KFW ECONOMIC RESEARCH

Focus Economics

No. 18, 7th March 2013

You get what you pay for – The remuneration structure of VC funds and its consequences

Author: Dr Philipp Brutscher; phone +49 (0) 69 7431-9592, research@KfW.de

Why do Venture Capital Funds so often fail to deliver when it comes to returns?

Many investors ask themselves this question. In their view VC fund managers fail frequently - despite good education, great commitment and sometimes tremendous industriousness.

Apart from difficult recent market conditions, the flaw often lies in the system. The current fund remuneration scheme creates conflicts of interests where there should not be any, namely between investors and fund managers. [1]

What characterises VC funds?

Whether it is Intel, Microsoft, Google or Facebook, almost all large entrepreneurial success stories of the past 40 years were financed by Venture Capital Funds (VC-Funds) in their early days.

The economic role of VC funds is undeniable – they help to implement new technologies, develop markets and create skilled jobs.

VC funds act as intermediaries. They collect capital from institutional and private investors and invest it under their own name in equity stakes of young high-tech companies.

The activity of VC funds comprises all necessary steps in this context – from selecting and evaluating suitable investment objects to selling off the acquired equity stakes at the end of the holding period.

The remuneration scheme of fund managers usually comprises two components:

- a fixed management fee and
- a variable carried interest.

The management fee is meant to cover the fixed costs of a fund. The investor pays it – independent of a fund's performance. In most cases it is set as a fixed annual percentage claim of committed capital and usually amounts to 2–2.5 % per year.

The carried interest is intended to incentivise performance. It usually amounts to a fifth of realised capital gains. Often the fund managers receive the carried interest only after a specific benchmark return is met, known as the hurdle rate. For example: If a hurdle rate of 8 % p. a. is agreed upon but the fund only achieves a return of 7 % p. a., the fund managers receive not a cent of carried interest.

Serious incentive distortions

Fixed costs covered – more remuneration only once a certain benchmark is met. A good idea? Yes, but in practice the existing remuneration scheme often leads to distorted incentives.

For example, if a fund is initially developing badly. If at the beginning it incurs high losses even, the fund managers will often have no possibility to later exceed the hurdle rate and thus invest more time in maximising the value of other more promising funds.

Or they focus on new fundraising activities instead.[2] In some cases – as our own analyses show – they also hang onto bad investments for too long in order to so profit longer from management fee payments.[3]

Harmful asymmetry

Another way in which incentives get distorted results from the fact that the variable component of the remuneration scheme (carried interest) is asymmetric. The management participates in fund profits – but not in fund losses. This encourages the fund managers to take excessive risks.[4]

Let us compare a:
a) moderately risky fund strategy with a
b) highly risky fund strategy – and look at what kind of remuneration the fund management can expect in each case.

a) moderately risky fund strategy

Assume a 25 percent probability respectively for moderate profits (+EUR 80 million) or losses (-EUR 80 million).

The expected value for the variable fund remuneration then is about EUR 4 million (0.20*[0.25*0 + 0.25*80 million.]). [5]

b) highly risky fund strategy

Now assume a 25 percent probability respectively for high profits (+EUR 240 million) or high losses (-EUR 240 million).

The higher risk alone results in the expected value for the variable fund remuneration to be three times higher – amounting to EUR 12 million (0.20* [0.25*0 + 0.25*240 Mio.] (Chart 1)).

One doesn't need any predictive powers to surmise the consequences. What is particularly troubling from the point of view of investors is that – because of the same mechanism – even investments with a negative present value can increase the expected variable fund remuneration.

The problem of fundraising

What consequences does the current fund remuneration scheme have for the willingness to invest in VC funds?

For investors, ultimately, it is not very attractive to give their money to fund managers whose interests are not aligned with their own ones.

Thus the willingness to invest declines. Particularly because the money – once committed – cannot be accessed anymore for a long period of time and the exact use of the committed money lies outside investors' realm of influence.

The problem is worsened by the fact that, under the current remuneration scheme, it is quite attractive also for fund mangers with low qualifications to secure funds for themselves. After all, they have the opportunity to make high profits – while being insured against any downside risk.

Because it is difficult for investor to judge whether a particular fund management is good or not, this means an additional deterrent for investors to hand over money to VC funds – with the corresponding negative consequences for total capital inflows to VC funds.

Implications for the early stage segment

The consequences of distorted incentives on the part of fund managers go far and beyond the fundraising activities of individual VC funds however. The reluctance of investors to provide VC funds with cash leads to an equity gap for young high-tech companies.

The reason is that the lack of funds provided to VC funds can not be compensated for by any other early stage financier, neither public funds nor business angels, nor family offices nor CVCs. (Table).

Business angels, family offices and public funds tend to focus on a different segment than VC funds. They are mainly engaged in companies at a relatively early stage of their life cycle, with relatively low levels of own R&D activities and (still) rather moderate financing needs.

In the case of public funds, what is more, is that they often do not actually invest pure equity capital and – different from independent VC funds – quite frequently have to take into account regional and promotional policy targets.

Can corporate venture capital close the gap? In the best case: partially. Corporate venture capital funds

- from industry focus on a similar market segment as independent VC funds – but tend to invest strategically. This is why nearly 80 % of their investments flow into three sectors only.
- from the financial sector are more broadly oriented compared to their colleagues from industry. However, CVCs from the financial sector increasingly pull out of the market due to strict regulatory requirements (Solvency II, Basel III).

What role does the track record play?

The current structure of fund remuneration not only affects the amount of money available to VC funds to finance young high-tech companies but also which VC funds receive this money.

Due to the described conflicts of interest as well as the additional selection problems faced by investors, investors are – increasingly and understandably – relying on the track record of VC funds. In other words, they focus on VC funds that can demonstrate investment successes from the past.

This prioritisation of successful VC funds mitigates the misdirected incentives caused by the remuneration structure. In order to retain (or attain) a positive track record, fund managers must subordinate short-term interests (e. g. taking excessive risk) to longer-term fundraising concerns.

Yet, as a recently published study by the Kauffman Foundation as well as our own analyses show[11] the described problems are not fully addressed in this way.

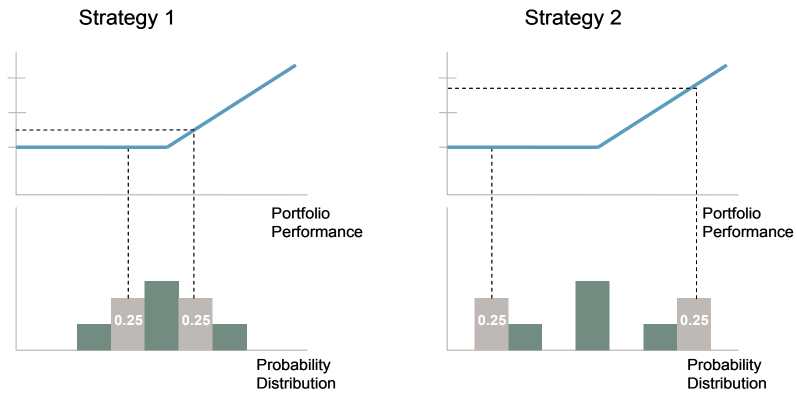
Why? Firstly, because the funds have great flexibility in how to present their performance. Harris et al (2012) show, for example, that by using the right performance measure half of all funds can claim to be top quartile! [12]

Secondly, investors have ever fewer alternatives to invest in. There are less and less VC funds. Over the past 10 years many VC funds have exited the market and only few have come to take their place with the result that – as Metzger (2013) discusses – the competitive pressure among funds has decreased.[13]

But why are there hardly any new providers of Venture Capital entering the market?

Chart 1: Variable Remuneration depending on risk

The expected value of the variable remuneration rises with increasing willingness to take risk.



Source: Adapted from Rumelt (2009)[6]

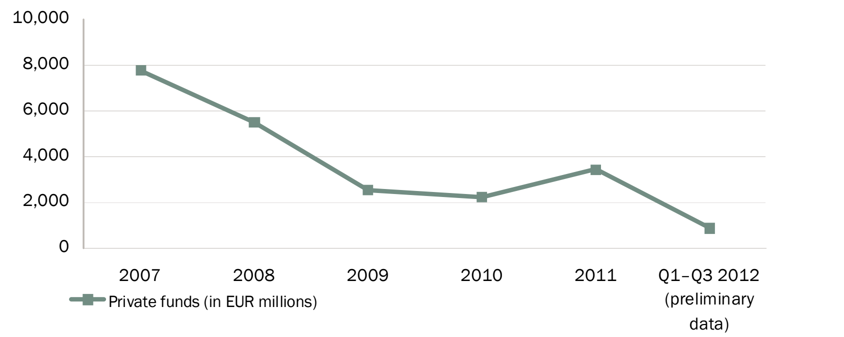
Table: Characteristics of founders (shares in percent)

	Comparison to VC funds
Public funds	Public funds serve a different segment They tend to invest earlier, smaller amounts and in less growth-oriented companies and ... ... often are subject to regional and promotional policy targets
Business angels	Business Angels also cover a different segment than VC funds: They tend to invest earlier, smaller amounts than VC funds and primarily in low-threshhold innovations. The differences here are so great that simply leveraging business angel activities would not be sufficient to close the gap.
Family Offices	Direct investments by family offices in the VC market are rather negligible VC investments make up only a small share of the portfolio of family officies. The share accounted for by direct investments is minimal.
CVCs	CVCs invest primarily strategically from the corporate perspective - not only on the basis of the potential of the enterprise. CVCs from the financial industry often withdraw from the market due to strict regulations.

Source: Evaluations conducted by KfW including the German Private Equity Barometer data, Fryges et al (2007)[7]; Weber (2005)[8]; Famos (2012)[9]; Leleux, B. et al (2007)[10]

Chart 2: Development of fundraising in Europe

Accumulated private funds in EUR millions



Source: EVCA \ PEREP_Analytics

This may be due to the track record. New providers naturally cannot demonstrate any successes from the past. The focus on track record therefore makes it almost impossible for new funds to collect funding.

Something designed as a sensible means so turns out to be a barrier to market entry. And a barrier to innovation. New providers often contribute new ideas – concerning the selection as well as development of portfolio companies. These innovations do not make their way into the market when investors are relying / have to rely on the track record.

Any market without new ideas will become unattractive over time - leading to yet again fewer inflows of funds in the medium term (Chart 2).

Six steps to a better remuneration structure

How can more money be mobilised? We propose six possible adaptations to the current remuneration scheme of VC funds – which could be helpful in this respect:

1) Increase the fund management's participation in their own fund

The average participation of the fund management in their fund usually amounts to 1 % of the fund volume.

Why not 5 or 10 %? In this way the incentive of the management company to maximise profits / minimise losses can be maintained – even if a fund performs poorly initially.

Greater downside participation by the fund management is also likely to sharpen the management’s risk awareness.

2) Halve the management fee

What happens if the fixed management remuneration drops – for example from the current 2 to 1 %?

This performance-independent component of the remuneration structure would then no longer undermine the incentive effect of the performance-related remuneration. Today this is – in particular for larger funds – often the case.

Instead of paying 2 % outright, the management fee could be gradually increased to up to 2 % - if previously defined performance targets are met. For example, an increase of 0.33 percentage points each time a performance target is met. This would be paid out as an additional component of the variable remuneration component – after a fund is divested.

3) Retain or increase total remuneration in case of success

The total remuneration of the fund management under the new remuneration scheme should be as high as under the current remuneration scheme – or even slightly higher.

This is the only way to avoid that fund managers refuse to accept the new remuneration structure with the argument that it would undermine the seriousness of their intentions.

The argument would be completely legitimate. If an investment fund accepts a remuneration scheme, which in the case of success places it in a worse position than today, it signals to investors and potential portfolio enterprises that it scarcely hopes for high capital gains.

In this sense, a remuneration scheme which places the fund managers in case of success in the same or slightly better position than today is in the interest of the investors. Only in this way can they ensure their access to the entire spectrum of VC funds.

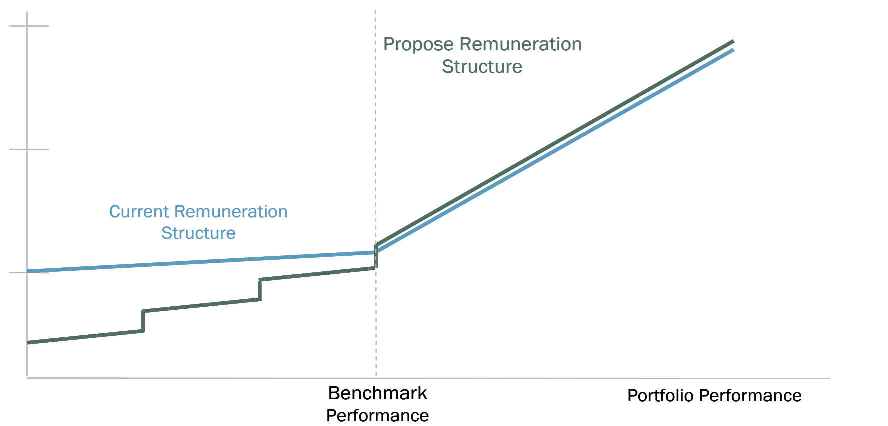
4) Evaluate fund performance relative to a market equivalency

Why benchmark fund performance to a fixed return (hurdle rate)? Why not use a public market equivalent (e. g. a Small Cap Index) instead?

In this way the remuneration scheme would reward / punish the performance of the fund management – and not reward or punish market developments over which fund managers' have no control (Chart 3).

Chart 3: Total remuneration depending on portolio development

Comparative summary of the current and proposed remuneration structure



Source: KfW

5) Create scope for individual solutions

For some funds – in particular first-time funds – it may be difficult to meet the higher capital requirements (5–10 %). Or to cover their operating costs with the lower management fee of 1 %. Thus it must be possible to allow for adjustments to requirements 1) and 2) in certain cases.

However this requires full disclosure on the part of fund managers – with regard to their total income and wealth situation as well as the cost structure of their fund. Only in this way can be made sure that the adjustments to capital requirements and management fees do not distort incentives again – and so undermine the investors' interests.

6) Take greater account of multiple fund-raising activities and long holding periods

How can it be avoided that parallel fund-raising activities or overly long holding periods undermine the incentive effects of the remuneration scheme? One possibility is to make clear from the outset that the management fee is only paid for a certain period of time – and adjusted in case of further fundraising activities.

Conclusion

Venture Capital funds play an extremely important economic role. At the same time their financing of young high-tech companies could be optimised significantly – through a relatively simple adjustment of their remuneration scheme.■

---

1 The article builds – among other things – upon 23 expert interviews (seven with VC/PE funds, six with investors of funds, four with Business Angels / Family Offices, two with Crowdfunding platforms and four with researchers) between September and November 2012. In addition we reviewed the relevant literature and conducted our own data analyses.

2 This is one of the results of the recently published Kauffman Study: Mulcahy, D.; Weeks, B. and H. S. Bradley (2012): We Have Met the Enemy… and He Is Us – Lessons from Twenty Years of the Kauffman Foundation's Investments in Venture Capital Funds and The Triumph of Hope over Experience; Kauffman Foundation.

3 Our own analyses show that the average holding duration has increased in the past years. This is true even if we control for a larger number of fund and market factors (such as for example exit conditions). See also: Buyyacchi, L.; Scellato, G. and E. Ughetto (2013): The Investment Strategies of Publicly Sponsored Venture Capital Funds. Journal of Banking and Finance, Vol. 37, Issue 3, pp.707–716.

4 Stricly speaking, the problem is not risk per se, but much more the fact that the fund management - due to the asymmetrical profit-sharing – does not correctly price the risk in the view of the investors.

5 For the sake of simplicity we have ignored the – graphically presented – residual probabilities.

6 Rumelt, R. (2009): How Bonuses Promote Excessive Risk Taking. http://www.strategyland.com/2009/risk-inducing-incentives/.

7 Fryges, H.; Gottschalk, S; Licht, G. and K. Müller (2007): Hightech-Gründungen und Business Angels (High-tech start-ups and business angels); Final Report for the Federal Ministry of Economics and Technology (BMWi). Project No 04/07 File reference: I D 4 - 02 08 15.

8 Weber (2005): Corporate Venture Capital als Beitrag zum Wissensmanagement – eine vergleichende Langzeitstudie in Deutschland (Corporate venture capital as a contribution to knowledge management – a comparative long-term study in Germany), WZB Discussion Paper, SP III 2005-107.

9 Famos Study (2012): Eine Anlageklasse für sich: Immobilienvermögen in Family Offices (An investor class by itself: property assets in family offices).

10 Leleux, B.; Schmidheiny, S. and J. J. Diverse (2007): Europe's Family Offices; Private Equity and Venture Capital. EVCA Special Paper.

11 The results of the Kauffman Foundation show that - even in the US market with relative strong competition among funds - fundraising cannot (completely) offset short-term maximisation of interests. The same applies to our own analyses regarding duration of the participation.

12 Harris, R.; Jenkins, T. and R. Stucke (2012): Are Too Many Private Equity Funds Top Quartile? Journal of Applied Corporate Finance, Vol. 24, Issue 4, pp. 77–89.

13 Metzger, G. (2013): Mindestrenditeanforderungen von Beteiligungsgesellschaften: Ansprüche werden bescheidener (Minimum return criteria of investment funds: Requirements becoming more modest). KfW Economic Research, studies and materials (publication pending).