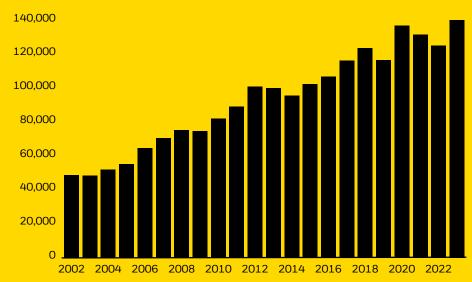
Source: BlackRock. Google Trends as of September 2023. Numbers represent search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means there was not enough data for this term.

⁵ Reference to the company name mentioned in this communications is merely for explaining the investment strategy, and should not be construed as investment advice or investment recommendation of those companies.

The informational edge provided through a systematic process requires both skill and scale in interpreting that data. LSEG Data and Analytics, one of the industry's largest financial research providers, currently offers a research library featuring more than 46 million research reports from over 1,800 sources. The availability and proliferation of independent unbiased broker reports is a rich data set, but keeping pace with the volume of reports and their relevance for private comparables is a significant challenge. If a public equity analyst mentions a private company among a group of public comparables, it's typically a positive sign that this private company is a viable threat to that public peer group, or a potential acquisition target. Finding that mention of a private company in the millions of broker reports requires the ability to transform unstructured text into aggregated data suitable for analysis through natural language processing, and the ability to do so for a rapidly increasing number of companies and reports. The chart below illustrates the volume of BlackRock's Systematic Active Equity team's machine-read broker reports over time.

Advances in analytical techniques such as machine learning and cognitive computing now make it possible to use alternative data to inform due diligence of growth equity companies, providing a material informational edge in the highly competitive category of growth equity investing.

100k broker reports machine read monthly



Source: BlackRock as of August 2023.

Building the next generation growth equity portfolio

The ability to recognize and source new investment opportunities is arguably the most important function of the growth equity investment process. Historically, sourcing the attractive deals has been relationship-based. The breadth and depth of personal networks have determined a manager's investment opportunity set. Today, data science techniques have raised the bar, allowing pioneering managers to look beyond their network and proactively detect attractive company characteristics using predictive models. Systematic models offer scalability, enhanced efficiency and improved portfolio outcomes by evaluating a universe of thousands of securities. A systematic approach offers investors the ability to uncover opportunities that traditional methods and models may have overlooked, with a faster view and with a higher degree of certainty.

Alternative data represents the next evolution in private market investing. Just as electronic trading brought reduced transaction costs, improved speed, efficiency and greater liquidity to public markets, alternative data will play an increasing role among firms seeking a competitive advantage in private markets. While many investment firms already integrate structured data from typical information providers, investors further along the adoption spectrum are putting more resources toward tapping into the informational advantages afforded by unstructured data, uncovering growth equity companies with higher probabilities of exit success.

The increasing digital footprint of private companies presents a rare opportunity for growth equity investors to gain an informational advantage. Examples are widely available from the different ways in which we now hail taxis, order food and book our airline tickets, to name a few. The ability to harness data and extrapolate unique and timely insights about a company's customers, products and supply chains is no longer a competitive advantage, it's a strategic imperative.

Alternative data and predictive analytics add dimensionality to traditional fundamental analysis — bringing in more attributes and a new lens. Importantly, alternative data and systematic modeling do not replace a fundamental process for growth equity. A systematic model allows a fundamental team to be more efficient with their time and energy. It affords investment teams the ability to cast a wider net, highlight opportunities that may have been missed by competitors. It allows investors to focus their research on opportunities with higher probabilities of success. Most importantly, a predictive model provides a faster view, more certainty, accelerates the processing of information and allows for better, smarter decisions along the entire investment process.



Advancing innovation

The availability of alternative data and its application in private markets has the potential to revolutionize the growth equity investment process. Investors pioneering the integration of alternative data and a systematic process alongside fundamental due diligence and sourcing stand to benefit sustained advantages over traditional approaches — identifying opportunities more efficiently, proactively recognizing disruptive companies before competitors and having greater confidence around the probability of success.

Evolving trends in growth equity, such as the acceleration of digital transformation, soaring valuations and a frenzied IPO market suggest investors with a competitive edge could have the opportunity to generate compelling risk-adjusted returns for clients. In this competitive environment, analytics that can incorporate machine learning to evaluate company characteristics, analyze views of stakeholders and assess the behavior of other market participants will set the bar for the next era of successful general partners. The ability to refine new data and advance analytics to exploit market trends will be the baseline attributes for a new era of growth equity investors.

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USD \$223B

Assets under management in equities, fixed income and alternatives 35+

Years investing systematically across alphaseeking & factor-based investments⁷ 200+

Person interdisciplinary team of investment experts, data scientists and academics 304

Professionals with advanced degrees, like PhDs or MFEs 8+

Years of private markets research

BlackRock Private Equity Partners

USD \$47B⁸

In commitments across core strategies, custom accounts and focused strategies 20+

Years of experience delivering global private equity solutions 204⁹

Private equity specialists, including 49 Investment professionals **450**+

General Partner relationships across 800+ funds

USD \$3B

Direct investments in private growth equity companies

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Source: BlackRock as of June 30, 2023

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Lit No. ALT-DATA-WP-1023 232072T-1023

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