

Capital Evolving

Alternative Investment Strategies to
Drive Inclusive Innovation

Supported by

MacArthur
Foundation



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About the John D. and Catherine T. MacArthur Foundation

The John D. and Catherine T. MacArthur Foundation supports creative people, effective institutions, and influential networks building a more just, verdant, and peaceful world. MacArthur is placing a few big bets that truly significant progress is possible on some of the world's most pressing social challenges, including over-incarceration, global climate change, nuclear risk, and significantly increasing financial capital for the social sector. In addition to the MacArthur Fellows Program, the Foundation continues its historic commitments to the role of journalism in a responsible and responsive democracy, as well as the strength and vitality of our headquarters city, Chicago.

MacArthur is one of the nation's largest independent foundations. Organizations supported by the Foundation work in about 50 countries. In addition to Chicago, MacArthur has offices in India, Mexico, and Nigeria.

About Village Capital

Village Capital is a global venture capital firm that helps entrepreneurs bring big ideas from vision to scale. We are reinventing the system to back the entrepreneurs of the future; a future where business creates equity and long-term prosperity. Since 2009, we have supported more than 100 early-stage entrepreneurs through our investment readiness programs. Our affiliated fund, VilCap Investments, has provided seed funding to more than 90 program graduates.

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LETTER *from* the PRESIDENT

The way we fund new businesses does not work for most entrepreneurs.

Our current capital structures – particularly the most well-publicized options of venture capital and bank loans – reward the few and leave the many on the sidelines.

Billion-dollar tech “unicorns” distort our view of a successful startup economy. Most startup capital goes to just a few people, in a few places, and a few industries. Half of the world’s venture capital goes to just three US states. In 2017, only 15% of venture capital went to female-led ventures, and 1% of venture capital went to people of color.^{1,2}

The vast majority of entrepreneurs are not able to find investors who will provide them with the funding they need. Kauffman Foundation noted in July 2018 that at least 81% of American entrepreneurs do not access a bank loan or venture capital.³

As investors we often talk about why we invest, or what we invest in, but we too rarely talk about *how we invest*. When we speak about innovation in entrepreneurship, it’s usually in the context of some transformative product or service. As more of us make an effort to support entrepreneurs solving challenges in critical industries, we’ll need to start innovating ourselves.

Over the past year our team has been on a journey to find workable, practical solutions to some of the constraints presented by current capital structures. Along with many other individuals and organizations, we are rethinking how investors invest, proposing alternative investment strategies. In this report we conduct a deep dive analysis into three ideas that show promise. These are hypotheses meant to spark a conversation and we look forward to your reaction.

We see the opportunity to create new categories, and build on existing ones. The way we support innovation should continue to improve – it’s time to evolve our capital investment structures to build a more inclusive entrepreneurship ecosystem.



Ross Baird
President, Village Capital

The background of the slide is a collage of various financial charts and graphs. In the top left, there is a bar chart with approximately 12 bars of varying heights. In the top center, a line graph shows a fluctuating trend over 10 data points, with values ranging from approximately 2750 to 3050. In the bottom left, another bar chart shows a series of bars that generally increase in height. In the bottom right, a bar chart shows a steady upward trend from approximately 35 to 100. The overall color scheme is blue and white, with a grid pattern visible across the charts.

EXECUTIVE SUMMARY

While stock market gains and corporate profits dominate the headlines around economic growth, new businesses play a critical role in shaping the future of prosperity and solving some of the world's most pressing challenges. Entrepreneurs create the next generation of the economy.

Unfortunately, despite all the talk of overnight successes and “unicorn” companies (those valued at over \$1 billion), entrepreneurs face barriers and challenges, and frequently struggle to find the resources they need to increase their revenues, create new jobs, and scale their businesses.

One of the most critical of these resources – and one of the most difficult to access – is financial capital. It can play a major role in stimulating business creation and supporting entrepreneurial success. A recent study by Emory University, Village Capital, and 20 other accelerator and seed fund partners found that companies that are able to access capital grow 30% faster than those that do not.⁴

However, access to capital is highly uneven. According to Kauffman Foundation, at least 81% of American entrepreneurs do not access a bank loan or venture capital; those that do generally represent only a few types of people, places, and industries.⁵ In the US, which accounts for roughly three-fifths of the world's total venture capital (most of which is concentrated in three states), just 15% went to women, and less than 1% to people of color.^{6,7}

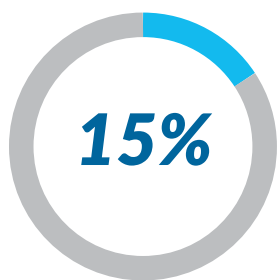
This is in part the result of broader issues like flaws in pattern recognition and selection bias, and is compounded by the limited range of financing tools businesses can access. Our current capital structures are highly restrictive to fit a narrow range of companies, and limit access from a wider pool of investable ventures. Today's venture capital model was designed to be "one size fits all" by favoring businesses that require as few resources as possible to scale up as quickly as possible. Scale, in this context, can come at the expense of broader economic value and business sustainability. It also undermines the patience that is often required to address critical challenges in major sectors of our economy, such as health, education, food and housing.



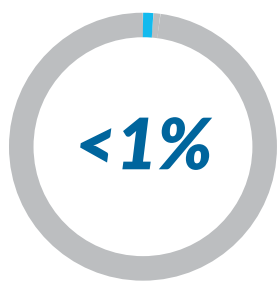
*The United States accounts for roughly **three-fifths** of the world's total venture capital.*



*Most of it is concentrated in **three states***



*of funding in 2017 went to **women***



*went to people of **color***

Equity investment and bank loans are the most common financing options for most early-stage businesses, yet there are a wide array of possible alternative solutions – some more feasible than others – that offer the potential to support more entrepreneurs more effectively.⁸

Village Capital, with funding from the John D. and Catherine T. MacArthur Foundation, conducted a study to identify alternative forms of investing that are practical for investors but diversify funding for entrepreneurs.

The purpose of this study was to assess the feasibility of different strategies for the investor community, with a focus on simple, manageable and pragmatic options that nonetheless help resolve some of the limitations of current capital structures. The study surveyed over 200 investors and asset managers, and examined what the performance of a hypothetical portfolio might look like for a few select options.

Out of this survey, three readily scalable solutions emerged:



Revenue Share Structures

The solution that received the most positive feedback from current investors is a tool that provides more liquidity than equity and a higher return than debt: revenue-based financing. Revenue sharing – which has been employed by a handful of investors, including Adobe Capital, Candide Group, Indie.vc and Village Capital's affiliated fund, VilCap Investments – involves deploying capital which is subsequently repaid from a share in the revenue of a growing business. This reduces the ownership dilution experienced by an entrepreneur while offering investors a more liquid structure. **Revenue share structures are a good fit for businesses that are too risky for debt, but struggle to reach the large return multiples expected for venture capital.** To further evaluate the utility of revenue share, we developed a mock portfolio for a revenue-based financing vehicle.



Place-Based Multi-Asset-Class Funds

The second solution – which was of extremely high interest to a subset of investors we surveyed – seeks to deepen the overall investment approach by combining two different strategies into one. Multi-asset-class funds are common on the public markets, and place-based investing is hardly new but integrating those two strategies together offers a lot of potential. **Research from the Urban Institute and Mission Investors Exchange shows that a promising approach for current place-based initiatives involves investing in businesses, infrastructure, and real estate in the same community.** By developing a vehicle focused on multiple asset classes across a specific geography, investors can invest deeply in a geography, supporting everything from mixed-use buildings to local bakeries from a single fund. In the US, the Investing in Opportunity Act, passed in 2017, has stimulated additional interest in this type of approach, so with this legislation in mind, we have modeled out what a community-focused portfolio with multiple asset classes might look like. ⁹



Peer-Based Decision-Making

Finally, we have conducted a review of an alternative due diligence model – peer selection – to determine the most effective ways to identify future commercial performance and improve inclusiveness in the final stages of diligence. At Village Capital, we have spent nine years designing, building, and implementing a peer review and selection model. **This model explores whether entrepreneurs who have lived experience of the problems, customers, and markets they are working on, can conduct due diligence and make investment decisions more effectively than the traditional venture capital diligence and investment process.** Inspired by the “village banking” methodology in microfinance, the peer selection methodology has shown promising results in terms of inclusion and survival, all while showing positive financial performance. Over the course of this report and a corollary study, we analyze the applicability of these learnings to the broader industry.

SECTION 1

BEYOND BUSINESS AS USUAL



OVERVIEW

Entrepreneurs play an important role in global financial ecosystems. They are crucial to economic growth, and have the ability to solve major challenges in the world.

However, for many entrepreneurs, one of the most critical barriers to scale is access to capital.

Capital can play a major role in increasing entrepreneurial starts and successes. A recent study by Emory University, Village Capital, and 20 other accelerator and seed fund partners found that companies that are able to access capital grow 30% faster than those that do not.¹⁰

Yet access to capital is highly uneven. The majority of entrepreneurs begin their businesses with personal or family wealth, but relying on personal wealth exacerbates pre-existing disparities, particularly among low-income communities and in areas where household wealth is minimal.^{11,12}

CONCENTRATED CAPITAL

Entrepreneurs that do seek external sources of capital find that it is highly concentrated in very few people, places, and industries.

People:

In 2017, female-led companies received less than 2% of venture capital, and mixed-gender founding teams received less than 15%.¹³ Furthermore, research from the Urban Institute, a think tank, indicates that women-owned businesses only account for 4.4% of all small business lending.¹⁴ The concentration of capital goes beyond gender. In the US, for example, NY-based fund Harlem Capital Partners found that less than 1% of venture capital went to people of color.¹⁵ Nor is that sort of demographic concentration limited to the US: in East Africa more than 90% of funding for local startups in 2017 went to companies with at least one expatriate founder.¹⁶

Places:

More than 45% of venture capital investment worldwide goes to just three states in the US (New York, California, and Massachusetts), leaving the vast majority of entrepreneurs around the world with a limited pool of capital to access.¹⁷ Since 2013, the Bay Area has received more funding than India, Africa, and Latin America combined.¹⁸ For example, Kenya, arguably one of Africa's largest markets for early-stage investment, has seen as much VC-backing as the US state of Kentucky.¹⁹

Industries:

Out of the 273 “unicorn” companies (privately-held startup companies valued at over \$1 billion), only 18% are focused on the six industries – health, food, education, energy, financial services, and housing – that people rely on to live healthy and productive lives, despite the fact that these sectors are where the majority of the world's population spends most of its budget.²⁰



*Since 2013, the Bay Area
has received more funding
than India, Africa, and Latin
America combined.*



LIMITATIONS OF CURRENT CAPITAL STRUCTURES

Why does capital concentrate in such a restrictive fashion? A number of organizations, including the Kauffman Foundation, have been exploring that issue, and what emerges are three broad dynamics that channel capital to a few specific structures and strategies.²¹

One size fits all:

The vast majority of attention and funding for early-stage companies focuses on two sub-categories of investment structures: venture capital and small business loans through banks. Early-stage ventures often turn to venture capital because they are too risky for most small business lenders, and they generally do not have the cash flow, operating history, or collateral to access competitive debt. However, venture capital requires a liquidity event, such as an acquisition or IPO, in order to provide a sufficient return on investment.

Bryce Roberts, founder of the Indie.vc fund, has noted previously that this generally only works for ventures that fit a narrowly defined growth profile, and the “growth at all costs” mentality may be harmful to those that are not yet ready to focus on achieving scale as quickly as possible.²² Ultimately, while the types of capital that investors provide is fairly narrow, entrepreneurial business models and capital needs are very diverse, leaving many entrepreneurs without the appropriate capital for their businesses.

Too small to succeed:

Traditional investment fund structures prioritize big over small, leaving the vast majority of entrepreneurs on the sidelines.

Many fund investors face minimum size requirements, so major asset managers, from BlackRock to JPMorgan, have prescribed minimums that must be met in order to invest. These minimums are often in the tens or hundreds of millions, and their investment can only comprise a small fraction of the fund (e.g. 10% of the overall fund), meaning the funds they invest in must be multiples larger.

In addition, for many investors, the transaction costs of making a (relatively) small investment in an early-stage company are too high. According to a 2013 World Economic Forum report, it takes the same amount of time to conduct due diligence on a \$10 million investment as it does for a \$100 million investment. If a fund is greater than \$50 million (which is considered small in the venture capital world), it does not make sense to write \$100,000 checks. When given a choice, investors are highly incentivized to invest in the larger deal due to the increasing costs of smaller investment amounts. As a result, seed-stage rounds are growing and beginning to look more like Series A deals. In 2017, the number of seed deals in the US declined to a five-year low, even as venture capital hit a 10-year high, suggesting that many seed institutions are growing too large for the early-stage ventures they intend to fund.²³

It's not what you know, it's who you know:

Often inundated with hundreds of funding requests a year, investors frequently use filtering mechanisms to make investment decisions. These filters can take the form of patterns that can serve as a proxy for potential. For example, given that 40% of venture capital investors attended either Stanford or Harvard, an investor might look at graduates of top universities as a useful indicator of future success.²⁴

This reliance on patterns can lead to implicit bias in investment decision making. One example of implicit bias is the tendency for investors to invest in companies within their existing, homogeneous, networks. In a 2017 study, Village Capital found that more than 90% of funding for East African startups went to companies with at least one expatriate founder, that 80% of disclosed investors in East Africa are expatriates themselves, and that 72% of all venture capital in the region went to just three startups.²⁵ In addition, nearly 50% of the investments made from 1980 to 2009 were located within 233 miles of venture capital funds.²⁶

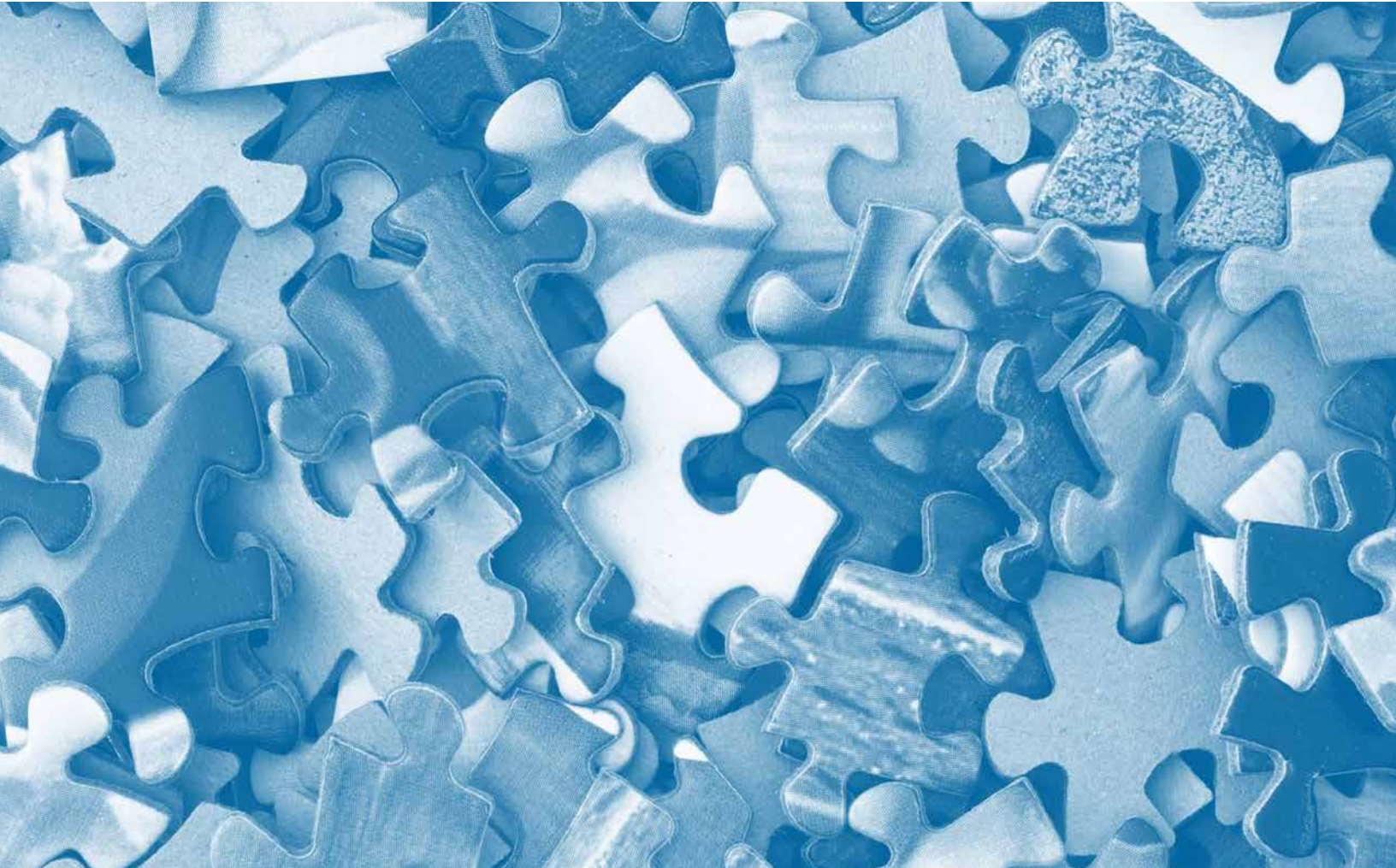
Perhaps unsurprisingly in a sector where 70% of investors are white, less than 1% of venture capital funds go to founders of color. Similarly, 82% of the venture capital industry are men, and only 15% of funds going to female-founded or co-founded companies.²⁷

Further, a recent study found that men were 60% more likely to raise funding than women when pitching the same business.²⁸ Another study found that men and women were asked entirely different questions by investors. While investors asked men generally positive questions about “opportunity”, they asked women generally negative questions about “risk”.²⁹

The prevalence of certain structures, incentives and networks ultimately concentrates capital in a small subset of people, places and sectors.

SECTION 2

FINDING NEW WAYS TO SUPPORT BUSINESS



OVERVIEW

As significant as the problems discussed in the introduction may be, they are not insurmountable. There are a number of market-based options that offer the ability to mitigate bias, reduce capital concentrations, and improve the efficiency of investment – both for investors and for entrepreneurs.

Recent years have seen a number of new initiatives emerge in an effort to help promote these options. The Urban Institute has explored collaborative place-based investing, for example. The Zebras Unite movement is encouraging less extractive investment while the Collaborative for Frontier Finance is researching clearer ways of market segmentation to improve capital matching.

This study looks to contribute to those discussions, by assessing demand from the larger investment community for specific alternative strategies, and by modeling out some of the most immediately scalable solutions.

MOONSHOT STRATEGIES

Most of the strategies we presented to investors for their feedback were inspired by a design session in 2017 we facilitated along with the Kauffman Foundation and Access Ventures to develop new investment ideas.

The two-day session, called the Moonshot, convened 50 senior representatives from foundations, community development financial institutions, corporations, venture capitalists, and entrepreneurs to flesh out viable options that could significantly increase access to capital for entrepreneurs.³⁰

The Moonshot structures were designed to be realistic and implementable, and ultimately were whittled down to six options: revenue-share investment, location-specific investor pipelines, community bank support, pay-for-success debt notes, place-based multi-asset funds, and niche alternative evaluation investments.

These capital strategies offer significant potential to mobilize large volumes of formal funding to a wider range of people, places, and problems. Some of these structures are already being deployed or piloted; others are wholly conceptual.





MARKET DEMAND

To make sure the Kauffman Moonshot options reflected market demand, we surveyed 201 investment managers and 50 entrepreneurs in late 2017 and early 2018.

The 201 investors collectively manage more than \$100 million, and were selected to purposefully include a range of different funder viewpoints, namely: 62 foundations, 41 single- or multi-family offices, 65 asset managers, 25 endowments, five pension funds, and three insurance companies. The investors also had a range of different overarching strategies, from domestic to international (or both), sector-specific to sector-agnostic, and mission-driven to market-driven. The entrepreneurs were drawn from an intentional sample of early-stage Village Capital alumni, most of whom were post-revenue but had raised less than \$10 million in financing.

This report is shaped by their collective feedback. Following extensive secondary data collection and a literature review in late 2017, we surveyed the investors and entrepreneurs to gauge their appetite for six alternative investment options. The survey was not intended to be exhaustive but sought to build on the most common trends and approaches already being discussed in the marketplace. Respondents were able to select their level of interest among “very interested”, “interested”, “somewhat interested”, and “not interested”, and add additional comments to explain their thinking.

The survey was then followed up by subsequent in-person and phone interviews for a subset of respondents, to better capture their viewpoints around alternative capital strategies, with questions including what sort of challenges they foresee in pursuing a specific strategy, where they see that strategy being deployed most effectively, and their observations on the broader discussions around that strategy.

Table A on the next page provides a summary of the alternative investment strategies and an overview of the responses we received from investors. Appetite for the various options varied significantly among the investor community, in large part due to the specific demands of individual investors. For example, the place-based investment strategy had a much higher percentage of investors who were “very interested” – largely asset holders such as foundations or family offices who had an affinity for their specific community – and a much lower percentage of investors who were “interested” than comparable models.

STRUCTURE

INVESTOR RESPONSE "Interested" or "very interested"

INVESTOR FEEDBACK

Investing in the Middle: Moving Beyond Debt or Equity

An investment vehicle, such as revenue share, directly into companies with higher return than debt, more liquid than equity, and does not force the pipeline into only companies that "exit" via acquisition.

63.1%

(this option had the highest percentage of investors who were "interested" and "very interested")

"We very often find companies with strong cash flow, but limited visibility into where an acquisition or other liquidity event would come from. For a certain group of companies, this could be a compelling investment category." - Asset Manager

Fixing the Leaky Pipeline: Fund of Funds

Build an institutional-grade pipeline of fund managers, ecosystem builders, and intermediaries that are able to invest in untapped places, people, and industries.

53%

"We are looking to promote local fund managers, rather than investment funds run by people who are far away from what they are investing in. We also, in the right opportunities, prefer evergreen structures to limited partner/general partner structures, especially in the geographies where we operate. We see this as a way to seed more innovation." - Foundation

Bringing Banks Back: Community Banks

Provide balance sheet capital to community banks to originate loans for entrepreneurs who had a strong lending profile but were not bankable by traditional underwriting methods.

42.1%

(second-lowest percentage of investors who were "very interested")

"There are obviously lots of questions on mechanics and underwriting, but I think it's interesting. I'd like to explore how you could use a community development entity structure to make construction loans, the returns from which could then be plowed into business credit of this sort. I also like the idea of creating a security of these underlying loans." - Family Office

Jobs Bond: Pay-for-Success

A pay-for-success structure that rewards investors for investing in companies creating quality jobs in under-capitalized places.

36.9%

"I like this opportunity to leverage mezzanine debt and potentially strengthen community banks, as well as create a partnership between the Small Business Administration and national and local entities." - Foundation

Zero Barriers: Multi-Asset-Class Fund

Focusing on building an inclusive community with one investment vehicle that has multiple, interdependent asset classes (fixed income, public equities, real estate, direct investments in entrepreneurs), with entrepreneurial dynamism at the center, such as Opportunity Zone funds.

33.3%

(this option had the highest proportion of investors who were "very interested")

"Very much aligned with how we currently invest, and our clients' desires to go deeper into their specific communities. If investors were able to mitigate the risk of the potentially limited number of investment opportunities that would fit within the strategy, and their associated risk profiles, this could be very compelling." - Asset Manager

Recruiting for Entrepreneurs

Deep investment in a specific thesis (e.g. social determinants of health) or region, using technology and alternative evaluation methodologies, would improve asset allocation and minimize due diligence, allowing a fund to invest in a much higher volume of founders.

26.3%

(this option had no investors who were "very interested")

"I think this would be much more compelling (and hopefully, catalytic!) if it were bolted on to existing VCs and their practices." - Family Office

Based on the feedback from the respondents, we selected two of these strategies for a more thorough analysis of feasibility. The first was the Investing in the Middle (or revenue share) option, given it had the highest overall number of investors who were interested or very interested. The second was the Zero Barriers (or place-based multi-asset-class fund) option, due to the fact that it had the highest proportion of very interested investors. Finally, we also studied peer selection, which Village Capital currently employs to make its own investments to mitigate bias, and which has yielded promising outcomes. The result is a report that further explores ways of structuring investments, developing vehicles and evaluating opportunities that can both expand the pipeline for investors and the pool of capital for entrepreneurs in the immediate future.

SECTION 3

THE THREE BIG IDEAS





IDEA 1: Revenue Share Structures

DESCRIPTION

The solution selected as the most attractive was an investment vehicle that provides a risk/return profile in “the middle” of traditional debt or equity. Such a vehicle could provide investors a higher return than debt, more liquidity than equity, and provide support for companies that may not have traditional exit potential, whether through an IPO or acquisition, or significant assets to collateralize.

This investment vehicle could be structured as dividend-based or revenue-based financing where entrepreneurs pay a percentage of revenue or cash flow over time to investors.

A number of investors already have tested this type of option, including Village Capital. Adobe Capital invests in companies in Mexico using revenue share as a financing tool, as do US-based funds Candide Group and RevUp Capital.

What does this solve?

The vast majority of attention and funding for businesses focuses on two types of capital: debt and equity. While the types of capital that investors provide is fairly narrow, business models and capital needs are very diverse, leaving many entrepreneurs without the appropriate financing fit for their business.

A prominent choice for entrepreneurs that seek external capital is debt, usually in the form of small business loans.³¹ These business loans, however, are much more common among growing or more mature businesses. Early-stage ventures are too risky for most small business lenders, and they generally do not have the cash flow, operating history, or collateral to access competitive debt. Further, the repayment schedule on debt can be detrimental to early-stage companies that have yet to generate any revenue.

The limitations of debt leave venture capital-style equity as an important source of startup funding. However, the venture capital ecosystem is designed around a liquidity event, usually in the form of an acquisition or IPO, which limits investors' choices to a narrowly defined growth profile, and causes them to miss out on non-traditional, but still high-potential, companies. Equity is often not a good fit for non-tech industries where billion-dollar valuations are rare, or in sectors or geographies where acquisitions or IPOs are much less common. The Zebras Unite movement, a group of organizations promoting alternative capital strategies, highlights this in their manifesto, noting that this approach values short-term hockey stick-style growth over long-term value creation – which can come at the expense of more sustainable business models, longer-term profitability, and broader economic and environmental value, including the creation of new jobs.^{32, 33}



*of US-based
entrepreneurs do not
access a bank loan or
venture capital.*



Benefits

An investment vehicle utilizing revenue-based or dividend-based financing aligns investors as if they were equity owners, but is more flexible for the founders, and gives investors a more visible path to liquidity than an equity investment and greater returns than debt. These vehicles provide an alternative to debt or equity, allowing investors to invest in markets and companies where there is not a clear path to exit, increasing their options and access to a different risk/return profile.

An investment fund structured to focus primarily or significantly on this investment structure may also provide better returns to fund investors. Traditional venture capital funds typically model their investment strategy such that they expect a small number of investments, generally around 10%, to generate outsized returns and deliver a multiple of the entire fund, while the vast majority of their investments fail. This high risk, high reward strategy fails more often than it succeeds. A recent Cambridge Associates report shows that, over a 10-year period, if limited partners had invested in the stock market, they would have had a slightly higher return on their capital compared to returns on investment for the average venture capital fund.³⁴ In addition, this investment structure can give early-stage ventures time to mature to a point where they can focus on substantial scale. At this stage of growth, companies can seek equity, which is now a much more viable option for both founders and investors.

Challenges

A dividend-based or revenue-based financing investment vehicle can face challenges in implementation. The first challenge – similar to early-stage equity investing – is the inherent risk in investing through a structure without any collateral. An investor's return is contingent upon companies generating revenue, positive cash flow, or even profit (depending on the structure). Unlike debt, where investors may be able to recover some capital through recourse or collateral even if the business does not grow as predicted to traditionally service debt, revenue-share investors are taking on the risk that companies will gain traction in the market. Conversely, the repayment obligation of revenue-share agreements may become overly burdensome to entrepreneurs and could prevent them from reinvesting revenue back into the company's growth.

Another challenge is the investor perception of this investment structure. Traditional venture capital investors may be reluctant to invest in companies that have outstanding revenue-share obligations on their capitalization tables due to their lack of familiarity with this investment vehicle. Similarly, because this is a relatively new structure for early-stage investing, investors may find that they need to educate entrepreneurs about its benefits.

Finally, this structure for early-stage ventures is only appropriate up to a certain size of investment, generally between \$50,000 and \$500,000, depending on the expected return multiple and timeline, and the company's annual growth rate and traction at time of investment.³⁵ Larger investments may actually cause harm to businesses and be more extractive than productive, by requiring repayment terms that are onerous or long-term repayment schedules that are not of interest to investors. As Aner Ben-Ami of Candide Group has noted, for an investor to realize a 3x return on a \$500,000 investment from 3% of revenue, the company would need to generate \$50 million over the life of the investment.³⁶



Revenue-share is more flexible, provides greater liquidity and higher returns, and could mitigate risk.



Revenue-share investments are less common, and may be better suited for smaller ticket sizes.

Investor Interest

The positive response we received from investors demonstrates a demand for this type of investment vehicle. Of the surveyed investors, 63.1% said they were “interested” or “very interested” in this option, and of all of the six options presented, this had the most investors that were “very interested”. Investors noted that current capital structures leave a gap in the market for companies and markets that do not meet the requirements for traditional financing structures, and for those that reach profitability faster and grow revenue more quickly.

The 37% of investors who were not interested largely had three types of feedback:

1. Investors did not understand the category, or how it might fit within their current portfolio allocation (suggesting a need, if pursuing this idea, to formalize and create a new category, similar to “seed investing” or “venture capital”);
2. Some larger asset managers queried whether it would be viable for financing early-stage startups, particularly given the limited track record for revenue generation;
3. Investors commented that this tool only worked for a specific type of high-margin, predictable cash flow business, which did not fit the industries that interest them.



Positive Feedback

“Our focus is more explicitly on emerging markets than the US, but we very often find companies with strong cash flow, but limited visibility into where an acquisition or other liquidity event would come from. For a certain group of companies, this could be a compelling investment category.”

“This is the biggest gap in the [US] ecosystem. Increased bank regulation, the institutionalization of asset management, [and] a heavy concentration of assets under management in endowments, pensions, and insurance companies who invest where they perceive safety (which they correlate with size)...leaves few market participants with little capital to write the small tickets. Talent has followed capital, which has accelerated the brain drain and disinvestment from the middle/small.”



Negative Feedback

“It’s unclear if this structure works for new businesses. It’s hard to make sure you are not hunting for a unicorn of a structure, or whether this kind of mezzanine layer does exist, but is just for larger and more profitable companies than those you are targeting.”

Revenue- Based Financing Case Study

Revenue-based financing investment vehicles have been used in the past to invest in businesses with potentially predictable cash flow and high profit margins, from movies to high-margin services businesses.

It is also gaining steam with investors focused on early-stage companies. In addition to Adobe Capital, Candide Group and Village Capital, for example, Novel GP is a venture capital firm in the US that has a \$12 million fund focused on revenue-share investments in software-as-a-service companies.³⁷ Indie.vc recently raised their second \$30 million fund that invests through a “profit-sharing” structure by which the fund receives disbursements based on net revenue or net income, depending on which is greater.³⁸ RevUp Capital is an example of an investor focused on revenue share investments for early stage companies, investing between \$100,000- \$250,000. Lighter Capital invests in later-stage companies, generally those that are averaging around \$1.5 million a year.³⁹



Spensa Technologies is a precision agriculture company based in Indiana in the US. In 2013, VilCap Investments, an early-stage venture capital firm, invested in Spensa through a revenue share investment structure. At the time, Spensa was going through early customer validation and market development, and had strong enough revenue to make this investment an attractive option. The agreement gave the founders the flexibility and runway to grow.

After two years, Spensa beat the original revenue forecasts and repaid the revenue-share obligation. This highlights the value of revenue share as a financing tool to help early-stage companies grow, either on their own or to the point where they can raise more traditional financing in a less burdensome or extractive manner. The original revenue-share investment provided Spensa with the flexible capital it needed to finance its early operations and get to a place where it was ready for an equity investment.

Spensa later raised a Series A round and a bridge round, both of which VilCap Investments participated in through an equity investment before a Series B. A software-as-a-service model, ambitious growth projections and a trajectory towards a traditional exit meant that by that point, equity was a better fit for their needs. In April 2018, Spensa was acquired by global digital services company DTN, providing another return to VilCap Investments.

Revenue share is not a one-size-fits-all tool, and can combine helpfully with venture capital and more traditional types of financing. Spensa is in a large group of “invention-based businesses”, which often need capital for prototype development. This is harder for pre- or early revenue businesses to raise from venture capitalists. Village Capital's revenue share agreement with Spensa helped it bridge the gap between idea and prototype development. After Spensa used the revenue-share investment to develop its first product, it started to see significant traction and revenue growth, to the point where it became compelling to venture capital investors. Village Capital then invested in a more traditional venture capital round in Spensa once it reached those milestones, alongside other investors. After raising a Series A in traditional venture capital, Spensa was acquired at an attractive return.

Mock Portfolio: REVENUE SHARE MOCK FUND

What would a revenue share fund look like?

In order to refine the scope of where revenue-based financing best meets the needs of early-stage entrepreneurs, we developed a mock portfolio for a revenue-based financing vehicle. The fund structure and findings are provided below.



Revenue Share Backdating Investment

We conducted a backdated analysis of hypothetical revenue-share investments in 30 companies, deploying just over \$1.5 million in investment, to inform the overall structure of the mock fund.

To do this, we selected 30 companies from VilCap Investments' portfolio based on revenue growth, and evaluated what returns would have looked like had the original amount invested been in the form of revenue share and had the company subsequently followed the same growth trajectory.^{40,41} The companies that were included in the backdated analysis are from a variety of sectors, including fintech, health care, agriculture and education, although all use technology to acquire, serve and retain their customers. All findings are discussed in the aggregate to maintain confidentiality.

At the time of initial investment, each of the companies were early stage, with an average annual revenue of about \$330,000 (though there was a wide range, with some companies pre-revenue and some that had nearly \$1 million in revenue). For the purposes of this exercise, we structured terms of the revenue-share financing as follows:

- **Payback of 5% of revenue, paid on an annual basis** ⁴²
- **Annual payments until 3x returned to investor**
- **Investors only require payment if the company is generating profit during the payback period.**

Insights

Years to Recover: After backdating a hypothetical revenue-share investment in the 30 companies, we found that, on average, it would take around **4.4 years** to realize a 3x return on the initial investment amount, which ranged from \$20,000 to \$100,000.

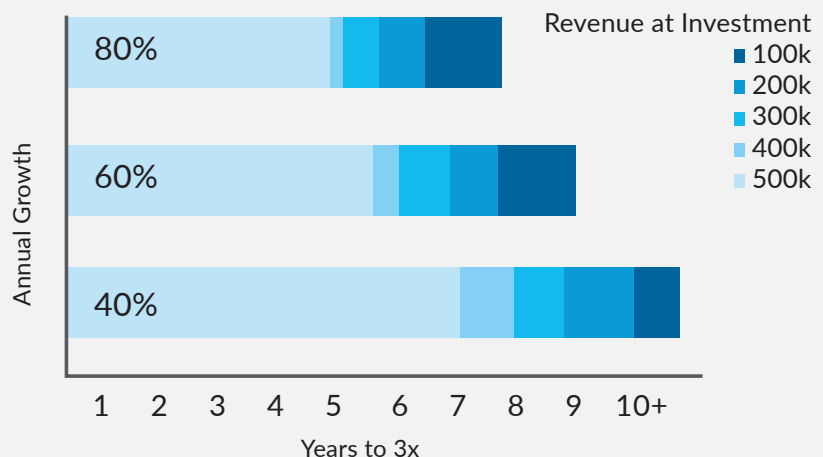
Company	Investment Amount	Amount Realized	Multiple Recovered	Years to Recover 3x
1	\$50,000	\$149,730	2.99	3.03
2	\$74,999	\$231,460	3.09	5.05
3	\$25,000	\$75,530	3.02	4.30
4	\$74,999	\$224,492	2.99	6.76
5	\$25,000	\$75,867	3.03	2.80
6	\$20,962	\$62,931	3.00	5.61
7	\$74,999	\$225,600	3.01	5.60
8	\$55,000	\$165,651	3.01	5.19
9	\$50,000	\$149,713	2.99	7.73
10	\$50,000	\$154,875	3.10	2.74
11	\$75,000	\$225,421	3.01	5.12
12	\$20,570	\$63,558	3.09	3.95
13	\$75,000	\$229,750	3.06	2.08
14	\$75,000	\$226,728	3.02	5.81
15	\$74,999	\$229,270	3.06	2.04
16	\$50,000	\$154,364	3.09	3.30
17	\$75,000	\$230,141	3.07	3.78
18	\$75,000	\$226,008	3.01	5.19
19	\$25,000	\$75,589	3.02	6.78
20	\$75,000	\$224,901	3.00	6.05
21	\$50,000	\$149,192	2.98	2.65
22	\$100,000	\$299,350	2.99	6.16
23	\$25,000	\$77,538	3.10	5.35
24	\$25,000	\$75,760	3.03	5.28
25	\$25,000	\$75,883	3.04	5.76
26	\$75,000	\$178,438	2.38	4.64
27	\$32,500	\$102,773	3.16	2.12
28	\$25,000	\$75,723	3.03	2.39
29	\$25,000	\$78,182	3.13	1.92
30	\$75,000	\$225,416	3.01	2.92

Amount of Investment: To get a better sense of the reasonable range in the size of investment, we experimented with investing up to \$200,000 in nine of the highest-performing companies from the 30 companies in the original sample. This allowed us to explore what sizes might work best with a high-performing sample, and then apply that as a best practice guidance for the rest of the portfolio. For these nine sample companies, we projected the future revenues based on the past growth in revenue for each company. Although the historical growth rates of the companies averaged 53%, we projected more conservative rates averaging closer to 30-40% year-on-year (reflected in the chart below), due to the fact that this type of tool is crucially also a viable option for companies that are not experiencing aggressively high growth.

Company	Actual Investment	Actual Initial Growth Rate ⁴³	Years to Recover 3x	Scenario 1 \$75,000 Investment Years to Recover 3x	Scenario 2 \$100,000 Investment Years to Recover 3x	Scenario 3 \$200,000 Investment Years to Recover 3x
5	\$25,000	105%	2.8	5.1	5.8	7.9
10	\$50,000	33%	2.7	3.6	4.4	6w.8
13	\$75,000	38%	2.1	2.1	2.6	4.1
15	\$75,000	76%	2.0	2.0	2.5	3.9
21	\$50,000	65%	2.6	3.4	4.0	5.9
27	\$32,500	115%	2.1	3.4	4.0	5.7
28	\$25,000	99%	2.4	4.0	4.6	6.2
29	\$25,000	48%	1.9	4.0	4.8	7.4
30	\$75,000	20%	2.9	2.9	3.6	5.8
			2.4	3.4	4.0	6.0

Growth rate:

The amount of time to recover an investment depends significantly on the revenue growth rate of the company and the amount of baseline revenue at the time of the investment. To get a better sense of ideal growth rates, we structured different size investments and various growth rate assumptions.



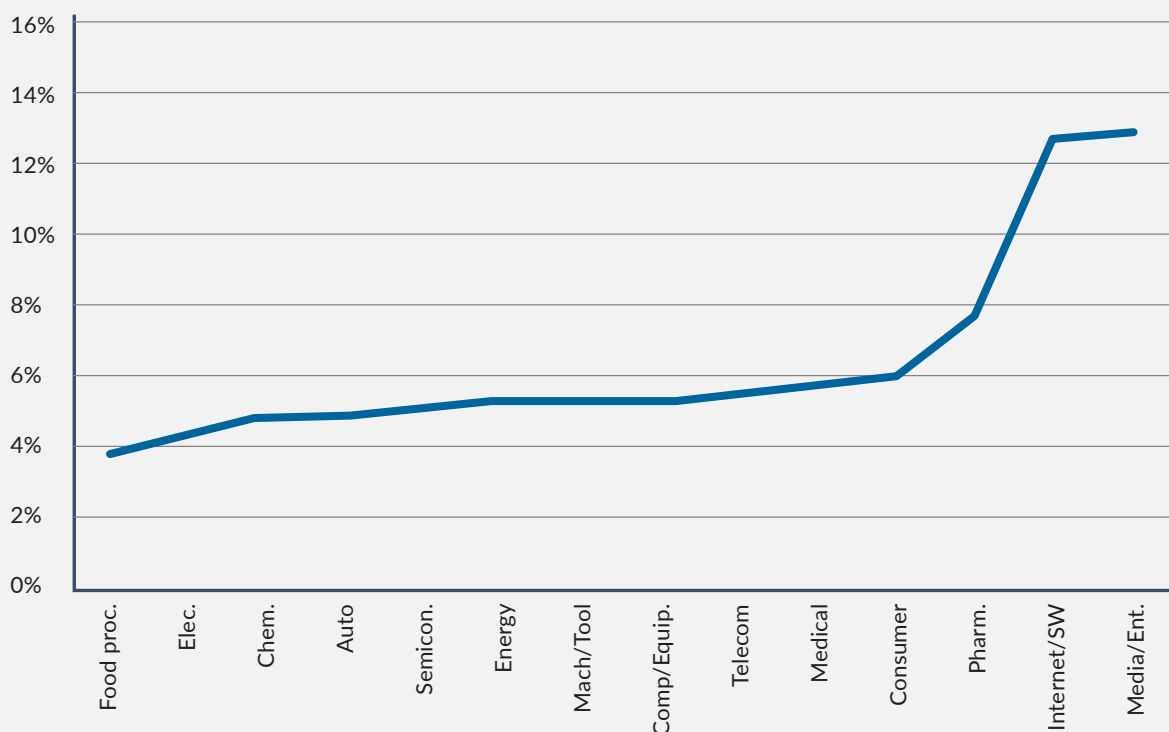
The chart above outlines potential scenarios for a \$100,000 investment and a 3x target recovery.

We used consistent growth rates for this analysis, though many companies may see over 100% annual growth in their first few years. Changing the assumptions and investment amounts of the analysis can help provide a better understanding of how investment timelines and returns might be affected accordingly.

Company Profile:

As noted previously, certain types of companies are a stronger fit for this form of investment. In order to afford a 5% revenue-share during their payback period, which could take place quarterly or annually, the investee company should have healthy margins which allow it to service these payments, in addition to retaining enough profits to expand its operations comfortably. From a cash flow and commercial point of view, these payments are akin to royalties. Based on studies that evaluate the kind of margins companies should ideally have in order to meet royalty payments, sectors that are technology-intensive and produce differentiated products generally register high gross margins (55-65%) and hence have historically seen higher royalty rates (8-12%).

Reported royalty rates



*Source: <https://assets.kpmg.com/content/dam/kpmg/pdf/2015/09/gvi-profitability.pdf>

On the other hand, traditional sectors and the sectors that produce general purpose goods can generally only obtain modest or low gross margins (35-45%), and hence have been industries that have historically seen lower annual royalty rates (3-5%).⁴⁴ Thus, it must be ensured that the company is earning sufficient gross margins based on the sector and the type of company.

Finally, the best use of a revenue share investment is to meet working capital requirements that have a direct tie to sales, such as servicing existing contracts, versus using the money for longer-term growth oriented investments such as team growth, or product development (where equity would play a better role).



Fund Structure

We used the findings from the backdating analysis to inform the overall structure of the fund.

The Investing in the Middle Mock Fund is a \$50 million fund, structured for the principal purpose of providing an alternative investment vehicle for investing in early-stage enterprises globally.

The fund is dedicated to providing revenue-share investments in early-stage ventures, with a large proportion allocated to supporting company growth through follow-on growth equity investments. The bifurcation is due to the fact that making \$50 million worth of appropriately-sized revenue-share investments – which would be between \$50,000 and \$500,000 – would imply an abnormally large deal flow for the fund. Including equity also allows the fund more flexibility in supporting companies over a longer period, including when the company has scaled to a point where revenue-share support could be burdensome. For the purposes of this exercise, the fund will not make investments in any companies that have not previously received a revenue-share investment.

The fund is also set up with a traditional 2/20 structure, involving a management fee of 2% of aggregate capital commitments and a 20% fee on carried interest. We have found that the vast majority of venture funds are structured in this way.

There are separate questions around whether this is the appropriate structure for a fund – particularly in terms of impact alignment – or whether there are other more applicable structures available. However, we followed this approach to explore whether a conventionally-designed fund that follows common venture capital practice could deploy an alternative financing structure effectively and profitably, given that it is most likely to be received as “standard” by potential investors.

Principal Terms: The relevant principal terms are as follows:

<i>Capital Commitment :</i>	\$50 million
<i>Investment Period :</i>	Five years
<i>Term :</i>	10 years
<i>Management Fee :</i>	2% per year of aggregate capital commitments
<i>Investment Strategy :</i>	To invest in early-stage for profit enterprises that strive to make a positive social and/or environmental impact around the world, deploying the fund capital as follows: <ul style="list-style-type: none">• 15-25% of aggregate capital commitments reserved for revenue-share investments in early-stage enterprises• 75-85% of aggregate capital commitments reserved as follow-on investments for portfolio companies seeking growth-equity or similar investment.

Assumptions:

Fund Investment Assumptions	
Total Fund Size LP AMF Carried Interest	\$50 million 2% 20%
Total Capital to Invest net of fees	\$40 million
Number of Revenue-Share Investments Investment Amount per deal Total Invested in Early Stage	60 \$100,000 \$6 million
Follow-On Investments (Series A) Series B Follow On Investment Per Deal Total Invested in Series B Rounds	9 \$2 million \$18 million
Follow-On Investments (Series B) Series B Follow On Investment Per Deal Total Invested in Series B Rounds	4 \$4 million \$16 million
Exit Assumptions Months Until Exit (from initial investment)	60



The assumptions were based on the following:

- **Types of Companies:** The types of companies receiving investment are tech-enabled companies, which means they tend to be higher growth and display higher profit margins.
- **Size of Revenue-Share Investment:** We determined that an average investment of \$100,000 with an expected return of 3x in an average of four years was reasonable based on the findings from backdating revenue-share investments.
- **Number of Revenue-Share Investments:** The management fee of a \$50 million fund is of sufficient size to allow the fund to make, on average, 12 revenue-share investments a year for the investment period of the fund (five years), resulting in 60 investments.
- **Number and Size of Series A and Series B Investment:** We have assumed that 15% of the companies that receive an original investment of revenue share will raise a Series A and that around 6.7% will raise a Series B, with average commitment from the fund to each round of \$2 million and \$4 million, respectively. We made these assumptions based on our experience investing in the target companies and target sectors.⁴⁵

Analysis

In modeling the performance of the portfolio, we conducted a sensitivity analysis for an upside, base, and downside case for the revenue share, Series A, and Series B investment.

We based the revenue share assumptions on the back-testing we performed with the 30 companies. For the Series A analysis, we divided the assumptions into six categories: write off, losing exit, breakeven, basic exit, better exit and best exit. Each category was assigned appropriate exit multiples and probabilities based on typical Series A investments. For the Series B analysis, we divided the assumptions into four categories: losing exit, breakeven, basic exit and best exit. These categories were also assigned appropriate exit multiples and probabilities based on typical Series B investments.

We made the following assumptions in developing the sensitivity analysis:

Assumptions	Base Case	Upside	Downside
Revenue Share	We recover a 3x of 70% of the total amount invested, over 4 years.	We recover a 3x of 90% of the total amount invested, over 3 years.	We recover a 3x of 50% of the total amount invested, over 6 years.
Series A	On average, we recover 2.1x of each investment after 5 years of making that investment.	On average, we recover 2.7x of each investment after 5 years of making that investment.	On average, we recover 1x of each investment after 5 years of making that investment.
Series B	On average, we recover 2.9x of each investment after 4 years of making that investment.	On average, we recover 5.75x of each investment after 4 years of making that investment.	On average, we recover 1.13x of each investment after 4 years of making that investment.

Please note, this is a simplified analysis that assumes that all three of these investment rounds would perform similarly. Disaggregating the analysis would allow investors to evaluate what happens in a multi-scenario analysis where revenue share, Series A, and Series B all perform differently (for example, the revenue-share performs base case, Series A performs upside, and Series B performs downside).



Findings

Under this analysis, we found the following:

Return to Investors		
Upside	3.920x	29.9% IRR
Base Case	2.399x	17.2% IRR
Downside	1.125x	2.1% IRR

Revenue-Share Investments: The findings from a backdated portfolio of hypothetical revenue-share investments suggest that it is possible to provide a profitable return to an investor through revenue-share investments in early-stage entrepreneurs. The parameters of those investments are described above. The challenge lies in structuring an investment fund based on revenue share alone (see next page).

Follow-On Equity: The overall performance of the fund supports the idea that growth equity investments after an initial revenue share investment can lead to a return for investors. The initial revenue share investments can be used to help companies start earning revenue, followed by Series A funding that can help them scale. Most companies start by conducting a few pilots before commercially launching their commercial product. Then, the commercially launched product undergoes a number of iterations, which can be funded by the revenue share investment. Ultimately, there must be a clear path to both monetize these iterations and release a product for mass adoption. In summation, revenue share investments are best for a specific profile of companies – those that can use the initial capital injection to gain enough market traction where equity may make sense for further product development or other scaling expenses.

It is important to emphasize that while the revenue share as a transition to traditional equity path is possible, one goal of using this alternative structure is to support companies that may never be appropriate for equity. Additionally, a revenue-share investment gives the company space and time to scale, without the pressure to grow at all costs and exit. There are some companies where growth into equity is a viable option and will provide an appropriate return on capital for investors. For others, revenue share may be a bridge to help the company become financially self-sufficient. Therefore, there is an inherent tension in a fund model that reserves a portion of its capital to follow-on equity. Ideally, we need to find a fund model that allows for both types of investments, and can scale in size. However, this generally requires a larger initial ticket size, as discussed in the next section.

Fund Size: We further found that a fund dedicated to revenue-based investments for early-stage entrepreneurs (those raising less than \$250,000 with a revenue profile of \$500,000 or less) faces size limitations.

The overall performance of the fund supports the idea that growth equity investments after an initial revenue share investment can lead to a return for investors.

Revenue-Share Only Fund: A fund where all of the investable capital is solely dedicated to revenue share (without any reserved for following equity investments) will likely need to be very small to reasonably deploy the capital in the investment period, due to operational capacity constraints.

In our mock revenue-share/follow-on portfolio, the fund could potentially deploy up to \$6 million over five years through revenue share. That is based on a 2% management fee for the \$50 million fund. However, there are inherent limitations on how many investments a fund can make with a 2% management fee structure, given the volume of investments that would need to be made.

With the appropriate ticket size for a revenue-share approach below \$500,000 – with an average size closer to the \$100,000 to \$250,000 range – a \$6 million fund would need to make up to 12 investments per year. The amount of time and resources that would need to be put into both due diligence and portfolio management as a result would push the limits of the 2% (or \$1 million total over five years) fee structure.

As a result, creating a bigger revenue-share only fund would require a significant volume of resources to effectively manage the capital and portfolio. Developing a \$50 million revenue-share only fund – the same size as the mock portfolio – focused on early-stage companies would necessitate as much as 100 investments per year, which would obviously involve a significant amount of time and human capital.

Although it was not explored in this analysis, the size of this fund and amount per investment may increase if the revenue-share investments were also made in later-stage companies (allowing the fund to deploy larger amounts of capital into larger companies).

Revenue-Share Plus Follow-On Equity Fund: A fund structured similarly to the one we modeled as part of the mock portfolio, where the follow-on equity is limited to companies that received an original revenue-share investment, also has size limitations. We had originally intended to model a \$100 million fund, but were unable to reasonably do so given the average assumed size of an initial revenue-share investment (\$100,000). To make it a \$100 million fund, we would have to assume at least 120 revenue-share investments over a five-year period, or 24 investments a year, which implies both pipeline and portfolio management requirements that are likely unreasonable. As a point of comparison, the average fund and investment size for a micro VC in the US is \$33 million, which makes an estimated 2.80 investments per year at an average deal size of \$500,000 and an average check size of \$125,313.⁴⁶

A fund that has a portion reserved for revenue-share investments, but is more opportunistic in making equity investments (not only reserved as follow-on to initial revenue share investments), will have more flexibility in increasing its fund size. In addition, it is possible to structure the fund such that revenue share is a follow up to an initial equity investment (and therefore reserved for later-stage companies).

Given that the most promising ticket sizes for revenue-share fall well below \$500,000, a large revenue-share would face challenges given the volume of deal flow it would have to manage

RECOMMENDATIONS

Overall, our findings suggest that a fund dedicating a portion of its investable capital to revenue-share investments can provide a market rate return to investors. However, there are limitations on the size of those investments, and therefore the size of the fund.



When structuring such a fund, we recommend that investors consider the following:

- 1** Investors that are interested in supporting investment vehicles structured around revenue-based financing mechanisms for early-stage entrepreneurs need to increase their willingness to invest in funds that are less than \$100 million.
- 2** Fund managers that are raising funds with a focus on revenue-share investments may need to consider changing the structure of the management fee for the fund (e.g. increase the management fee from 2% to allow for a smaller fund size) or structure the fund such that it allows for follow-on and/or opportunistic equity investments.
- 3** The amount reserved for revenue-share investments should be feasible for a fund to deploy within the investment period.
- 4** Given our assumptions on a fair revenue-share amount and target repayment threshold, the reasonable range for a revenue-share investment is between \$50,000 and \$200,000, depending on the current revenue and project growth profile of the company.



IDEA 2: Place-Based Multi-Asset-Class Funds

DESCRIPTION

A second deep dive focuses on a solution that – rather than looking to change the type of capital – seeks to change the overall investment thesis, by creating a place-based multi-asset investment vehicle. A blended fund modeled on this approach would differ from traditionally sector-specific funds by investing in a diverse range of interdependent asset classes in a specific geography, such as a metropolitan region, a city, or even a specific neighborhood.

For example, a place-based multi-asset fund focused on a city could allocate a percentage of its portfolio to public equities located in the target geography and screened for environmental, social, and governance factors, with an emphasis on quality jobs. A similar proportion could be set aside for private equity investments into high-growth businesses in the area, while a component of the portfolio could be invested in blended real estate – including single-family and multi-family homes, and commercial properties – and a smaller portion could provide catalytic funding to local community organizations or entrepreneurs.

Place-based multi-asset investing has been done on a collaborative basis among multiple organizations, but as a strategy for a single fund, it is still relatively uncommon.

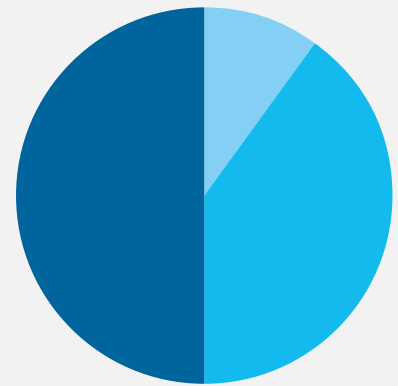
What does this solve?

The approach is borne out of the need to address a number of existing constraints in the capital landscape, primarily, that conventional equity and debt are ill-equipped to respond to the bulk of existing demand for capital. As noted previously, the incentive structure of venture capital to find fast and outsized returns can be unrealistic, while debt is often inaccessible for younger or smaller businesses. This not only leads to latent or unmet demand for capital, but also results in missed opportunities.

Similarly, due diligence is a significant – and costly – process for many investors, which reduces the ability of many institutional funds to investigate smaller opportunities, including early-stage companies or small property investments. When investors are interested in investing across industries and asset classes, which requires a deep level of market familiarity, this becomes an even greater problem, ultimately limiting multi-asset funds to larger and better-resourced vehicles – which are less likely to make smaller deployment sizes.

Finally, community-focused investment has traditionally been supported either by government or philanthropy, neither of which are able to sustain long-term development solely by themselves. Around the world, government agencies are rarely effectively equipped to support economic development on their own, while philanthropic donors face burnout from sustained support of stubbornly recurrent issues. In the same way that blending public and private finance has supported investment in infrastructure – for example, guarantees by the World Bank Group's Multilateral Investment Guarantee Agency have helped to catalyze private investment into utilities projects in emerging markets like Nigeria – blending different types of asset classes can support more sustainable investment in communities.

Sample Multi-Asset-Class Fund



10%
EARLY-STAGE SEED FUNDING

40%
GROWTH EQUITY

50%
BLENDED REAL ESTATE



Benefits

Place-based multi-asset funds would help broaden the range of opportunities that investors can target – and the range of financing options for local entrepreneurs – by providing a single vehicle that can deploy capital in a variety of ways. This would allow a greater number of companies, properties and organizations to be considered eligible for investment, rather than those that fit the narrow private equity profiles.

The deep and interdependent nature of a place-based multi-asset fund would also provide a two-fold benefit. The first is by allowing mission-driven or place-focused investors to have a robust intervention in a particular community or region, with successful investments supporting a virtuous cycle of growth, where the success of one piece of the portfolio can lead to the success of another piece. For example, if you invest in real estate, you can also support startups that will use it, and those startups may then grow into larger companies that will create jobs locally and expand. The second benefit is allowing smaller vehicles to reduce due diligence burdens through a greater familiarity with the local ecosystem, as a result of exposure to a diverse set of market drivers.

Furthermore, as the Urban Institute noted in their 2018 Investing Together report, linking a wide range of asset classes and opportunities allows place-based multi-asset funds to bring a diverse set of investors – ranging from philanthropic institutions to pension funds to angel investors – together, thereby reducing the burden on existing community-focused actors.⁴⁷

Challenges

There are challenges associated with this type of transformative approach. Among the biggest from the investor's perspective is that of risk concentration. While this type of fund would be diversified in terms of asset class, it would still be reliant on a specific and delineated location. In smaller communities – whether neighborhoods in a city, or cities in a broader metropolitan area – external macro headwinds and regional factors can play a significant role in economic performance, which means there is still a risk of geographic concentration.

By the same token, smaller communities might also struggle with a lack of viable pipeline, particularly for more liquid or higher-return investments.

Other hurdles include the potential for investment in lower-income or distressed communities to be extractive, accelerating gentrification and inflation, and leading to the dislocation of longtime residents.

Similarly, evaluation of both specific opportunities and fund-level outcomes would be challenging, given the plethora of data points, the broad range of stakeholders, and the multifaceted nature of community change.



Place-based multi-asset-class funds can provide broader flexible financing, lead to a virtuous cycle of growth, and allow multiple investors to align their strategies and share the risk.



Pipeline in smaller or distressed communities could be a challenge, and given the risks of gentrification and displacement, outcome measurement could be a difficult

Investor Interest

These challenges were regularly referenced in discussions with investors. Although the survey occurred before the US Investing in Opportunity Act was passed in December 2017, 33.3% of investors polled in 2017 were willing to explore a place-based multi-asset fund, which was one of the lowest responses for the various options we tested – and a reflection of the complex and multifaceted nature of the approach.

Yet there were a number of positive comments and surprisingly, it had the highest proportion of “very interested” investors, largely from institutions such as foundations and family offices who were already exploring a place-based thesis. Still, several acknowledged the challenges that this approach poses to conventional investors and fund managers, particularly in terms of the fund’s complexity and risk diversification.



Positive Feedback

“I’ve been curious about how one might securitize a geography in this way for some time. I’m not at all sure how public equities would work in this model (I had been thinking you could bundle a variety of local cash flows into a bond), but I’d love to learn more.”

“Very much aligned with how we currently invest, and our clients’ desires to go deeper into their specific communities. If investors were able to mitigate the risk of the potentially limited number of investment opportunities that would fit within the strategy, and their associated risk profiles, this could be very compelling.”



Negative Feedback

“I question the viability from a timing standpoint. In order to generate a reasonable return, the targeted community must already have a viable ecosystem, full of entrepreneurs and managers who can prudently allocate and manage the capital. If you hang out a sign, stating the intention to invest in a community, it will likely take too long to attract the necessary skills to create success at an acceptable pace.”

“Great in theory, too complicated to develop.”

Place-Based Multi-Asset-Class Fund Case Study

Multi-asset funds on the public markets are commonplace among large institutional investors such as Vanguard and BlackRock, but far less prevalent in the private markets, and very few have a narrow geographic focus or a willingness to invest small dollar amounts. However, there are a handful of examples of place-based multi-asset funds, either under development or active, which illustrate the potential benefits of scaling this approach.

In many markets, co-working spaces also make investments, providing an illustration of a multi-asset-class approach, although not necessarily a multi-asset-class fund. One example is the iHub in Nairobi, Kenya, which is a real estate company that hosts a co-working space and event space, and acts as an incubator for emerging startups – owned by a venture capital investors, it serves as a strategic asset acquisition for the portfolio. Other emerging coworking space investments, such as WeWork, are following similar methodologies.

Although they are not combined into a single multi-asset vehicle, there are a handful of initiatives that serve as precursors to a place-based multi-asset fund. These efforts look to pool, coordinate or catalyze investments – albeit predominantly among philanthropic institutions, which are already shouldering a large burden of community investment – across industries or asset classes in a specific location, such as the Benefit Chicago collaboration between the John D. and Catherine T. MacArthur Foundation, Chicago Community Trust and Calvert Foundation.

Among the planned projects there are a few ways in which investors are exploring the approach. Following the rollout of the US Investing In Opportunity Act, a coalition of investors led by multi-asset provider Access Ventures have begun exploring the establishment of an Opportunity Zone fund, a multi-asset fund that would invest directly in businesses, residential property, and commercial real estate in low-income census tracts. A number of larger institutions are also looking at the space: in late 2018, for example, the Rockefeller Foundation and the Kresge Foundation received more than 140 expressions of interest as part of an offer of support to build out Opportunity Zone funds.

The Great Lakes St. Lawrence Blue Growth Fund is another example of a single vehicle that would deploy capital in a specific region and across multiple asset classes. The fund – which is being supported by provincial, state, and national agencies – is still in the development stages, but would focus on supporting wealth generation and economic development in the Great Lakes region, with an emphasis on environmental and water sustainability.

Access Ventures Investment into Shelby Park

An example of an existing place-based multi-asset fund – and the one that provides an illustration of the potential performance of such vehicles – is Kentucky-based Access Ventures. Access has invested in several asset classes in Shelby Park, a neighborhood in Louisville, Kentucky, in the US for the past five years. The blended portfolio seeks to provide both a density in Shelby Park that enables better business growth and attractive diversification for investors. It provides a roadmap for what an Opportunity Zone strategy could look like:

Real estate: Access invested in real estate in Shelby Park that provides both affordable housing and commercial space.

Growth investment: It has made lower-risk growth investments in coffee shops, restaurants, and other businesses in the neighborhood, both debt and equity.

Seed investment: Access has also made higher-risk, higher-return investments in the startups founded in the neighborhood, with a focus on businesses that build on local and regional strategies, which include those in agriculture and advanced manufacturing.

In total, since 2014, Access has deployed \$3 million and created more than 200 net new jobs in the Shelby Park community.

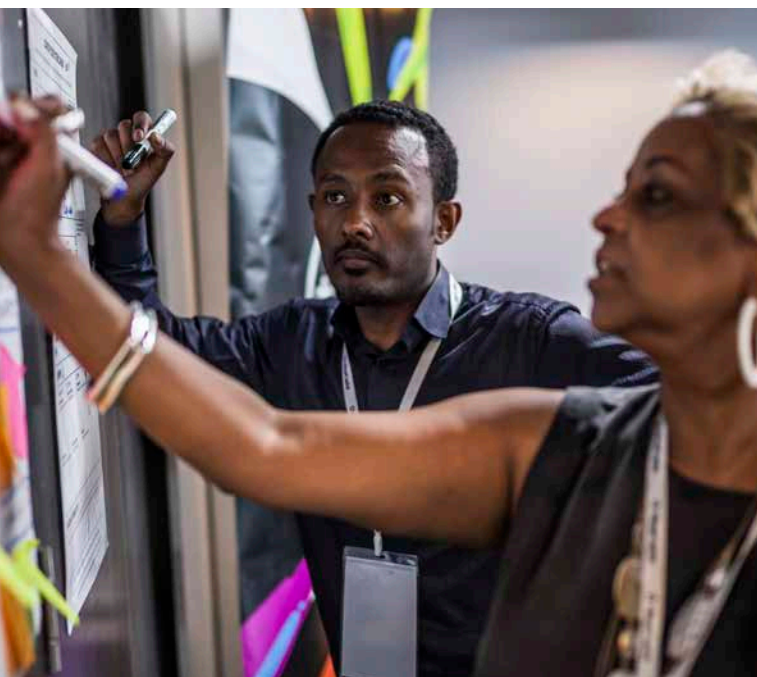


Mock Portfolio: LOCAL OPPORTUNITY ZONE MOCK FUND

These examples highlight both the rise in interest from mission-aligned investors in place-based investments and the track record of early movers in the space. To better evaluate the potential of a place-based multi-asset fund, we developed a mock portfolio that invests in both blended real estate, early-stage companies and later-stage companies in five designated locations.

We have structured the vehicle as a US-based Local Opportunity Zone fund, in part due to the timeliness of the US federal legislation around place-based multi-asset-class investments and in light of interest from investors around the US 2017 Investing In Opportunity Act. Although the lessons of place-based multi-asset-class funds are applicable to different markets around the world, the Opportunity Zone funds represent a specific type of US vehicle. The fund would use a multi-asset-class, interdisciplinary investment strategy sized and modeled to meet specific community and business needs.





Fund Structure

For the purposes of this mock portfolio, the Local Opportunity Zone Mock Fund is a \$100 million fund, structured for the principal purpose of investing in Opportunity Zones across the US. The fund is dedicated to supporting the economic development of five designated distressed communities by supporting the growth and scale of early-stage entrepreneurs and community real estate assets.

We selected a small range of specific locations for the fund based on feedback from investors. Interviews with investors have suggested that place-based Opportunity Zone Funds actually have higher demand than a national diversified pool that invests across any Opportunity Zone (structuring the fund in that fashion would also reduce any place-based benefits). For example, a \$100 million opportunity that contains two to four place-based funds of \$25 million to \$50 million each is more likely to meet investor demand. In our initial scoping, we found substantial demand from investors for place-based multi-asset class funds in specific metropolitan areas, including Austin, Atlanta, Baltimore, Chicago and Washington DC.

Principal Terms: The relevant principal terms are as follows:

Capital Commitment :	\$100 million
Investment Period :	Five years
Term :	10 years
Management Fee :	2% per year of aggregate capital commitments
Investment Strategy :	To invest in early-stage for profit enterprises that strive to make a positive social and/or environmental impact in five locations within the US, deploying fund capital as follows: <ul style="list-style-type: none"> • 10% reserved for early-stage seed investments • 40% reserved for growth equity investment • 50% reserved for investments in real estate

2017 Investing in Opportunity Act

Opportunity Zones are a result of the 2017 Investing in Opportunity Act, passed as a part of the US Tax Cuts and Jobs Act.⁴⁸ The law created a new designation, Opportunity Zones: low-income census tracts designated by governors across the US. Investors may receive certain tax benefits if they invest in qualified businesses within the Opportunity Zones via Qualified Opportunity Funds. Qualified Opportunity Funds must invest more than 90% of their assets into businesses (whether real estate, retail, or startup) based in Opportunity Zones.

Investors who invest in any business in an Opportunity Zone are eligible for the following tax benefits:

- **Deferred/reduced capital gains from sale of current assets.** If an investor sells any asset and invests the proceeds into a Qualified Opportunity Fund they can defer the capital gains for 10 years and receive up to a 15% discount on ultimately paid gains.
- **Reduced/eliminated capital gains on returns from the Access to Opportunity Fund.** If the investors realize returns from the Access to Opportunity Fund, they can either pay capital gains on all proceeds at a significantly reduced rate, or no capital gains if the returns are realized after 10 years.

Assumptions

The mock portfolio is built on the following assumptions:

General Investment Assumptions	
Total Fund Size	\$100 million
Total Capital to invest net of fees	\$80 million
Allocated for First Fundings	\$8 million
Allocated for Series A	\$32 million
Follow-Ons	
Allocated for Real Estate	\$40 million
Total Investable Capital	\$80 million

Portfolio Assumptions	
Investment Size	
Average First Funding (Catalytic/Seed)	\$250,000
Average Second Funding (Early Series A)	\$1.5 million
Portfolio Size	
Catalytic	32
Series A	21
Investment Timeline Assumptions in Years	
Investment Timeline (Catalytic & Series A Investments)	5
Series A Months after Initial Investment	12
Fund Life in Years	10



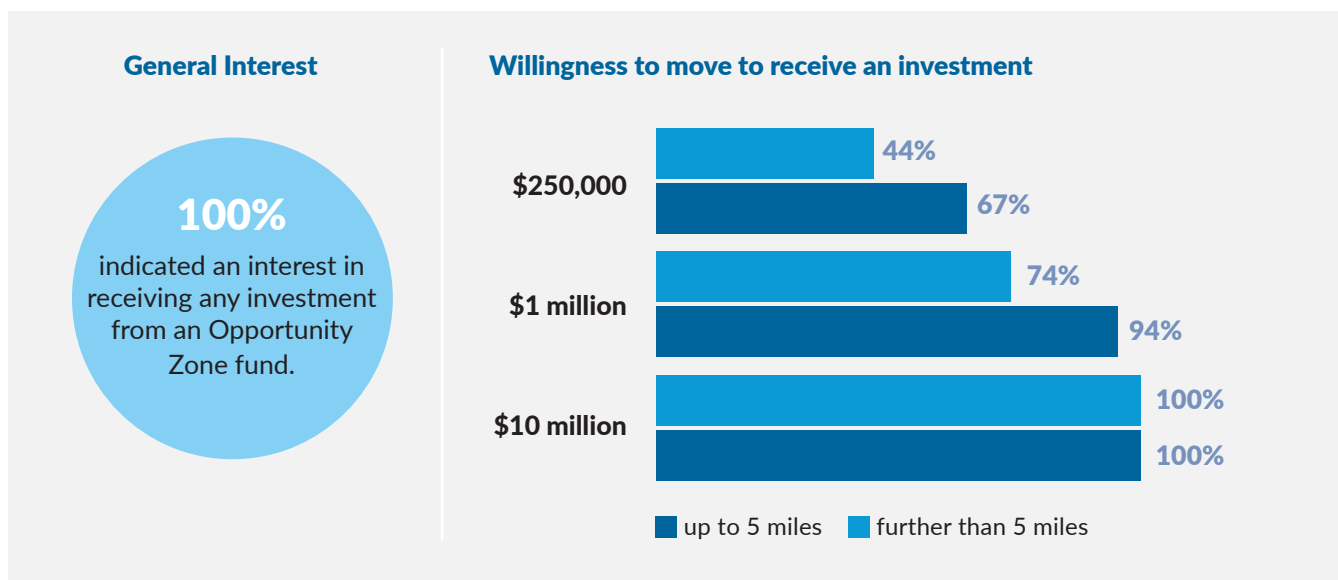
The assumptions were based on the following:

- **Number of Seed and Series A Investments:** With a deployment timeline of five years, the fund will make 6-7 seed investments and 4-6 Series A investments annually, resulting in 53 investments.
- **Size of Seed Stage Investments:** With \$8 million dedicated to seed investments, we determined an average investment of \$250,000 was reasonable, with investment amounts ranging from \$100,000 to \$500,000, depending on the capital needs of startups in our targeted opportunity zones.
- **Size of Series A Investments:** As investment rounds become larger, the chasm between seed and Series A, investments continue to rise. Assuming two-thirds of our initial investments demonstrate sustained growth potential, we set aside \$32 million for Series A with an average investment of \$1.5 million. Investment sizes will range from \$1 million to \$3 million.
- **Amount dedicated to Real Estate Investments:** We decided to allocate half of the fund to real estate to provide a more stable and sizable proportion of capital in an otherwise risky fund. Of these investments, 50% are allocated to affordable housing.

Fund Pipeline

The Local Opportunity Zone Mock Fund is restricted to investing in entrepreneurs and real estate located in designated Opportunity Zones, which are low-income census tracts designated by governors across the US. As a result, site selection is crucial to ensure a sustainable pipeline.

We conducted a survey of roughly 250 of Village Capital's US alumni to better understand their interest in receiving an investment from an Opportunity Zone fund and willingness to relocate for an investment. Of the nearly 50 that responded:



To evaluate the quality of the pipeline of entrepreneurs located in these zones, we first looked to our alumni located in or near Opportunity Zones. Note: All findings are discussed in the aggregate and individual company information will remain confidential.

Around 35% of Village Capital's alumni are located within one mile of an Opportunity Zone.

Type	#	%
In Opportunity Zone	35	15.49%
Within one mile of Opportunity Zone	45	19.91%
Total	80	35.40%

Of the 80 companies that are in or within a mile of an Opportunity Zone, we found that:

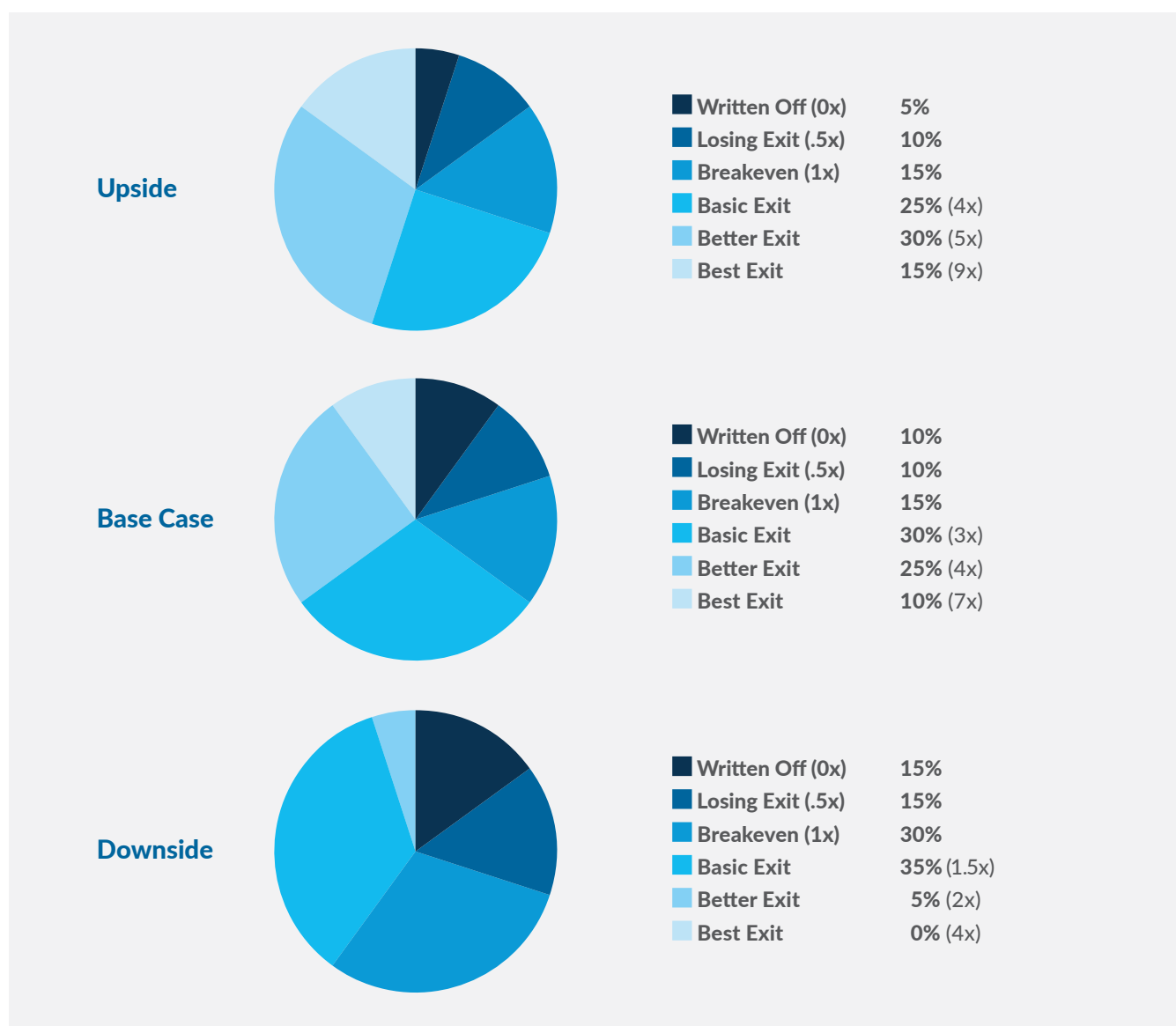
- **23%** raised a seed round with an average investment of **\$900,000**.
- **6%** raised a Series A round with an average investment of **\$4.75 million**.
- **1%** raised a Series B round with an average investment **\$4.2 million**.

We found high concentration of alumni companies in or within one mile of an Opportunity Zone located in a number of metropolitan areas, including Austin, Atlanta and Washington DC, as well as smaller concentrations of Opportunity Zone-adjacent ventures in Chicago, Oakland, New York and Boston. Based on this analysis, we believe there is preliminary evidence of quality pipeline in or near an Opportunity Zone for initial and follow-on investments for the Mock Fund.

Analysis

In modeling the performance of the portfolio, we conducted an upside, base case, and downside sensitivity analysis for the seed, Series A, and real estate investment.

For all investments, we assumed a 10 year horizon on all real estate investments and a 50/50 split between commercial and affordable housing investments. We made the following additional assumptions in developing the sensitivity analysis:



The distributions above are based on an internal analysis of publicized portfolio targets from high-performing funds and low-performing funds across the early-stage investment industry.

Please note, this is a simplified analysis that assumes that all three of these investment rounds would perform similarly. Interested investors may want to disaggregate to evaluate what happens in a multi-scenario analysis where seed round, Series A, and real estate all perform differently (for example, the seed round performs base case, Series A performs upside, and real estate performs downside).



Findings

Under this analysis, we found the following:

Return to Investors		
Upside	3.49x	25% IRR
Base Case	2.49x	16.4% IRR
Downside	.94x	-6.3% IRR

Investor Tax Benefits

Investors in the Local Opportunity Zone Mock Fund have the option to invest capital that would otherwise have been subject to capital gains tax to realize a tax discount, provided it is held in the fund for a sufficient length of time. In addition, investors will receive a capital gains tax discount on any returns they realize from the fund that are above the original amount invested.

According to the Opportunity Zone fund guidelines, every investment in an Opportunity Zone that is held for 10 years, seven years, and five years receives a capital gains tax redemption of 23.8%, 15%, and 10%, respectively.⁴⁹ In an \$80 million fund that invests \$40 million in real estate (10-year lifeline, 10% return), \$32 million in seed-stage companies (seven-year lifeline, 20% return), and \$8 million in Series A-stage companies (five-year lifeline, 15% return), we can assume the following aggregate returns through this vehicle:

Asset	Hold Period	Investments	Average Return	Capital Gain	Total Gain After Tax	Tax Redemption (%)	Tax Redemption (\$)
Real Estate	10 Years	\$40M	1.1x	\$4M	\$3.05M	23.8% (full)	\$0.95M
Seed Stage	7 Years	\$32M	1.2x	\$6.4M	\$4.88M	15%	\$1.52M
Series A	5 Years	\$8M	1.15x	\$1.2M	\$0.91M	10%	\$0.29M
All		\$80M		\$11.6M	\$8.84M		\$2.76M
Total Return	\$91.6M	Opportunity Zone +	\$2.76M	*on a 23.8% capital gains tax rate			

By investing in Opportunity Zone assets, the fund, which would see an \$8.84 million return over 10 years on the \$80 million (after tax), instead is able to realize an extra \$11.6 million return with the tax redemptions. This is a \$2.76 million benefit – a 3.4% increase in cash-on-cash returns.

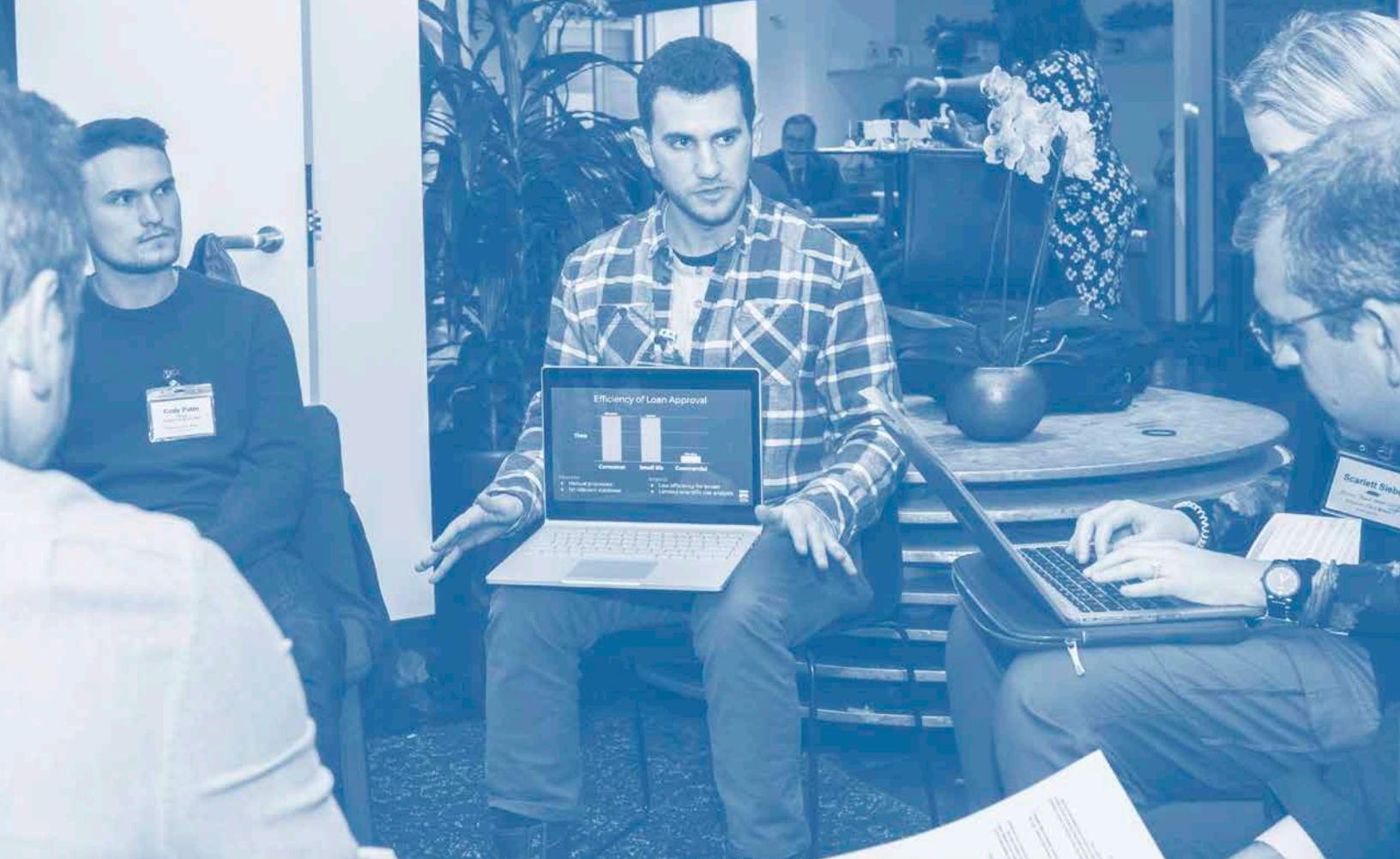
RECOMMENDATIONS

Overall, our findings suggest that a fund that invests in multiple assets in a specific geography can provide an attractive market rate return to investors (particularly when benefiting from additional tax incentives, as in the case of Opportunity Zone funds). However, there are a few caveats that investors should consider when structuring a place-based multi-asset fund:

When structuring such a fund, we recommend that investors consider the following:

- 1** It is important to develop profitable business models for both the real estate and the operating businesses: it is not reasonable to expect one to cross-subsidize the other. Real estate tends to be the most straightforward – and for many investors with limited experience in venture capital, the most predictable – component of the portfolio, but in geographies with a large pipeline of businesses the approach to company investment should be equally robust.
- 2** This ties in to the second key point, which is the importance of evaluating and planning the pipeline for operating business. Network density – which could consist of lining up a “prospectus” or “portfolio” of businesses willing to co-operate and co-locate – is critical, particularly if there are strict constraints (as with Opportunity Zone funds) on where the fund can deploy.
- 3** While holding multiple assets ensures that funds benefit from a measure of diversity, it is worth ensuring that each asset class is also appropriately diverse, and relevant to the geography they are investing in. Fund managers who are raising multi-asset funds should consider a diverse real estate strategy, for example, including both commercial, mixed-use and affordable housing to meet the needs of the community that they intend to develop. Debt will need to be raised to offset high capital expenditure.





IDEA 3:

Peer-Based Decision-Making

DESCRIPTION

The final deep dive we conducted was to evaluate an alternative approach to the due diligence and decision-making process: a peer selection methodology which gives entrepreneurs the power to evaluate and make investment decisions on behalf of a fund.

Village Capital has uniquely employed peer selection – inspired by the village banking model in microfinance – to identify high-performing investable ventures. In the Village Capital model, peer selection brings together a group of 10 to 12 early-stage ventures working around a sector-specific problem for a three-month accelerator program. As part of that program, participants use a specific investment readiness framework to assess one another's potential, doing a deep dive into their respective businesses. Based on that framework, those entrepreneurs then participate in three to four rankings of their peers (where they must explain their scores) over the course of the three months (the first comes after four days of programming, the last comes at the end of the program). The final rank is definitive: the two highest-ranked ventures at that point will receive offers of investment from VilCap Investments.

In a forthcoming report, Village Capital, with support from the John D. and Catherine T. MacArthur Foundation, explores the data of peer selection, looking at why it has resulted in the outcomes it has, and what the implications are for other investors. For more information and to see the report, go to vilcap.com.

What does this solve?

The current system of supporting entrepreneurs does not always work very well, particularly when resources and capital are concentrated in only a handful of places, people and problems. Some 45% of venture capital in the world goes to just three US states and in 2017, 15% of venture capital went to women, and less than 1% to people of color. When it comes to funding solutions to real world challenges, even that is lopsided: fewer than one-fifth of the 273 unicorns focus on sectors like housing, energy, health care and education, where the bulk of the world's population spend their money.

These blind spots are in part a result of the difficulties investors face in their due diligence and decision-making process: faced with sifting through more than a thousand pitch decks a year, they turn to time-proven strategies that, while effective, can also mean overlooking opportunities – in turn restricting access to capital.

Benefits

Village Capital has run more than 70 programs using peer selection over the past nine years, working with more than 1000 entrepreneurs in the process.

Based on the overall track record of alumni companies and the performance of Village Capital's portfolio, a preliminary reading of the outcomes suggests that the curriculum of peer selection leads to improved performance by alumni, and – more importantly for the purposes of this report – the methodology of peer selection works well in identifying the prospects for venture growth and investment returns. Among the 102 investments Village Capital has made since 2009, for example, 14 have provided exits with positive returns. Furthermore, approximately 90% of Village Capital's investments are still operating, against an average survival rate of 60-70% for early-stage venture capital in the US.

Village Capital has also seen some notably different outcomes from venture capital industry benchmarks. This research looks to further probe the extent to which peer selection impacts that.

For example, Village Capital's companies are more diverse – geographically and demographically – and more resilient than the traditional venture capital portfolio, for example: 44% of our portfolio comprises female-led ventures and 26% comprises founders of color. More than four-fifths of the portfolio is outside of California, New York, and Massachusetts – the three states that together account for roughly half of all venture capital activity worldwide.



Peer selection can yield a high-performing portfolio, with reliable returns while peer evaluation helps support a more diverse portfolio, with less risk of gender, geographic, or racial bias.

Challenges

There are certainly challenges associated with peer selection, not the least of which is the unusual nature of the methodology, which means that investors must feel comfortable outsourcing a large component of traditional business due diligence work to external stakeholders. Pre-committing offers of investment to a process – and trusting the outcomes of the process – is a steep ask of investors.

The idea of peer selection was – and still is – disruptive to the venture capital industry. Many still make the argument that entrepreneurs do not have the training, experience, or expertise necessary to reliably identify the most promising innovations that are ready for investment, nor do they know how to accurately assess the value of each other's companies.

Beyond that, the process is resource intensive. This provides benefits that can only be had with time, and the input and feedback of multiple people. While peer selection does appear to support the development of an inclusive and financially performing portfolio, the time and cost involved in structuring programs – based on the Village Capital framework – are high, and perhaps not feasible for investors who are already grappling with a thousand pitches per year.

The process has also traditionally been focused on earlier-stage companies and we have yet to see evidence that peer selection would work for later-stage companies with a substantial track record. Later-stage venture capital and private equity investors deploying tens of millions of dollars in growth capital have years of evidence of a company's performance, and are making decisions based on assessing a company's growth trajectory, rather than predicting whether an idea and its early execution will be successful based on factors such as team dynamics or value proposition.



Using a peer-based model for investment decisions is expensive and works best with multiple entrepreneurs. It is also an unusual method and investors may be unwilling to outsource decision-making.



Peer-Based Decision-Making Case Study

Village Capital's peer selection process involves a group of entrepreneurs evaluating and providing feedback on one another, eventually making a collective decision on who should receive investment.

Village Capital uses peer selection as the anchor component of a three-month non-residential investment-readiness program, during which a group of 10-12 early-stage companies operating in a specific geography and sector (such as clean energy in India or education technology in the US) assess themselves and one another as if they were an investor. Each program consists of three workshops, and cohort companies participate in a variety of different curriculum modules, including extensive interactions with investors, potential customers and strategic partners.

Using a framework for evaluation – Village Capital's VIRAL Pathway – to identify venture maturity and development, the peer selection process essentially serves as a collaborative due diligence process. The VilCap Investments fund precommits investment to the outcome of the program, and participants know that the top two peer-selected ventures will receive an investment offer. As a result, companies have a fiduciary responsibility to make the best possible investment decision they can.

The peer selection process begins in the first workshop, with an introduction to the VIRAL framework and deep dives into specific issues companies should consider when evaluating one another, such as team and value proposition. This is followed by a trial ranking, where peers score one another and explain the reasoning behind that score.

Over the following two workshops, three more trial rankings are conducted to allow the companies to assess their progress before the final day of the program, when the final ranking occurs. The results of that ranking mean that two companies, as chosen by their peers, will receive investment.

Entrepreneurs behaving like investors

Heading into the first day of Village Capital's Fintech Africa 2017 program, Odunayo ("Odun") Eweniyi and her co-founders at Piggybank.ng had several fundraising goals, but one stood out above the others: acquiring a license from the government to operate as a microfinance service. The license would cost \$150,000.

Piggybank.ng is an online savings platform that helps Nigerians put away small amounts of money on a regular basis, whether daily, weekly or monthly. However, to scale – and to buy the government license – Piggybank.ng needed venture capital. Odun knew that pitching VC investors would be a new and different experience. "We went through the program to learn how to pitch VC investors."

Meeting Her Peers

The Fintech Africa 2017 program was divided into three separate workshops, each one month apart, in Accra, Nairobi, and Lagos. At each program Odun got to know her peers – fintech startup founders from five countries – a little better, working each day on modules that allowed her to explore everything from their value proposition to their human capital to their customer discovery processes. At the end of each workshop the entrepreneurs went through a "trial" of the peer-review process, taking those factors and learning into consideration.

Odun appreciated these trial ranks. "Because the program was in three tranches, we were able to see people's progress," she said. "The month-long break was important to internalize the feedback you got from the previous round. You could go home, think on the changes, and decide whether or not you were going to implement them. If not, you had to come up with reasons why not, then come back and explain them."

Playing the role of investor was a new experience for Odun. “Initially I thought it was overwhelming. It’s a lot of pressure to be in the decision seat for whether someone gets money or not. But we were able to get past that.”

“It was very interesting to see that many people across Africa running businesses, their motivations. Nigeria is very big but also very little. At the time there weren’t as many people as now. So you normally don’t get to meet other entrepreneurs. The group of peers we met was very diverse. It was really interesting to see what people were doing differently from us; to see people’s motivations for doing things.”

The Final Ranking

On the final day of the program, Piggybank.ng was ranked as one of the two top companies, along with Olivine Technologies. “In every ranking, each person has to give a justification for why they ranked that way. Hearing those reasons, seeing that we made progress, that was very important. It was important to hear not just from investors, but from fellow founders.”

A few months after the program, Piggybank.ng raised \$1.1 million seed funding to develop its products and expand, but also to get the license. The company now has 100,000 users, half of whom are active every month, in turn helping them save \$8 million dollars thus far.



PORTFOLIO HIGHLIGHTS

These examples highlight benefits of alternative decision making and due diligence strategies in terms of expanding access to capital for investors. To share the value of a portfolio developed using peer selection, we have pulled out key takeaways from Village Capital’s own portfolio below, although it is not structured as a mock fund.

PORTFOLIO SUMMARY

90%

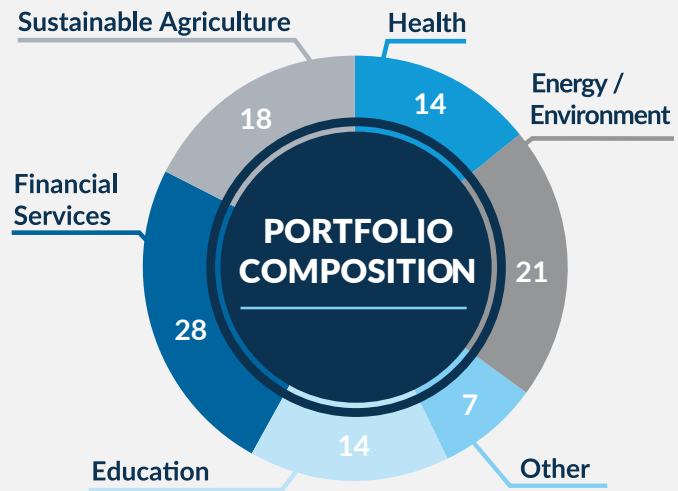
Survival Rate

102 INVESTMENTS

78 ACTIVE INVESTMENTS

14 EXITS

10 WRITE-OFFS



PORTFOLIO DIVERSITY

FOUNDERS OF COLOR (US)

26%

Vilcap Portfolio
Industry Average

2%

FEMALE-LED

44%

15%

OUTSIDE OF CA, NY, & MA

85%

25%

PORTFOLIO OVERVIEW

\$239.6M

Additional Capital

12.8M

Beneficiaries Served

\$87.0M

Revenue Generated

11.7K

Jobs Created

*Portfolio statistics refer to Village Capital's peer-selected portfolio from 11/2009 - 12/2017. Village Capital's affiliated investment vehicle, VilCap Investments LLC, has made 73 investments to date. The first 18 peer-selected investments from Village Capital programs were made through First Light Ventures. From 2009-2011, Village Capital peer-selected investments were made through the First Light Fund, managed by Gray Ghost Ventures. Village Capital incorporated as a 501(c)3 in 2010 and made investments through an independent affiliated fund starting in 2012.

PEER SELECTION STUDY



While the initial performance of the portfolio and alumni has been promising, there are several questions about peer selection that our research with the John D. and Catherine T. MacArthur Foundation sought to partially address. How effective are entrepreneurs at discerning future revenue growth or capital attractiveness? How exactly does peer selection impact gender or racial diversity? What aspects of the methodology are contributing to these outcomes? How can other investors leverage these learnings to improve their portfolio outcomes?

To better understand peer selection, our study looked at 39 programs from 2013-17 that Village Capital ran across the US, India, sub-Saharan Africa and Latin America. The dataset includes a group of more than 1200 entrepreneurs in total, including both alumni of Village Capital peer selection programs and control groups of applicants who did not participate in the programs.

Together with external evaluators, we analyzed both internal and self-reported data from the peer selection programs – including ethnographic observations of group dynamics in the workshops – along with longitudinal metrics from the Global Accelerator Learning Initiative and Social Enterprise @ Goizueta. We then compared that information against industry benchmarks from sources including Crunchbase and Traxn.

The forthcoming study ultimately yielded three key insights.



1. Entrepreneurs are able to accurately and quickly identify factors for commercial success in their peers

Entrepreneurs are able to accurately and quickly identify factors for commercial success in their peers. Looking at the performance of alumni in both the first and second years following a program, we found that the final peer-selected rank accurately reflected the subsequent ability of ventures to realize commercial success.

Entrepreneurs are on average accurately identifying which of their peers will see stronger performance in terms of capital raised – defined as commercial debt or equity – in the two years following a Village Capital program. The linkage between a high ranking and more capital raised is most definite in the first year, although the trend is sustained in the second year.

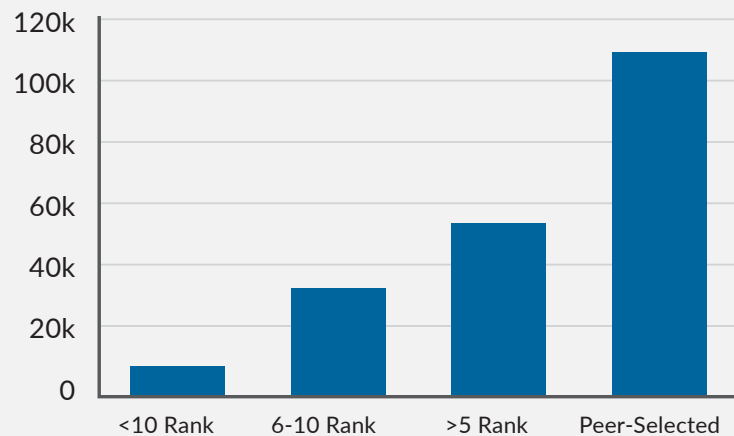
Furthermore, the difference in the amount of additional capital raised is statistically significant across each of the peer rank groups, which means that entrepreneurs are able to identify which of their peers will face challenges. The lowest-ranked companies consistently show lower performance improvements in the two years following the program.



Peer-selected companies – the subset of those companies that subsequently receive investment offers, and which are generally ranked as the top two ventures – show the most notable increases in capital raised and revenue generated.

The trends remain consistent even when controlling for the amount of Village Capital’s investment into the peer-selected firms (which can typically range from \$25,000 to \$100,000 per venture, depending on geography and sector).

Capital Raised One Year After Peer Selection



Equally notable, entrepreneurs were able to identify potential factors for success relatively quickly. Entrepreneurs have the opportunity to rank each other up to four times throughout the course of a Village Capital program, but comparing the results of the first ranking – which occurs after just four days – and the final ranking of programs indicated a correlation of 0.65 between the two, suggesting that entrepreneurs are predicting the future commercial performance of their peers within the first few days.

The ability to discern the factors that might lead to commercial success in terms of revenue generation or capital raised may also be, in part, due to the amount of time that entrepreneurs spend with one another, which includes roughly four days prior to the first rank (and a total of 12 days in person over the course of the three-month program).

This also suggests that the entrepreneurs may be better positioned to gauge future performance than external stakeholders, including other investors. One recent survey shows that roughly half of all venture capital firms only spend somewhere between 20 and 60 hours on due diligence, with only a third spending more than that.⁵⁰

As a result, participants have the opportunity to get to know their peers, as one entrepreneur put it, “as individuals, entrepreneurs, and teams”. The participants are able to see how the founders communicate their businesses with different audiences; how they engage as a team and with other stakeholders, such as mentors; and how the companies address and talk through challenges.

This appears to suggest that peers – in line with the approach of many other early-stage investors – do not just rely on purely commercial metrics to make their decision. Venture traction, for example, as measured by revenue generated and commercial capital to date, historically plays a large role in the evaluation of a company’s future performance but baseline traction – based on the performance of ventures when they enter a program – is not correlated with the final ranking.

2. Peer selection mitigates gender bias

One key trait that we wanted to better understand revolved around gender dynamics, given that women are often crowded out of the venture capital process but that outcomes of peer selection appear to suggest that it is less exclusionary.

Through this study, we found that the peer selection process mitigates that crowding out effect, meaning that female-founded ventures perform in proportion to their representation in the overall applicant pool.

Peer selection data suggest that female-led companies (which include mixed-gender teams) generally have an equal opportunity of being peer-selected throughout the Village Capital process – from time of application to final peer selection – to their male counterparts, when matched to their eventual commercial performance. In short, female-led ventures are being considered on their merits, just like their male peers.

However, the high percentage of Village Capital investments in female-led companies – 42% of Village Capital’s portfolio is female-led companies, compared to an average of 15% – does not appear to be a result of the peer selection process per se, but rather a result of the higher rates of participation in the cohort. Once female-led ventures are accepted into the program, they do not see an outperformance as part of the peer selection process.

In fact, female-founded companies in Village Capital programs have a slightly higher probability of being ranked lower, while men have a slightly higher probability of being ranked higher. Although this suggests the possibility of negative bias, when performance variables are included in the assessment, the relative commercial performance of those female-led ventures actually corroborates that entrepreneurs appear to accurately evaluate female-led ventures during the ranking process.

When compared to the male-led ventures in their comparison group, female-led ventures are performing similar, at the average for that group, or at times worse. This indicates that female-led ventures are being accurately ranked – and, in some first ranks, seeing positive bias. However, incidences of positive bias decrease between the first and final rank, suggesting that entrepreneurs more accurately rank women by the final rank.

Gender Distributions

Applicants

63.6%

36.4%

Semi-Finalists

64.9%

35.1%

Cohort

61.6%

38.4%

Peer-Selected

70.6%

29.4%

Male

Mixed or Female



3. Emphasis on capital limits the ability to identify revenue potential

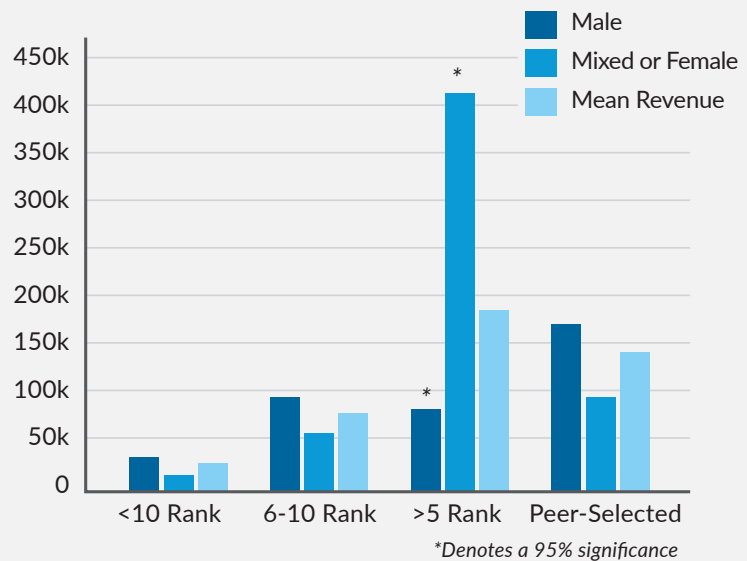
Finally, the data suggested that while subsequent capital performance maps to the peer ranks, the relationship – while still present – is less clear between the peer rank and revenue potential.

While there is a general trend of higher revenue for those ventures that are higher ranked, the trend is not statistically significant – unlike with capital raised – and shows far less distinction between comparison groups. In short: the ranks broadly reflect revenue performance but with far less accuracy than capital.

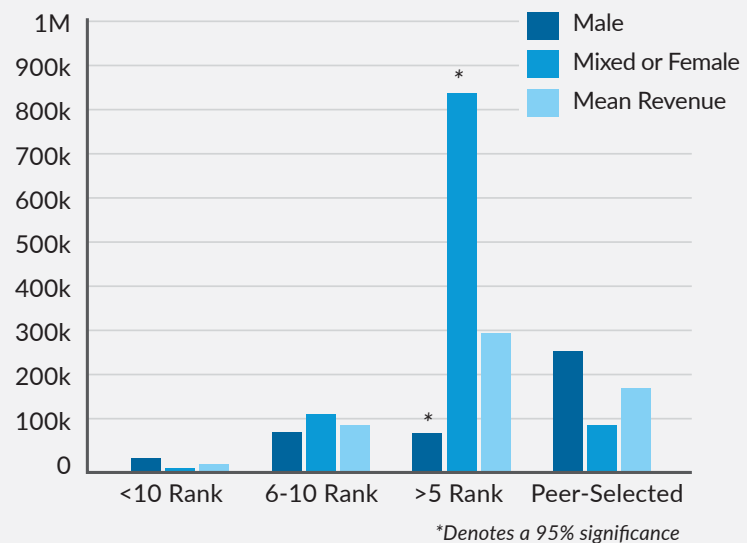
While Village Capital's cohorts are centered on a specific sector and issue, they frequently include a wide variety of companies all of which come with distinct business models, customer bases and revenue streams. The ability of participants to more clearly identify the ability to raise future capital among their peers – as opposed to the ability to generate future revenues – suggests that evaluating the core components of a business model at the early stage of a company is more challenging than identifying investment attractiveness. For example, evaluating the market size and possible exit for an investment is a simpler task than understanding the eventual positive unit economics for a product.

The difference in performance may also reflect the emphasis – both in the industry at large and within Village Capital's own curriculum – on capital raising specifically. Capital, and equity specifically, has long been seen as a measure of success for early-stage companies and a validator of their business. Village Capital's curriculum during the peer-selection programs also maps business maturity and growth to outside capital, which underscores investment as a focal point for the participating entrepreneurs.

Total Average Revenue One Year After Program



Total Average Revenue Two Years After Program



Ultimately, this suggests that entrepreneurs may be discounting current and future revenue performance as a measure of potential commercial success during the peer selection process.

What makes this point particularly noteworthy is the revenue performance of the comparison groups after the program – particularly when broken down in terms of gender.

As mentioned previously, peer selection shows a general if somewhat uneven trend between higher rankings and revenue performance. However, unlike with the measures of capital, the top two companies – those who ultimately were selected to receive investment – do not on average show higher revenue performance than those ranked immediately below them.

In fact, the strongest post-program revenue performance is on average displayed by highly ranked female-led ventures. Companies that are founded or co-founded by women, and who are ranked in the top five of their cohort by their peers but are not selected for investment, outperform the rest of the cohort in terms of revenue. In the two years following a Village Capital program, the revenue performance on average of strong female-founded companies outpaces that of top-ranked male-led ventures who do receive investment through peer selection.



RECOMMENDATIONS

Overall, our findings suggest that using peer selection as a means of making capital decisions can allow investors to develop a strong and more inclusive portfolio of investments. While outsourcing decision-making to a group of entrepreneurs may be challenging (for a variety of reasons) for many current funds, there are three ways in which integrating a peer review process could nonetheless support similar outcomes for investors.



1 Bringing entrepreneurs on to investment committees or advisory boards can mean another insightful voice that adds value to the due diligence process. Entrepreneurs bring valuable experience of the market, with a deep knowledge of market factors, competition, and differentiation within a given industry. The ranks of angel and venture capital investors are filled with former entrepreneurs but it is evident in our research that their ability to assess the investability of their peers is present long before they begin investing.

2 Providing a detailed and concrete matrix for evaluation can help improve the assessment of a venture and facilitate the due diligence discussion. The clear, detailed framework used in peer selection for evaluating investment readiness not only allows founders to articulate the specific milestones they have achieved across different facets of their company – testing their customer discovery hypothesis or validating their market, for example – but it also allows their peers to provide very specific and nuanced assessments of a company's performance and potential.

3 Multiple viewpoints can help improve the accuracy of assessment and limit the influence of individual bias in decision-making. A key aspect of the peer selection process is that the ranks are comprised of an average of multiple scores: combined not just from a single peer-to-peer review, but from up to 11 separate scores for each company. The back-and-forth of the peer selection process and the ability of multiple peers to focus on a variety of different components of a business, in turn allowing for a more comprehensive understanding of an early-stage company

SECTION 4

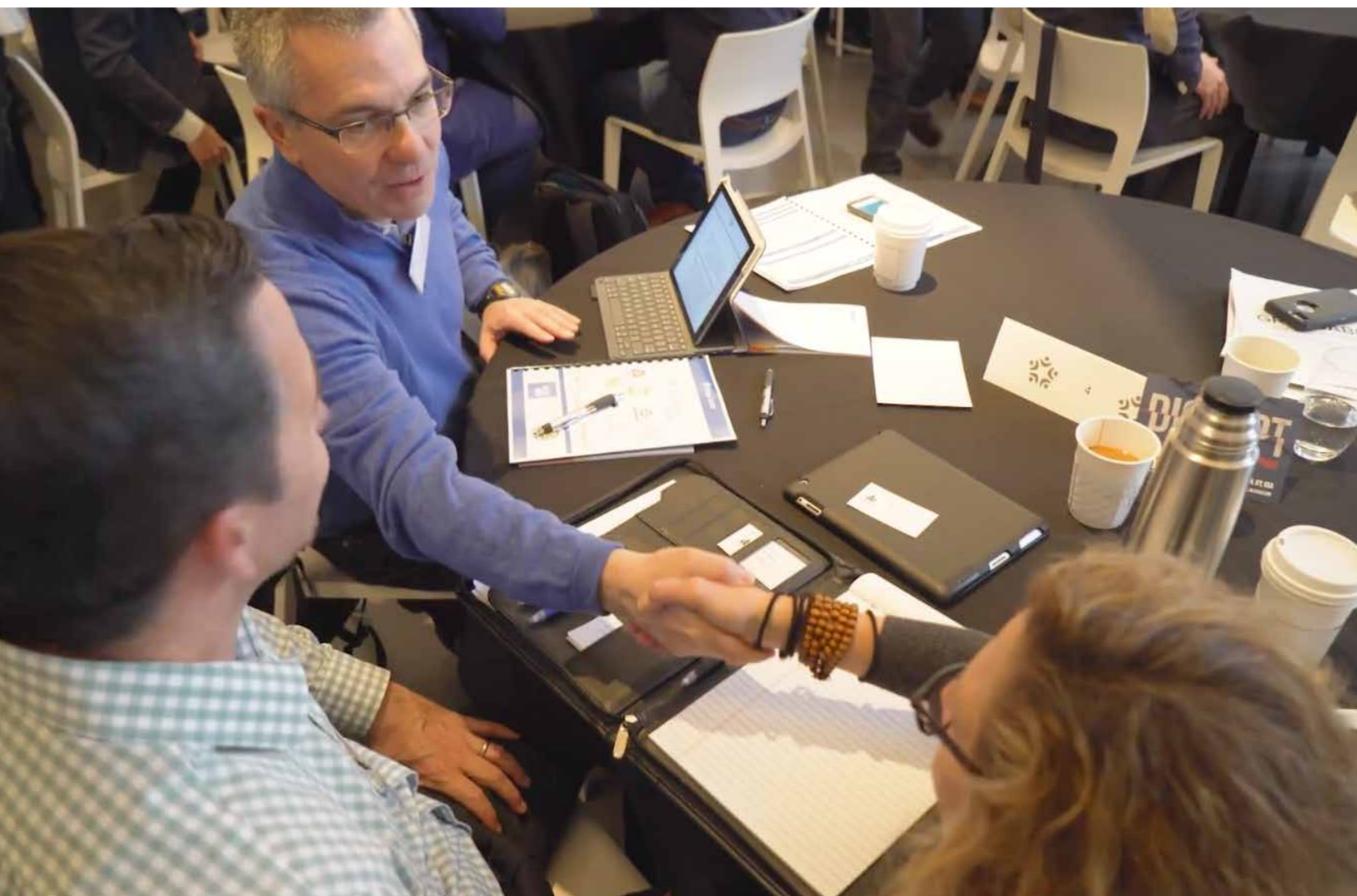
CONCLUSION



Financing businesses has not been a particularly innovative activity. Debt financing has been around for over 4,000 years, and was initially developed to support grain trading in ancient Mesopotamia. Private equity is much younger, but still traces its modern origins back nearly 200 years, to the industrial revolution.

These two prominent types of financing have helped drive the expansion of the global economy, but they are not always the right fit for every business opportunity: both have the potential to ignore entire swathes of entrepreneurs, dilute ownership or distort performance. Perhaps equally importantly, this leads to investors missing out on deals and returns by honing in on specific business models or squeezing capital into companies that might be a poor fit. At a time when funding is increasingly pooling in certain markets and sectors, there is a need to be more creative about how investors and funders deploy capital.

The encouraging news is that there are a range of potential solutions that can help support a broader range of entrepreneurs and business profiles. From Access Ventures' work to support place-based investing in a neighborhood in Kentucky to Adobe Capital's support of revenue-based financing in Latin America, capital is being deployed more creatively.



Many of these initiatives are still in the early stages, which makes evaluating their long-term sustainability or scalability difficult, but there are a few principles which stand out among the most actionable strategies:

- **Process innovation:** integrating structures and decision-making into investments that mitigate bias and make entrepreneurship more meritocratic.
- **Community investment:** thinking about investment in entrepreneurs beyond just investment in the businesses themselves. Entrepreneurs do not live in a vacuum, they live in a community.
- **Partnership capital:** building out an instrument that provides higher returns than debt but is more than liquid than equity, and helps ensure more supportive financing.

It is clear that there is both a need and an opportunity to create new categories of alternative investment. The venerable structures of equity and debt still account for the majority of capital supporting new businesses, in the same way that they have operated for centuries.

That being said, we have seen an acceleration in how investors approach deploying capital in recent decades. New types of investor profiles and risk appetite have emerged: 40 years ago, for example, venture capital was not an industry; 20 years ago, angel investing was not a common practice. Now, major investors, from foundations to high-net-worth individuals to venture capital funds, are exploring new structures.

This is not to argue that these are the only options for thinking differently about investing – or indeed, that the way in which we have analyzed them are the only ways to deploy the methods we have chosen.

However, they do represent three very clear pathways that investors can follow to support entrepreneurs in new ways, in more sustainable ways, and in more inclusive ways.

Given how the existing system is inaccessible for so many entrepreneurs – and in turn so limiting for investors – thinking more creatively about investment strategies can not only help improve portfolio performance, it can also help generate jobs, expand businesses and support our economies.

Endnotes

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- 18 CB Insights data search
- 19 CB Insights data search
- 20 This number was derived from the CB Insights dataset and is current as of 10.12.18. <https://www.cbinsights.com/research-unicorn-companies> methodology includes adding up the number of companies in industries (companies in industries listed as Biotechnology, Edtech, Energy, FinTech, Food, Healthcare) by the total amount of companies. The total dollar amount of these companies was added up as well and amounted to only 13% of total companies.
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- 39 <https://techcrunch.com/2016/07/20/lighter-capital-takes-a-different-approach-to-startup-financing/>
- 40 This analysis benefits from hindsight of company financial performance, which is information we would not have had access to at the time of making a first-time investment. However, to make this study robust and backtest a portion of this portfolio, we decided to incorporate actual revenue flow.
- 41 The actual original investment terms varied (e.g: convertible debt, debt, equity, etc).
- 42 This could have been made in quarterly payments. If that was the case, we wouldn't have received a payment if it wasn't a

profit earning quarter for the company.

- 43 Note: these growth rates are for the most recent full year after the investment was made. For example, if the investment was made in June 2016, this will be the annual change in revenue from year-end 2015 to year-end 2016 (assuming that the company was in operation for all of 2015).
- 44 <https://assets.kpmg.com/content/dam/kpmg/pdf/2015/09/gvi-profitability.pdf>
- 45 Although the amount per round will vary, this assumes an average total amount for each round of between \$4 million and \$5 million for Series A and \$8 million and \$10 million for Series B.
- 46 CB Insights data search
- 47 missioninvestors.org/resources/report-collaborative-place-based-impact-investing
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