



# THE CASE FOR DIVERSIFICATION INTO VENTURE CAPITAL

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A fund of Alumni Ventures Group

## EXECUTIVE SUMMARY

**SINCE ITS FOUNDING IN 2014**, Alumni Ventures Group (“AVG”) has been revolutionizing the venture capital (VC) industry. We believe that investing in VC can allow investors to diversify their investment portfolios by providing a different, potentially higher source of return by giving them access to the most entrepreneurial (and therefore higher-growth) segments of the economy. Investing in VC has long been a practice of institutional investors and the ultra-rich. We think that accredited individuals should also consider adding this asset class in moderation in order to take advantage of its diversity and return characteristics.

## THE CASE FOR ADDING PRIVATE INVESTMENTS

To generate higher returns and to hedge against mark-to-market volatility in the public markets, institutional investors turn to private investments to diversify their portfolios of stocks and bonds. Research conducted by Cambridge Associates, a leading investment advisory firm, has **identified allocations to private investments as a major driver of long-term outperformance for institutional investors.**

« *Private investments can add diversity to your portfolio and lead to increased returns over the long run.* »



More specifically, the research found that institutions that allocated 15% or more of their portfolios to private investments saw a median annualized return of 7.6%, which was 1.5% higher than institutions that allocated less than 5% of capital to private investments.<sup>1</sup>

When compounded over a 10-year period, this differential can have a meaningful impact on the health of a financial institution.

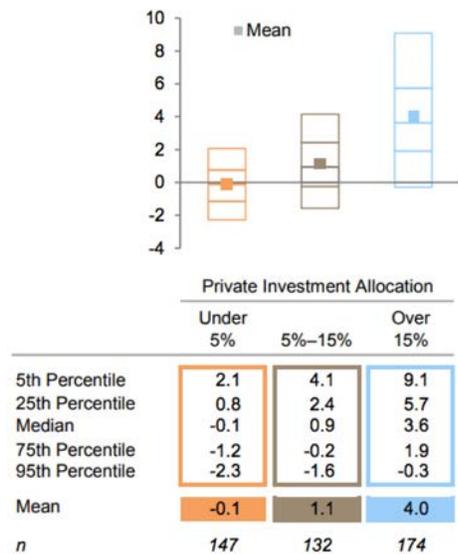
**Why do private investments tend to outperform the public markets?** One key reason many researchers point to is the “illiquidity premium.” The illiquidity premium refers to the additional compensation investors demand for taking on the added risk of investing in assets that cannot be easily converted into cash for their fair market value. Or put more succinctly: It’s the benefit you receive for the added risk of not being able to get your money back on command. According to data compiled by Cambridge Associates, the average outperformance of global Private Equity relative to the MSCI All Country World Index (a general proxy for the global stock market) typically hovers around 4.0-5.0%.<sup>2</sup>

It’s important to note that this outperformance does not occur every year. In the past 30 years, there have been 10 years when private equity underperformed public equities, with an average underperformance of 8.2%. Yet even given those 10 years, private equity has still generated a positive return over the last 30 years.

A key fact to consider: **Private equity tends to underperform in strong markets and outperform in weaker markets.** Using 2017 as an example: The MSCI All Country World Index was up +24.6% for the year, with global private equity returning just +20.1%.<sup>3</sup> Historical performance illustrates that private equity can provide a balance to a portfolio of stocks and bonds.

« *Historical performance illustrates that private equity can provide a balance to a portfolio of stocks and bonds.* »

Figure 1. Range of Fiscal Year 2015 Returns by Private Investment Allocation  
As of June 30, 2015 • Percent (%)



Source: Endowment and foundation data as reported to Cambridge Associates LLC.  
Note: Each institution’s private investment allocation is as of 6/30/15.

Source: <http://www.cambridgeassociates.com/wp-content/uploads/2016/07/The-15-Percent-Frontier.pdf>

<sup>1</sup> <http://www.cambridgeassociates.com/wp-content/uploads/2016/07/The-15-Percent-Frontier.pdf>

<sup>2</sup> <https://www.kkr.com/global-perspectives/publications/rethinking-asset-allocation>

<sup>3</sup> <https://www.kkr.com/global-perspectives/publications/rethinking-asset-allocation>



**Public market equities are no longer as diverse as they once were.** The number of companies listed on US stock exchanges has declined by 50% from its peak of 7,322 companies in 1996 to roughly 3,700 companies in 2016, despite a dramatic increase in aggregate market capitalization.<sup>4</sup> As the number of public companies has declined, the number of private companies has been steadily on the rise, growing from 1,500 in 2000 to roughly 7,500 today.<sup>5</sup> The decline in the number of publicly traded companies has impacted micro- and small-cap companies the most.<sup>6</sup> This is an important nuance to consider when thinking about portfolio construction.

A traditional source of portfolio diversification has been to allocate capital to small-, mid-, and large-cap stocks. Academics have long spoken of the additional returns from investing in small-cap stocks; this is known as the size premium and is one of the key factors used to describe stock returns.<sup>7</sup>

From 1926 through 1983 (58 years), the average annual return for small-cap stocks was 17.0%. During that same period, the S&P 500 only generated 11.3%, creating a 5.7% per year difference.<sup>8</sup> However, this size premium has evaporated as of late, resulting in small-cap stocks underperforming large-cap stocks between 2011 and 2018 by -1.6% per year.<sup>9</sup>

Thus, while there are still options to invest in small-cap stocks, the opportunities are far fewer (and arguably less attractive) than they were in the past.

Investors often don't realize how much exposure they have to certain stocks. Let's look at Microsoft, for example. Microsoft

EXHIBIT 43

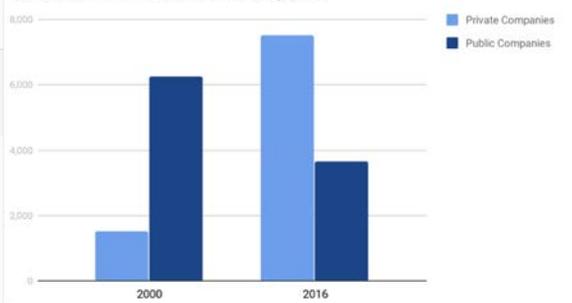
**Periods of Private Equity Underperformance Are Usually Periods of Overall Strong Public Equity Market Performance**

ANNUAL RETURNS (%)	GLOBAL PRIVATE EQUITY	MSCI AC WORLD TR GROSS USD	GLOBAL PE - MSCI ACWI GROSS USD
1988	10.8	24.0	(13.2)
1989	9.0	17.6	(8.6)
1991	8.7	19.9	(11.2)
1993	24.2	24.9	(0.7)
1998	15.2	22.0	(6.8)
2003	23.9	34.6	(10.7)
2009	16.8	35.4	(18.6)
2012	13.4	16.8	(3.4)
2013	19.0	23.4	(4.5)
2017	20.1	24.6	(4.5)
Avg	16.1	24.3	(8.2)

Data as at 4Q2017. MSCI ACWI = MSCI All Country World Index. Source: Cambridge Associates, MSCI, Bloomberg.

Source: <https://www.kkr.com/global-perspectives/publications/rethinking-asset-allocation>

Growth of U.S. Private/Public Companies



Data from: [https://www.cmgwealth.com/wp-content/uploads/2017/03/document\\_1072753661.pdf?mod=article\\_inline](https://www.cmgwealth.com/wp-content/uploads/2017/03/document_1072753661.pdf?mod=article_inline) and <https://www.hvst.com/posts/private-equity-and-your-portfolio-Xj8TpMr4>

<sup>4</sup> <https://www.wsj.com/articles/where-have-all-the-public-companies-gone-1510869125>

<sup>5</sup> <https://www.hvst.com/posts/private-equity-and-your-portfolio-Xj8TpMr4>

<sup>6</sup> <https://www.forbes.com/sites/greatspeculations/2018/08/13/the-pool-of-publicly-traded-stocks-is-shrinking-heres-what-investors-can-do/#731ced1a2078>

<sup>7</sup> <https://corporatefinanceinstitute.com/resources/knowledge/finance/fama-french-three-factor-model/>

<sup>8</sup> [https://www.comap.com/FloydVest/Course/PDF/Remarkable\\_Hist\\_Sm\\_Cap\\_Stocks.pdf](https://www.comap.com/FloydVest/Course/PDF/Remarkable_Hist_Sm_Cap_Stocks.pdf)

<sup>9</sup> [http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\\_library.html](http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html)



currently makes up 4.3%<sup>10</sup> of the S&P 500 and 2.1%<sup>11</sup> of the MSCI All Country World Index. The stock also ranks in the top 15 holdings of 189 ETFs,<sup>12</sup> giving many investors significant exposure to the company whether they realize it or not.

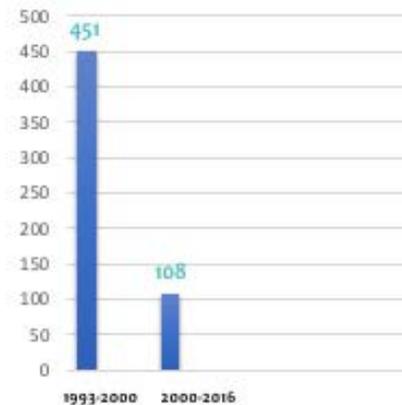
**Private companies are staying private longer, and public market investors are being shut out of meaningful value creation.** While public companies today are older, bigger, and fewer, promising startups are staying private for longer. Traditionally, up-and-coming young companies turned to the public markets to raise capital in order to expand their operations. This gave individual investors a shot at owning a piece of these companies' hoped-for success, either by buying their stocks directly or—more commonly—by holding them in a mutual fund or index fund.

Things are different today as more and more startup companies secure funding from private investors, cutting most Americans out of the equation. For context, the average number of annual IPOs between 1993 and 2000 was 451, compared to an average of just 108 per year between 2000 and 2016.<sup>13</sup>

« *Outside of large-cap stocks, investor options in public markets are diminishing.* »

IPO

Average Annual Number of IPOs



## EXPLAINING THE INCREASE IN PRIVATELY HELD COMPANIES

There are a few key reasons driving the increase in privately held companies.

**1. High cost of going public.** The 2002 passage of the Sarbanes-Oxley Act brought much-needed oversight to the financial markets by helping to protect investors from the fraudulent reporting by corporations. However, it also greatly increased the compliance costs associated with being a publicly traded company. According to [PwC's "Costs of an IPO" report](#), **two-thirds of public company CFOs surveyed estimated spending \$1-1.9 million annually on the costs of being public.** In addition, PwC's report revealed that the

<sup>10</sup> <https://www.slickcharts.com/sp500>

<sup>11</sup> <https://www.msci.com/documents/10199/8d97d244-4685-4200-a24c-3e2942e3adeb>

<sup>12</sup> <https://etfdb.com/stock/MSFT/>

<sup>13</sup> <https://openviewpartners.com/blog/why-are-we-seeing-fewer-venture-capital-backed-ipos/#.XPawqNNKjBI>



average cost of an IPO for a company generating between \$100 million and \$250 million in revenue is \$4.2 million. No wonder companies, especially those investing heavily in growth, elect to forgo the expenses of public offering and on-going compliance fees to instead raise money in the private markets at limited additional cost.

**2. Short-termism of the public markets.** A successful IPO is dependent on a company’s ability to attract investors that understand its business model and see value in its trajectory over the long term. **Yet, many publicly traded companies feel the pressure to optimize their businesses to meet quarterly earnings,** making it challenging to focus on longer-term, strategic plans that might take time to materialize.

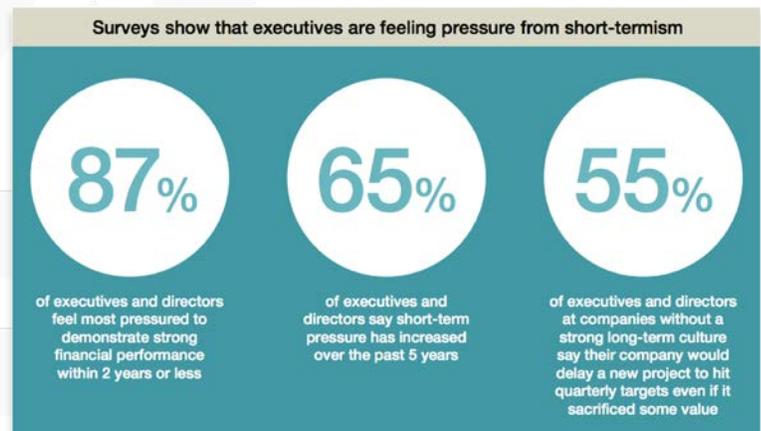
A study conducted by McKinsey of 615 large- and mid-cap US publicly listed companies between 2001 and 2015 found that 87% of this group felt pressure to demonstrate strong financial performance within two years or less.<sup>14</sup> For a high-growth startup still figuring out many aspects of its underlying business model (often through trial and error), the scrutiny of the public markets can be too much to bear.

**3. Availability of private capital.** Private assets under management totaled less than \$1 trillion in 2000; they surpassed \$5 trillion in 2017.<sup>15</sup> In this climate, many companies no longer need an IPO to raise capital. Since 2010, companies have been going public more than nine years after founding, compared to around five years in the mid- to late-1990s.<sup>16</sup>

Figure 5. Summary of going public costs by industry

Average costs by revenue range					
Avg IPO cost by industry (\$mm)	Less than \$100m	\$100m to \$250m	\$250m to \$500m	\$500m to \$1bn	Greater than \$1bn
Consumer Markets	2.5	4.2	4.2	4.9	6.5
Energy, Utilities & Mining	5.0	4.6	4.5	8.4	3.2
Financial Services	3.2	3.9	3.9	8.1	10.3
Industrial Products	2.4	3.7	5.0	8.3	7.5
Pharma & Life Sciences	3.0	4.3	3.5	-	9.4
Technology, Media & Telecom	3.5	4.3	5.1	4.9	6.0
<b>Total Avg IPO cost (excludes underwriting fees)</b>	<b>3.2</b>	<b>4.2</b>	<b>4.7</b>	<b>6.3</b>	<b>6.9</b>

Source: <https://www.pwc.com/us/en/deals/publications/assets/cost-of-an-ipo.pdf>



Source: <https://www.mckinsey.com/~media/mckinsey/featured%20insights/long%20term%20capitalism/where%20companies%20with%20a%20long%20term%20view%20outperform%20their%20peers/mgi-measuring-the-economic-impact-of-short-termism.ashx>

<sup>14</sup> <https://www.mckinsey.com/~media/mckinsey/featured%20insights/long%20term%20capitalism/...>

<sup>15</sup> <https://www.theatlantic.com/magazine/archive/2018/11/private-inequity/570808/>

<sup>16</sup> <https://pitchbook.com/news/articles/private-vs-public-market-investors-whos-reaping-the-gains-from-the-rise-of-unicorns>



## CONCLUSION: THE CASE FOR ADDING VENTURE CAPITAL

As startup companies stay private longer, investors with a portfolio of just publicly traded stocks are largely shut out of much of the value creation. This wasn't always the case. Amazon was founded in 1994 and quickly went public three years later in 1997 at a \$380 million valuation. On a simplistic level, a position purchased at the IPO and still held today would have generated a 2,500x+ return.

More recently, individual investors are being cut from participating in this growth trajectory. Facebook, for example, went public in 2012, eight years after its founding in 2004, at a \$81 billion valuation. The company currently has a market cap of approximately \$575 billion, giving investors at the IPO a 7x return on their investment if still held today. This return pales in comparison, however, to the Series A investors who invested in Facebook in 2005 at a \$100 million valuation. At time of IPO, these investors had an 800x return, not accounting for dilution.<sup>17</sup>

In closing, we acknowledge that venture capital is not without its risks. For every Google and Facebook success story, there are thousands of companies that don't succeed. In fact, two-thirds of all startups stall at some point and fail to exit or raise follow-on funding.<sup>18</sup> **But, given changes in the market dynamics, adding exposure to venture-backed private companies is something to consider to augment and diversify a traditional portfolio of stocks and bonds.**



### INVESTOR RETURNS

- **7X** from IPO to today
- **800X** Series A to IPO



#### About the Author

Lacey Farrell Johnson, Partner at Green D Ventures

Lacey joined Green D Ventures from CareGroup Investment Office, a \$3B manager of combined endowment and pension assets. As a member of the investment team, Lacey was responsible for investment sourcing and due diligence. Lacey managed investment opportunities across asset classes and strategies, including venture capital, growth equity, buyout, private credit, and hedge fund vehicles. Previously, she was an Associate at J.P. Morgan Asset Management and an Analyst in the Securities Division of Goldman Sachs. Lacey has a BA in History from Middlebury College and an MBA from Tuck.

<sup>17</sup> Data Source: PitchBook

<sup>18</sup> <https://www.cbinsights.com/research/venture-capital-funnel-2/>