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TES white paper: how much should clients invest in venture capital?

Why investors are underweight EIS and VCTs

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Executive summary

Investigating asset allocation

In this white paper, we investigate the effect of adding venture capital to equity/bond portfolios for retail investors. We show that it makes a compelling addition, significantly improving investors' risk/return profiles.

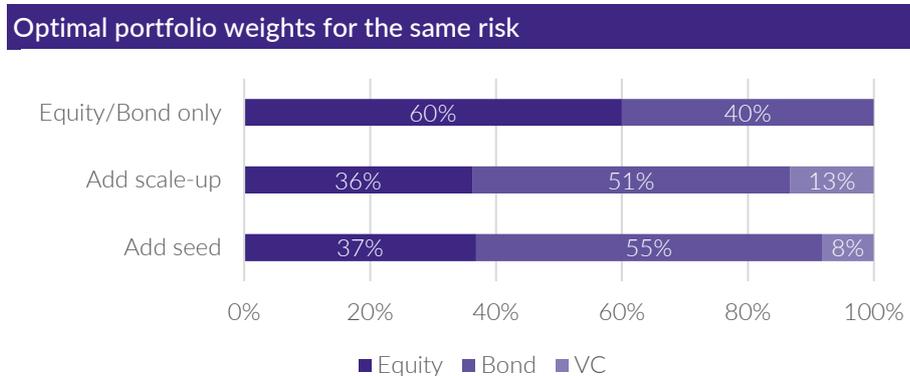
Methodology

We adopt the widely used mean/variance optimisation developed in the 1950s by Markowitz. We introduce assumptions using a mixture of market data and established research for equities, bonds and two categories of venture capital: scale-up and seed.

By introducing either of these, we can push up the efficient frontier, suggesting that venture capital can improve returns by 0.5% to 1.0% p.a. *without changing portfolio risk* for investors with normal risk appetites

Holistic portfolio approach

We also show that a holistic approach to asset allocation is required. If venture capital is introduced, then we need to adjust the weights of the other assets to keep the overall risk constant. This means reducing equity weights and increasing bond exposure.



Source: Hardman & Co Research

We also discuss product areas, list the few exceptions and discuss the fallacy of filling up pension allocation before looking at venture capital.

Effect of tax reliefs

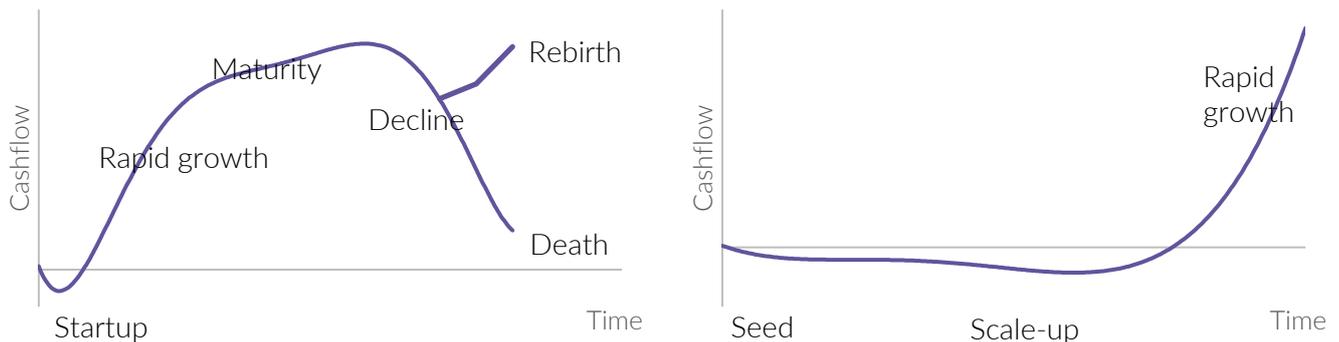
The UK is lucky to have venture capital schemes that offer significant tax reliefs to investors: Venture Capital Trusts (VCTs), the Enterprise Investment Scheme (EIS) and the Seed Enterprise Investment Scheme (SEIS). We show that that these tax reliefs hugely improve expected IRRs: almost doubling them in the case of SEIS. Unsurprisingly, these make venture capital even more attractive in our analysis. While there are nuances to applying these adjusted figures in practice, it shows that the original analysis is somewhat conservative.

The net result is that clients with an average risk profile should have venture capital exposure of mid-teen percentages or more, depending on which area of venture they have exposure to.

Venture capital as an asset class

While there is a temptation for investors that are new to venture capital to see it as an unquoted version of small-cap equities, it is distinct enough to deserve its own categorisation. The roots of this can be seen by comparing company and startup lifecycles.

Company lifecycle and startup lifecycle



Source: Hardman & Co Research

While few companies experience the smooth lines, they serve to illustrate the point. Most quoted companies sit in the rapid growth to decline stages, with some experiencing death or reinventing themselves. If we consider the market as a whole, company performance is affected by both micro effects (what they can do for themselves) and macro effects from the local, national or global economies.

Venture capital companies are doing different things. They are developing their first product, finding their first customers or seeking product/market fit. Failure to cross the dip, the so-called valley of death, shortcuts the whole of the left-hand cycle. These are hard regardless of the state of the economy – so the performance of venture capital companies is dominated by micro effects.

Macro effects can work either way for venture capital companies: a positive economy can make it easier to scale after product-market fit is found; recessions can force companies to look harder at how they do things and look for cost savings. For example, the pandemic has seen an accelerated uptake of many digital products, but devastated some travel startups.

However, venture capital and quoted company performance are not totally independent. Perhaps the biggest linking factor is the exit. While the dream of most venture investors is an IPO leading to a multi-billion company, in practice, they mostly get their returns from sales to existing companies. The prices paid can depend on how flush purchasers are with cash: higher valuations tend to come when the buyers are doing well, and have healthy balance sheets and share prices.

How distinct is venture capital?

Without looking deeper, it can be hard to judge which of these is more important. However, we can investigate the correlation between equities and venture capital. While much of this work is proprietary, there has been some work that is public. This author has had private conversations that suggest the proprietary information agrees with the public information, which is reassuring.

Publicly, there are estimates in two papers by Sand Hill Econometrics, (Woodward, 2009) and (Hwang et al., 2005). Each uses a slightly different method to estimate the correlation between venture capital and equities. This suggests that the correlation between venture capital and quoted equities is 0.47, and agrees with our intuition above: neither exactly correlated nor completely independent.

For reference, the correlation between quoted equities and bonds from the same data is 0.37. This suggests that venture capital will have decent diversification characteristics relative to equities, but not as good as bonds.

Interestingly, Woodward also investigates the relationship with lagged returns. The data suggest that venture capital returns correlate better with equity returns lagged five to six quarters. Woodward notes that this relationship does not appear to be stable, but this supports the relationship being through exit valuations, rather than macro conditions.

Venture capital is not homogenous

This supports the widely held view that venture capital is a distinct asset class. However, like many asset classes, venture capital is far from homogeneous. In this report, we are interested particularly in the UK's tax-advantaged schemes, which limit the size of a company that can be invested in.

Generally, venture capital is split by stage of development. There is no uniform classification, but, for the purposes of this paper, we will use two categories:

- ▶ **Seed:** this is early-stage funding, usually when companies are in product development or finding their first customers.
- ▶ **Scale-up:** once a company achieves product-market fit, it usually invests in distribution to grow revenue quickly. Funding rounds at this stage are usually known as Series A (or B, C, etc).

There are a myriad of subdivisions of these categories, such as pre- or post-seed, whose meaning is often only clear to those using the term. Note that, while seed includes SEIS funding, it covers other early-stage investments too.

The main feature that we will emphasise for this paper is that scale-up companies are better developed than seed companies. This should translate into a lower risk of failure, and investors should expect an accordingly lower return.

Framework for allocating assets

When investors allocate capital in their portfolios, the usual process is to balance risk and return. These can be quantified reasonably well (although not perfectly!) for quoted investments, which allows well-established methodologies to be used. Unquoted investments do not have the same data and, as a consequence, many advisers simply fall back on rules of thumb that seem to be based more on convenience and round numbers (e.g. just allocate 10%) than any rationale.

Expected venture capital returns

A key figure in asset allocation is the expected return on any asset class and how it relates to others. Sadly, there is no real data set specifically for (S)EIS investments. Even if there were, then caution might be required after the various rule changes. There are some studies that include relevant data.

The NESTA report, *Siding with the Angels* (Wiltbank, 2009), reviewed the experience of UK business angels. It suggested that the gross average IRR that was achieved was 22% p.a. These data need to be treated with a degree of caution, as they are self-reported, and are notorious for being mis-represented. Statistically, the data could be censored and vulnerable to survivor bias, which could lead to the actual figure being over-stated.

The Angel Resource Institute carried out a study on North American angel investors (Robert E. Wiltbank, 2016), with most exits between 2010 and 2016. This had improved methodology over an earlier study in 2007, which reduces some of the concerns over the NESTA study. It also gave an estimated IRR of 22%, down from 27% in the earlier study.

More recently, two UK EIS fund managers have produced reports using Beauhurst data. SyndicateRoom have carried out two studies, summarised in (Schwikkard, 2020), which tracked data from investments made in 2011 and 2012 to the end of 2018. The report suggests a 28% growth rate (realised and unrealised) across the 519 companies in the 2011 cohort and a 26% growth rate for the 1,069 companies in the 2012 cohort. Their work also suggests that maturity improves returns – so the shorter timescale could account for some or all of the difference.

Newable also sponsored a later report (Beauhurst, Newable, 2019). This report looked at the cohort of 1,229 private UK companies that had an observable valuation event in 2013 and at least one subsequent known valuation (to 30/11/2018). Within this group, aggregate CAGR was 23.7% – albeit much of that was unrealised. Of the companies, 7% exited and 13% were written down to zero. The method of constructing the cohort probably understates this last figure, and it is likely that there are some companies that are worthless, but not observed as such. Note that this covers all private companies, not just EIS or angel investments. Nevertheless, the return figure corroborates the other studies.

US venture capital data give lower returns: for example, a recent study by a group that has looked at this regularly (Harris, Jenkinson, Kaplan, & Stucke, 2020) gives 12.5% p.a. while Oliver Wyman, in a study for British Business Bank (Wyman, 2019), cites Wellcome Trust and Yale Endowment achieving 18% and 16%, respectively. We observe that, by size of investment, these are dominated by later-stage companies than those in which tax-advantaged schemes invest, which we would expect to give a lower return. We also note that these are after fee returns.

What the managers say

Most (S)EIS funds give target returns for investments. While these are perhaps more estimated than evidence-based, generalist or technology EIS funds typically target around a 2x-2.5x MoIC over five years or so. SEIS funds may have slightly higher target ranges. A 2x multiple on capital over five years is approximately equivalent to an IRR of 15% p.a.

Making reasonable assumptions

This suggests that a reasonable return target for venture capital in our areas would be something from mid-teen to low-twenties' percentages. Earliest-stage investments, such as SEIS, may be a bit higher, while scale-ups may be in the lower half of this range. For our purposes, we make the following estimates:

- ▶ expected return on scale-up investments is 15% p.a.; and
- ▶ expected return on seed investments is 22% p.a.

Given the data above, these seem like conservative assumptions. An average across everything of low-twenties' percentages suggests that seed is doing better than that.

Risk

While the relationship between risk and return is not necessarily linear, using multiples of returns suggests that EIS investments have approximately 2.5x-3x the risk of listed equities. If we use a historical average standard deviation for equities of 15% p.a., and assume equities return 7% p.a., this suggests risk measures of 32% for scale-ups and 47% for seed investments.

For bonds, we assume a 2% p.a. return. Historically, higher yields supported higher risk figures, so we have adjusted this downwards to 7% p.a.

Methodology

We can now apply Modern Portfolio Theory (MPT – also known as mean-variance optimisation) to estimate the asset allocation for venture capital. Developed by Markowitz in the 1950s (Markowitz, 1952), MPT mathematically trades off risk and return to determine a portfolio's optimal asset allocation.

It has been subject to two main criticisms:

- ▶ Firstly, it uses standard deviation as a measure of risk. Although it is widely used, it does have some shortcomings, especially when returns are skewed. Where we are more interested in relative than absolute risk, there is less concern about whether the measure is absolutely correct and more concern about whether the relative balance is correct. Given that our estimate of volatility for venture capital is based on the relative argument described above, the standard deviation criticism seems weak here.
- ▶ Secondly, when applied indiscriminately, MPT requires the estimation of a large number of parameters. Enrico Fermi's famous quote of John von Neumann seems appropriate here:

I remember my friend Johnny von Neumann used to say, with four parameters I can fit an elephant, and with five I can make him wiggle his trunk.

To keep matters under control, we will include only three separate asset classes: equities, bonds and either seed or scale-up venture capital. We also constrain portfolios to not allow gearing; we think very few investors would have the risk appetite to add that to venture capital.

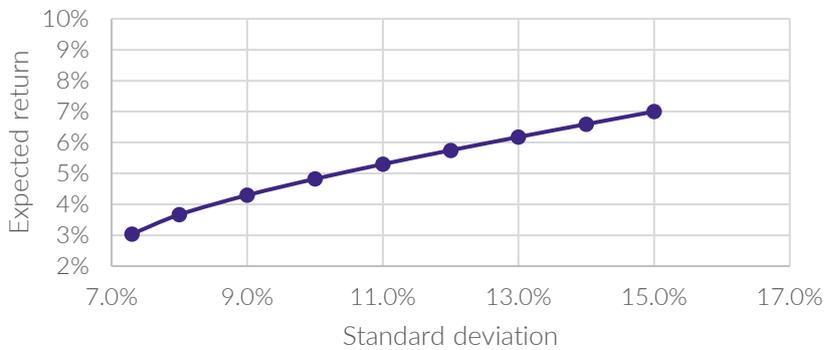
Results

Efficient frontiers

The following figures show the efficient frontier for a straightforward equity/bond portfolio. This can be thought of as the portfolio that gives the best return for a given level of risk or that minimises the risk for a given level of return.

With two assets, the efficient frontier is simply a proportional combination of each. Risk is on the horizontal axis, and return is on the vertical axis. As we wish to minimise the former and maximise the latter, we want our portfolios to be towards the top-left corner.

Efficient frontier for equity/bond portfolios

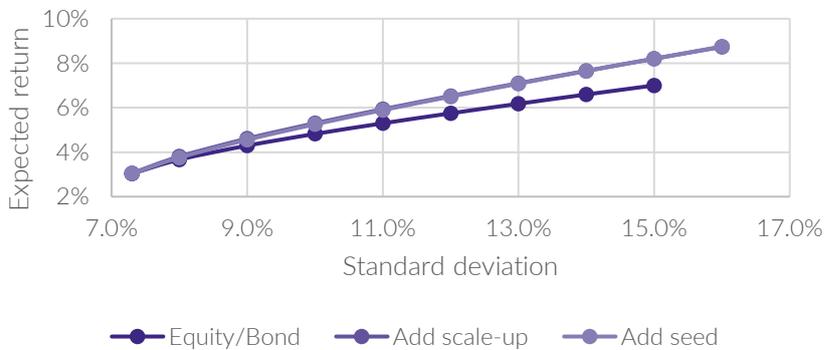


Source: Hardman & Co Research

For reference, a 60% equity/40% bond portfolio has a standard deviation on these assumptions of 10.4%, with an expected return of 5.0%.

When we add in venture capital, we now have to do an optimisation to find the efficient frontier. We do this separately for adding seed and scale-up investments, to give two additional frontiers.

Effect of adding venture capital to our portfolios



Source: Hardman & Co Research

If the reader is wondering where the third line is, it turns out that adding either of the two venture capital assets gives similar frontiers. This result is not very sensitive to the risk/return assumptions that we have made, which is reassuring for

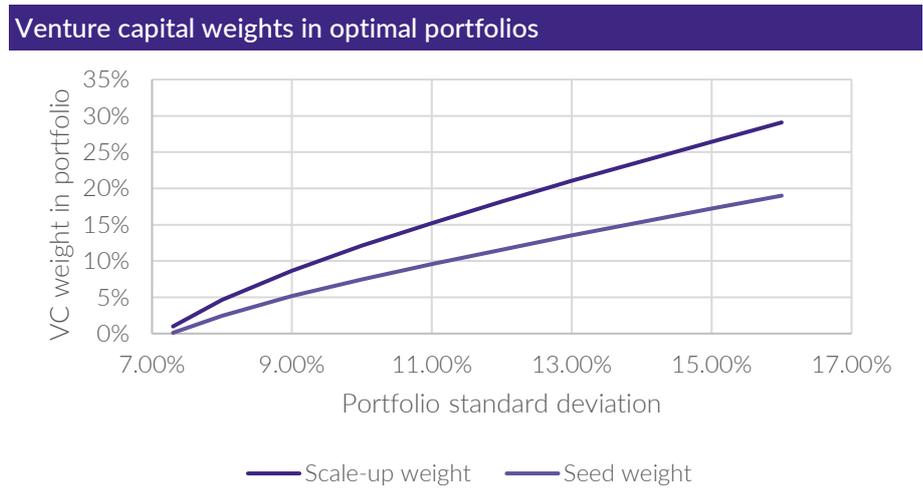
robustness of the results. When we first did this a few years ago, when bond yields were more like 4%, we got very similar asset allocations.

It is pretty clear that adding in venture capital has had a favourable effect: the portfolios with venture capital are higher, showing that we can improve returns for most levels of risk. For our 60:40 investor, the expected annual return has improved from 5.0% to 5.5% in either case. Alternatively, the investors could reduce their expected standard deviation to 9.5%, from 10.4%, while keeping the same expected return.

One other noteworthy point is that including venture capital can allow riskier portfolios for those with higher risk appetites. The curves could extend well beyond a 16% standard deviation, although there are very few people for whom this might be suitable (Elon Musk we mean you!)

Allocation to venture capital

The following gives the proportion of venture capital in optimal portfolios for each subsector.



Source: Hardman & Co Research

Again, focusing on our 60:40 portfolio, this suggests reinvesting either 8% into seed investments or 13% into scale-up.

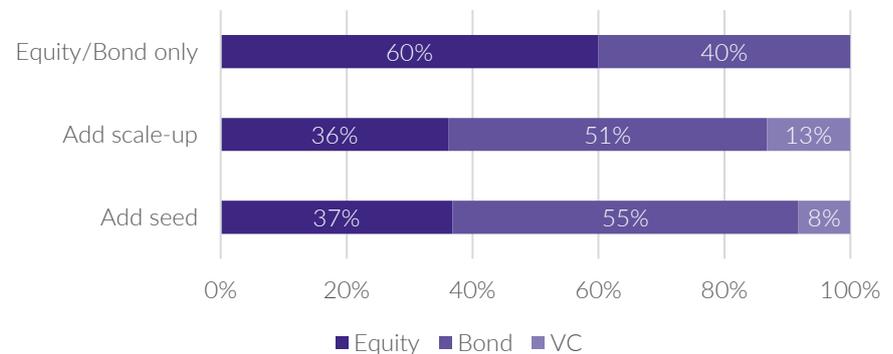
Either extreme illustrates interesting points:

- ▶ Firstly, mathematically, even those with a low risk appetite should still have a small amount of venture capital in their portfolio. A standard deviation of 8% corresponds to an initial portfolio of only one third equities, but could have the risk/return profile improved by the inclusion of 5% of scale-up venture capital or 2% of seed.
- ▶ Secondly, even those with a high risk tolerance should cap their venture capital exposure. For example, the 15% standard deviation corresponds to 100% equities when considering equity/bond only. The analysis suggests that 20%-25% of venture capital exposure is still a suitable limit for the same risk.

Holistic asset allocation

Advisers and investors will be aware that changes to asset allocation can have ramifications for the portfolio risk. The following chart shows the new optimal asset allocation for our 60:40 portfolio if we want to keep the same level of risk.

Change to 60:40 portfolio with constant risk from adding venture capital



Source: Hardman & Co Research

Intuitively, this makes sense. We are adding a riskier asset to the portfolio. It is not simply a matter of leaving the rest of the portfolio unadjusted, or even selling down the riskier asset (equities) to invest in venture capital. We have to reduce equities by even more and increase the bond proportion to keep the same overall risk.

Product areas

So far, we have – deliberately – said nothing about how retail investors can invest in venture capital. In practice, the options are limited. There are a couple of listed companies that invest in venture capital, but there are no options within pension schemes or mutual funds, where venture capital's lack of liquidity makes running open-ended funds impractical.

The main options are those available through the tax-advantaged schemes:

- ▶ EIS or SEIS funds;
- ▶ VCTs; or
- ▶ Investing directly into companies as business angels or through crowdfunding.

Recently, there have also been opportunities for sophisticated investors to invest in some larger venture capital funds. While these may offer later-stage exposure, and hence additional diversification, their lack of tax breaks will make them less appealing to most investors.

Nevertheless, the above analysis shows that, *even without tax breaks*, most investors should have some venture capital exposure.

Looking through VCTs

(S)EIS funds and direct investment give straightforward asset allocations, with 100% exposure to venture capital. However, VCTs may require a little more work. As well as the venture capital investments, their portfolios may contain some or all of the following:

- ▶ **Cash:** VCTs have to be at least 80% invested, but have three years to invest new cash, a year to invest cash from large exits and often like to have reserves to support the portfolio, if required. In practice, cash balances can be 30% or more.

- ▶ **Pre-2015 assets:** prior to 2015, VCTs could invest in lower-risk assets. These may have included energy, asset-backed companies or MBOs. While many of these have been exited and new cash is diluting existing positions, they are still a significant part of some portfolios.
- ▶ **Other assets:** some VCTs mitigate the cash balance by investing in other assets. These have to be liquid, and are usually near-cash assets, but some have additional quoted equity exposure.

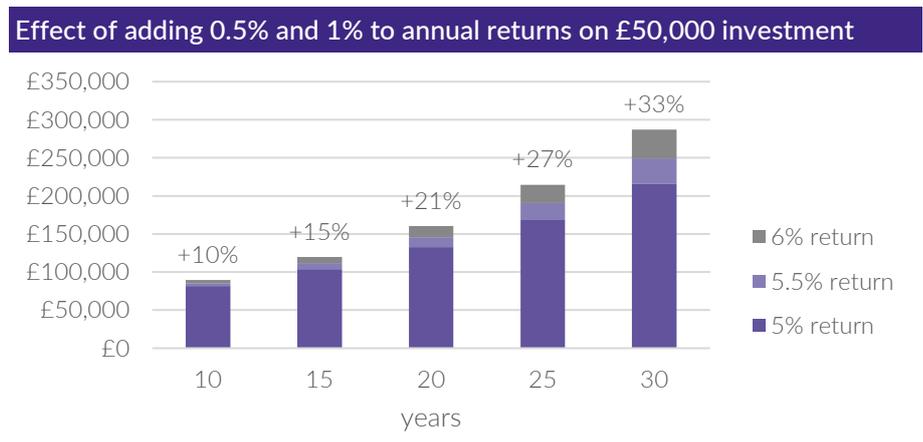
While these have little effect in some VCTs, in others, they can add up to almost 50% of portfolios. Investors in these VCTs may have to have much larger holdings than the weights indicated above to get the right venture capital exposure in their portfolios.

Example: if the target venture capital weight is 12% and the VCTs being used match the 80% invested that the rules require, then the investor should have 15% of the portfolio in VCTs.

A common fallacy

This leads onto a common fallacy that we see many in the tax-advantaged industry promoting. It is very tempting to promote tax-advantaged funds as the next tax-break once investors have reached the limit in their pension fund. However, this does not serve clients well.

Although the increase in the annual return by including venture capital is 0.5%-1%, over time, compound interest works wonders. An additional 0.7% per year on a lump sum for 20 years adds 15% to the final amount. What will compound the error is that younger investors are more likely to have a higher risk appetite. The efficient frontier charts above show that the increase in return is larger the greater the investors' risk appetite.



Source: Hardman & Co Research

It is worth emphasising that we are not suggesting replacing pensions with venture capital – only that investments in the two should be built up in parallel.

Exceptions

Every rule has its exceptions, and there are a small number of investors for whom venture capital investments may not be appropriate.

Illiquid portfolios

Investors should have a cash reserve of several months' expenditure before diversifying into other assets. They often also want some quasi-liquid assets, such as mutual funds or equity holdings, which could be sold in an emergency. For most investors, their pension is also an illiquid asset, even if the underlying assets are not. Venture capital is largely illiquid. The venture capital schemes also claw back relief on early sale, which can make forced liquidity expensive.

An investor with only a cash reserve and pension fund would probably want to build up some quasi-liquid reserves too. In these cases, it may be best not to aim to get to the right venture capital exposure capital as soon as possible, but to build it up alongside other investments.

Limited assets

Sadly, the minimums to invest in venture capital products start at £5,000, and many are higher. Investors with limited assets may only invest by going overweight, and be inadequately diversified in their venture portfolio.

These are not exceptions

Investor without a high risk appetite (usually)

It is only the lowest-risk investors that are excluded. Unless their natural portfolio has less than 20% equities, investors would benefit from adding venture capital. What we have shown above is that this can be done *while keeping the same portfolio risk*. This is vitally important – if all that happens is that venture capital is added to an existing portfolio, then we are increasing risk.

There is an obvious concern: venture capital investments can, and do, fail. Advisers are, naturally, worried about how some clients will react when this happens. There are two solutions for this:

- ▶ **Diversification:** if someone has a portfolio of five investments and one fails, this is likely to concern most people. If the portfolio is 100- or 200-strong, then failures are much easier to tolerate. SyndicateRoom (Schwikkard, 2020) shows that, in a portfolio of 150 venture capital investments, the probability of an overall capital loss in five years is under 5%. That is probably about the same as an equity market. The challenge is that no tax-advantaged products give this diversification on a standalone basis, so investors need buy several to diversify properly.
- ▶ **Use a VCT:** almost every investor will be investing in an equity fund that has suffered huge losses on some investments, but these investors don't know about them because all they see is the total return. Although the cash drag on VCTs means that, all else being equal, they will underperform equivalent EIS funds, investors will experience the aggregate return, rather than all the individual ones. Our comment on diversification in the preceding point still stands, though: more than one VCT is required to get adequate diversification.

No available tax relief

The above made no mention of use of tax relief. Even if investors are not paying enough income tax to get the relief, they should still invest in venture capital. What such investors will have is slightly more options about how they can invest.

Effect of tax reliefs

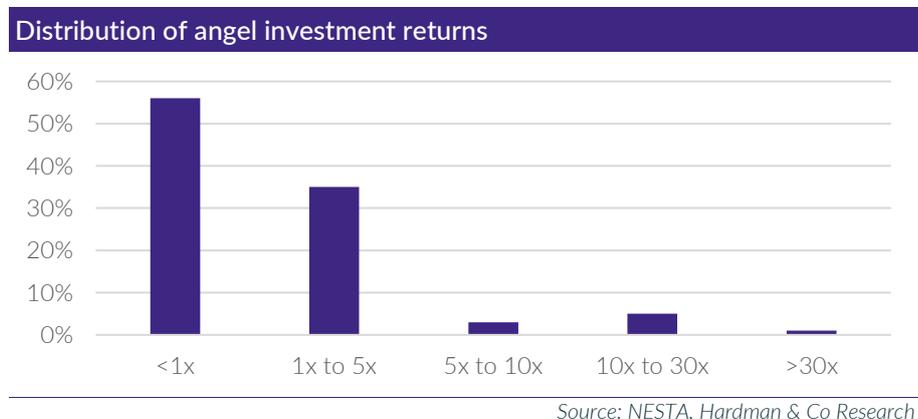
While the above made no use of tax reliefs, these are available to most UK investors, and are there to alter the risk/return profile of the investments. When comparing with, say, pension investments, then the overall effect for most higher-rate taxpayers is similar: EIS and VCTs get slightly lower relief on the way in, but better reliefs on the way out. SEIS tax reliefs are just better. However, it is helpful to see the effect when comparing with, say, mutual funds.

The following table gives a quick summary for the reliefs. There are plenty of resources for those who want more detail (all our sponsors have guides on their websites – see their entries at the end of this report or <https://www.gov.uk/guidance/venture-capital-schemes-tax-relief-for-investors>).

Tax-advantaged scheme reliefs			
	VCT	EIS	SEIS
Income tax relief on investment	30%	30%	50%
Capital gains relief on sale	Yes	Yes	Yes
Capital gains benefit on entry*	No	Yes	Yes
Income tax relief on dividends	Yes	No	No
Loss relief on failures	No	Yes	Yes

* details vary by scheme. Source: Hardman & Co Research

To see the effect of these on returns, we need an idea of the return distribution. For this, we draw on NESTA's report (Wiltbank, 2009), which contained the following chart.



The text fleshes out some of these numbers, and we will use the following distribution. Other than an average holding time of 3.6 years, no indication is given on timing – so we have added our own assumed, simplified, timing.

Return each year on £1 invested					
At end of year	2	3	4	5	7
Multiple of invested capital	0x	0.5x	3x	7.5x	15x
Probability	41%	15%	35%	3%	6%

Source: Hardman & Co Research

This gives the same 2.2x return as the report, but our IRR of 17% is lower than the report's 22%.

How do tax reliefs change expected return and risk?

Effect of tax reliefs on returns	
Scenario	IRR
No tax reliefs	17%
Initial income tax relief of 30% (EIS)	24%
Add loss relief (EIS)	27%
Add CGT deferral	31%
Initial income tax relief of 50% (SEIS)	30%
Add loss relief (SEIS)	32%

Assumed initial income tax relief received after 12 months. Loss relief paid immediately for 40% tax payer. CGT deferral assumes whole investment from capital gain, with 20% rate and no CGT allowance.

Source: Hardman & Co Research

It can be seen that the tax reliefs make a huge difference to expected returns. The initial relief alone adds 7ppts to EIS returns under this scenario and 13ppts to SEIS returns. Loss relief is slightly less beneficial for SEIS, due to the larger initial relief. In absolute terms, loss relief in this scenario would give another 12.7% of tax relief for EIS investors (for a total of 42.7%) and 8.2% for SEIS investors (total 58.2%).

Using CGT deferral enhances the return even further, but we don't use it in our scenarios, as it applies to a very small number of investors.

The impact on risk will be more muted. The upfront tax relief will raise all multiples on capital equally, and it will reduce the spread of IRRs, but not by much. Given that our risk estimate has a degree of approximation, we take the conservative assumption of not adjusting for this. Loss relief will compress the returns a bit more. Having looked at the figures, we assume a 10% reduction in risk. We note that the reliefs are simpler when we consider drawdowns, but we stick with standard deviations, as per our framework.

Rather than provide a comprehensive guide to the effect of each relief, we will illustrate the effects of the tax reliefs using two scenarios:

- ▶ Initial tax relief of 30% applied to scale-up investments. This will increase our expected IRR to 22%, and keep the same standard deviation.
- ▶ Initial tax relief of 50%, plus loss relief applied to seed investments. This will increase our expected IRR from 22% to 37%, and decrease the standard deviation to 42.4%.

These can perhaps be seen as the widest bounds, and most scenarios will sit between these two.

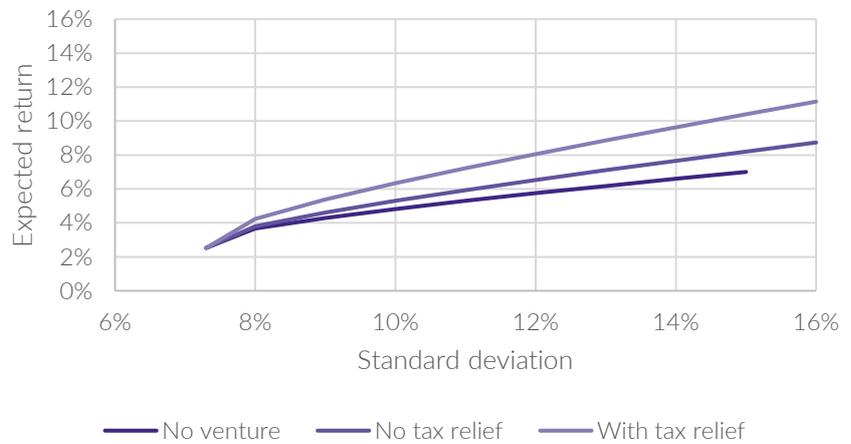
Effect on our optimal portfolios

Now each scenario has very different effects, so we plot separate charts for each.

Scale-up venture capital

The following chart shows our efficient frontier with no venture, with scale-up venture with no tax reliefs, and the same with the initial income tax relief only.

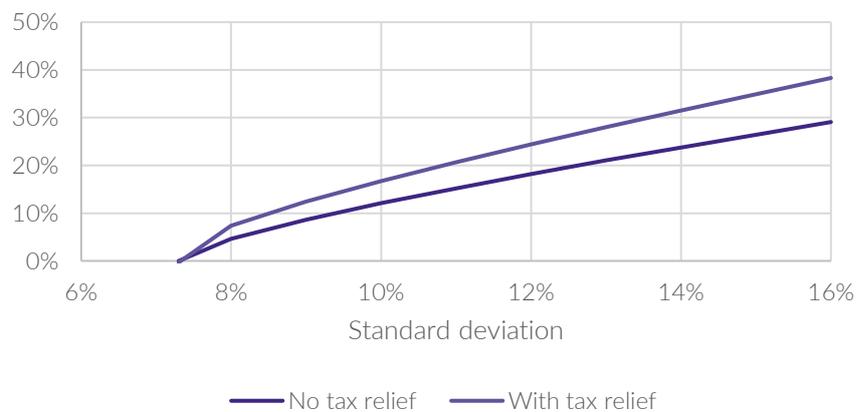
Efficient frontier



Source: Hardman & Co Research

The effect is very clear: adding tax relief has pushed up the efficient frontier further, and by more than adding scale-up venture in the first place. For our 60:40 investor, the expected return has increased from 5.0% with no venture, to 6.7%, compared with 5.5% for no reliefs.

Scale-up venture portfolio weights in optimal portfolios



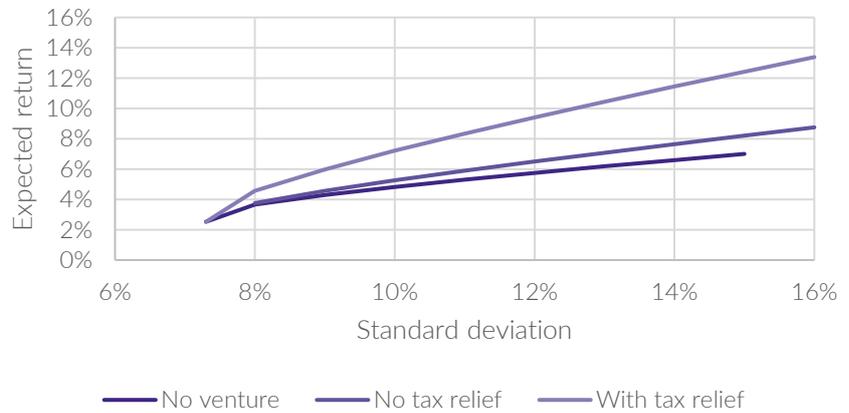
Source: Hardman & Co Research

Unsurprisingly, the optimal portfolio weights for scale-up venture have increased, although less dramatically than for their introduction. Our 60:40 investor should now have an 18% weighting, instead of the previous 13%.

Seed venture capital

With SEIS offering more generous tax reliefs, the effect is even more dramatic.

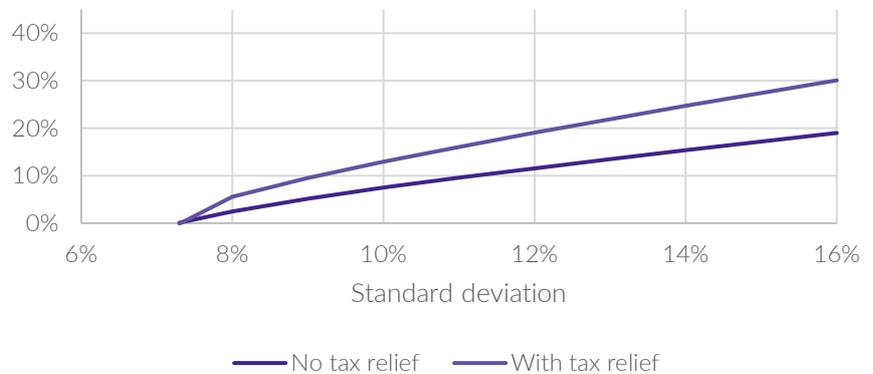
Efficient frontier



Source: Hardman & Co Research

If we do a comparison with the scale-up chart, we can see that the efficient frontier has been pushed even higher. The best return for our reference 60:40 investor is now 7.6%, a huge increase over the base 5.0% or 5.5% with seed venture with no reliefs.

Seed venture portfolio weights in optimal portfolios

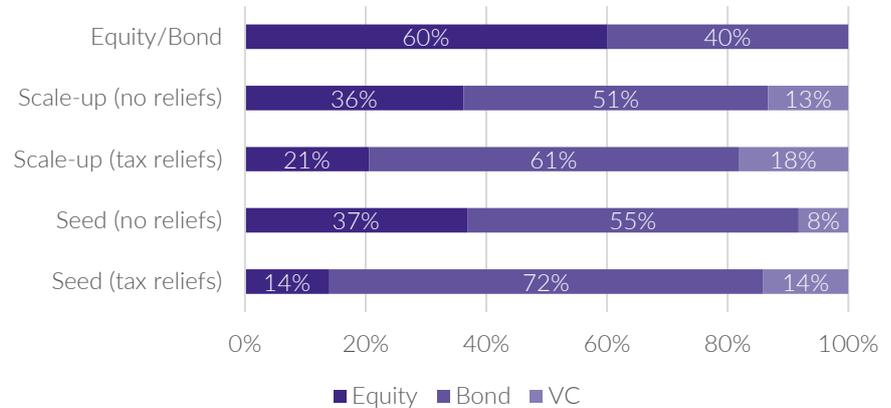


Source: Hardman & Co Research

With lower risk and better returns, the optimal weight of seed also increases. Our reference investor would now hold 14%, instead of 8%.

Holistic portfolio weights

Optimal portfolio weights for constant risk



Source: Hardman & Co Research

The above chart shows the optimal portfolio weights for our 60:40 investors if they want to keep risk constant. It can be seen that the effect on the equity/bond proportion is even stronger than before: bond weights continue to rise and equity weights fall. Again, this makes sense, as the constant risk constraint means that adding more to the riskiest asset must be offset by risk reductions elsewhere.

Not getting carried away

While the first reaction to this analysis is that the results are stunning, they require nuanced application. We can best illustrate this with an example.

Example: Imagine our 60:40 investor implements the asset allocation to add scale-up capital as described above. They now have 18% of their assets in EIS. A few months later, they receive their tax relief that is 5.4% of their portfolio. Assume, for simplicity, that no other valuations have changed. Then, when thinking about how to invest this cash, the *prospective* return on the venture assets will be enhanced by loss relief, but not the initial tax relief. This puts us in a scenario closer to the original analysis without tax relief, and the new cash should now be investing in the equity/bond portfolio.

This suggests that this tax-adjusted analysis is most useful when a portfolio is being rearranged in a single transaction, and when no other tax-advantaged schemes, such as pensions, are involved. Where investments are being made alongside pensions or for ongoing savings, our original analysis may be a better guide. However, the tax-adjusted analysis suggests that the original analysis is somewhat conservative.

Final comments

Using an industry standard procedure and well-justified assumptions, we have shown that venture capital is a compelling addition to investor portfolios. Even at a relatively small proportion of portfolios, it can make a significant difference. The addition of tax reliefs makes it even more compelling. The old rule of thumb of 10% looks more like a minimum for most investors, with mid- to high teens more realistic for those with average risk profiles.

Of course, while this gives advisors solid ground for recommending venture capital (and possibly shows that it may be negligent to not consider it!), this is not the approach that should be used when introducing it to investors. Even though the underlying approach is investment-led, stories involving long-term growth, participating in exciting growth companies and getting extra tax reliefs will resonate more with clients. Those who wish to invest as business angels or through crowdfunding will have additional motivations. The Business Relief benefit for EIS or SEIS is yet another extra story (and benefit!)

We cannot emphasise enough the need for a holistic portfolio approach. Including venture capital means integrating with the other assets, not bolting it on to an existing allocation.

When we first did these calculations several years ago, different assumptions for equity and, particularly, bond returns seemed appropriate. Interestingly, the asset allocations have not really changed. This suggests that the results are reasonably robust, although we also note that we have made enough approximations to not quote results with too much precision. Furthermore, we haven't said anything about fees. Venture capital generally has higher fees, but we note that this is very much a second-order effect. An extra percentage or two a year will not even offset the tax reliefs, and will definitely not change the message of this analysis:

Venture capital is a compelling addition to almost any investor's portfolio.

The author

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Brian Moretta is Head of Tax Enhanced Services at Hardman & Co. He is an actuary turned fund manager, who then moved into equity research, and has analysed many EIS funds, VCTs and companies, both listed and unquoted. He also has academic credentials, being an Honorary Fellow at Heriot-Watt University, where he does some occasional teaching. This has included teaching MSc students about, *inter alia*, Modern Portfolio Theory.

He has always had a strong interest in getting underneath companies and understanding how they really work, and he finds venture capital fascinating. Some of this is because transparency is hard, some because the industry is not well understood. He is doing his best to change both of these.

Brian Moretta is also host of the EIS Navigator podcast, and received Highly Commended at the 2021 EISA awards for the category *Best Journalist or Advocate*.

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The strategy behind the fund is to invest into the dealflow provided by its sister company, Nova Cofoundry Ltd, a Venture Builder that has seen its own portfolio grow at 36.5% Yr on Yr for over 11yrs. This Venture Builder aims to address the most common reasons for failure seen in startups by providing over 500 days of structured and dedicated resources in the first 9 months.

Nova Cofoundry provides the fund with a large and diversified portfolio of investments that are both off market and unique in their level of support. Due to the NW base and access to regional dealflow, this diversifies portfolio's away from the London concentration.

'Although Nova is a newer fund manager in (S)EIS terms, the team has more than a decade's experience of investing in and supporting new start-ups. This time has been used effectively, with some evidence that its methodology is working better now than it was at the outset Overall, Nova brings an interesting and distinctive proposition that should prove attractive to investors looking for early-stage companies.' - Hardman Review

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SyndicateRoom

We're delighted to sponsor Brian's research and ultimately see the potential impact of venture capital in a wider portfolio. Our own research corroborates his findings and notes the weak correlation between public and private markets. Clearly, diversification, within a fund and within a portfolio, can have a positive impact on broader performance, something our fund has been designed to do. However, the accessibility of most EIS funds (where the typical minimum ticket is £20k plus) has been a barrier to many looking to hold this asset class. We've worked to reduce this barrier and make it more accessible by reducing our minimum investment to just £5,000.

At SyndicateRoom we spent two years indexing and analysing the UK Our Access EIS fund builds investors a portfolio of 50+ holdings with each investment made alongside one of the UK's top-performing angel investors. This strategy, combined with our low minimum ticket, allows a wider audience of investors to gain access to EIS funds and offers the mass affluent an opportunity to hold an additional EIS fund in their portfolio. We look forward to the continuation of this research and working with Hardman on future projects.

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