

Looking Behind Closed Doors at Venture Capital Investments

Entrepreneurs need to carefully consider what happens in one of the shortest touchpoints they may ever have when going for venture capital funding. Why? Because the venture capital investment process is brutal, and it's about time to dispel some myths entrepreneurs rely on.

Introduction

Many entrepreneurs tell stories about what is going on when meeting with venture capitalists (VCs). Working with and coaching entrepreneurs over the years, one has heard a lot of fragmented and simplified stories. These stories are of course subjective and experience driven, attempting to demystify what is going on during the short touchpoints entrepreneurs have with VCs when going after investments. Academic research has concluded that VCs spend less than six minutes on average to screen a deal on first sight and make the decision to take it further or not within the next 21 minutes.^{1,2}

In a vacuum of several thousand deal proposals to VCs per year and these quick but important touchpoints, many myths exist among entrepreneurs and VCs. For example, some claim that getting a deal is all about a strong team.² Others hold it is all about networks³ or the business idea⁴. We had the chance to have a careful look behind closed doors as VCs made investment decisions and gained an inside perspective on what really matters to succeed in the investment process until the final decision is made. And, indeed, it's hard to pass the bar. The likelihood of receiving funding is not the 1%² or 2–3%⁵ that has been reported in the scientific literature. Instead, our results suggest that the chance of obtaining funding is one out of 1,000, or just 0.1%. The insights from our data led us to a critical conclusion: the simplified messages that we often hear in the fragmented stories among entrepreneurs and the overview of factors that we teach at business schools are snapshots that do not fully capture the causal relationships that exist throughout the venture capital investment process. Thus, we highly recommend entrepreneurs consider the overarching investment process and ultimately deliver on all facets necessary to improve their odds.

ABOUT THE RESEARCH

Our research is based on a large-scale research project at University of St. Gallen in close collaboration with the early-stage venture capital scene in Europe and consulting professionals from one of the leading international management consultancies. The project lasted for more than two years. The collaboration includes full data access to 14,549 actual deals screened from 2017 to 2020. In addition, we received unrestricted access to 1,362 deals that were evaluated in greater detail using a scorecard concept, and 427 of these deals have a detailed set of all relevant data. Further, we conducted 60 open- and semi-structured interviews with investment professionals and general partners of venture capital firms to validate the results in the paper. Finally, countless interactions with the investment teams; participation in screening calls, deal-flow meetings, and venture capital round-table events; and the full data access enabled us to gain an inside perspective on how the actual investment decision-making process of European-based venture capital firms works.

What is rarely discussed about the venture capital investment process?

VCs screen and evaluate proposals in several stages, use sophisticated evaluation methods and heuristics, form multiple independent opinions, and discuss the results in several meetings. Illustration 1 shows the generalized investment funnel process we observed during our research, including the total numbers in our sample and the odds of getting from one investment process stage to the next. The decisions are always final: if you don't pass a stage, you are rejected, and there isn't a chance for resubmission for this funding round.

The initial contact between entrepreneurs and VCs is often established via references, active screening by investment professionals, or—the least common way—a cold inbound from an entrepreneur. Our sample includes 14,459 deals in this initial deal-flow stage, which were screened on the basis of a few-minute heuristic that rejects more than 90%. Generally, throughout the investment process, evaluations are based on a scorecard concept capturing seven investment criteria: (1) team, (2) market, (3) product, (4) business model, (5) traction, (6) defensibility of the value proposition and (7) financial aspects (see Illustration 2). Those few deals that pass the *screening stage* enter the *first evaluation stage*, which includes a call or meeting between the entrepreneurs and the VCs' investment team. Again, a deal is evaluated along the seven criteria,

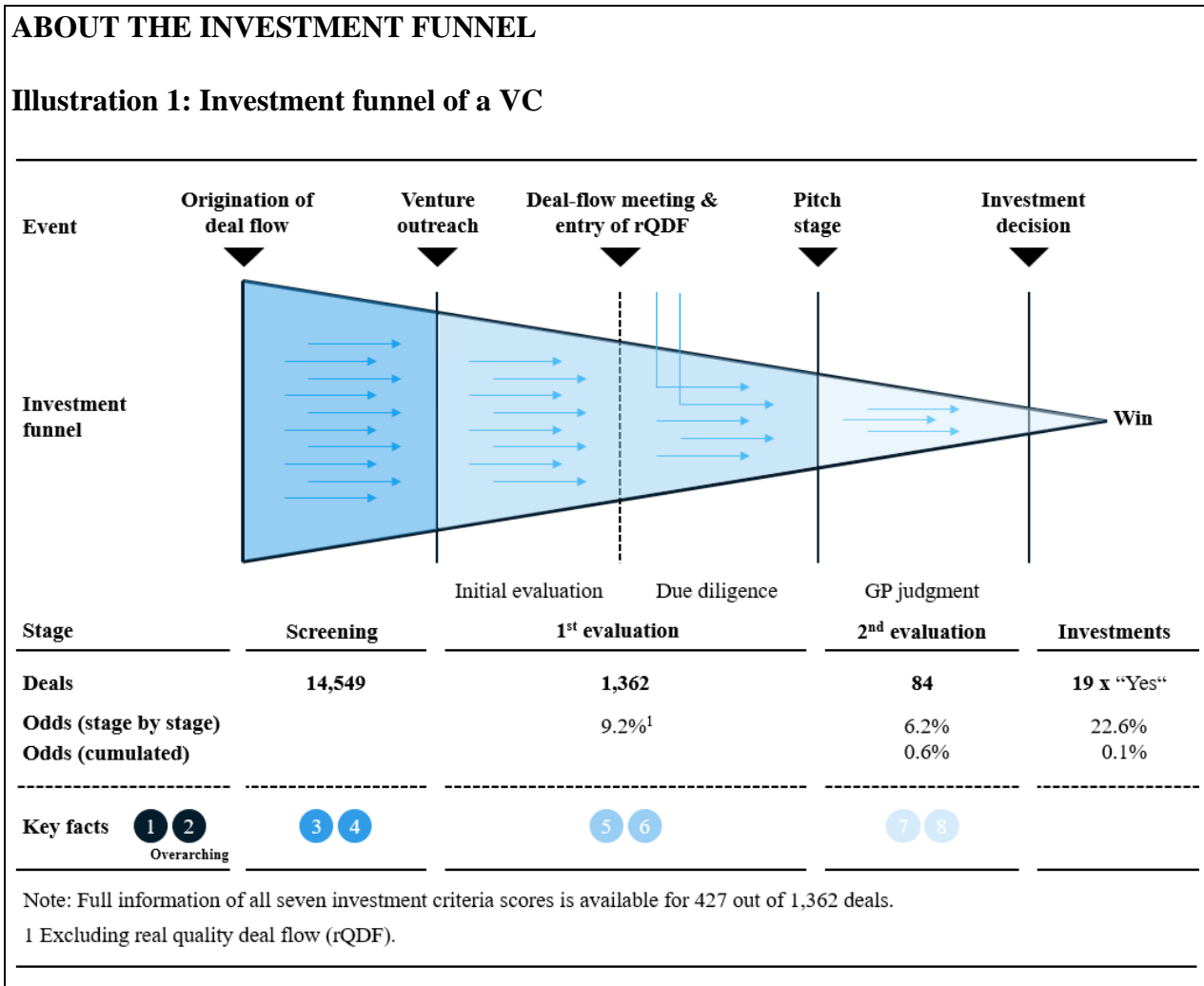
and the results of this evaluation are discussed in a deal-flow meeting. Here, investment professionals, often juniors, present their new potential investment cases briefly to the general partners (GPs) of the venture capital firm. Thus, an entrepreneur's first touchpoint with the final decision makers—the GPs—generally does not follow the form you might expect of an entrepreneur meeting the GPs and pitching to them. Rather, some investment professional meets the GPs and pitches the entrepreneur's case to them. This is something rarely discussed. So, better make your slide deck and case as self-explanatory as possible. Investment professionals and GPs spend about 10 minutes per deal on average and make an irreversible decision of whether your deal passes or not.

If the GPs decide to pursue the deal, a detailed *due diligence* process starts. This includes additional calls with the entrepreneurs; preparation of follow-up questions; and detailed analyses of the product, the business model, and the market. Hence, while the GPs have already assessed these latter criteria, their weight increases, and they start to become more central in the following stages. If your deal proposal also survives this due diligence, only then are you invited to give an onsite pitch in front of the GPs. Only 6.2% of deals passing to the first evaluation stage and no more than 0.6% of all deals manage to get in front of the GPs where you as an entrepreneur present (similar studies find 50% pass the screening stage and 10% make it to the end of this evaluation stage⁵).

After the pitch, the GPs evaluate the deal (using the same seven investment criteria) and then engage in final clarification through follow-up questions, deal structuring, negotiations, and legal due diligence. This *second evaluation stage* finishes with the investment decision: either a rejection or the eventual funding of the deal. We find that 22.6% of pitched deals are funded. This may not sound too bad, but this 22.6% translate into a terrifying 0.1% chance of receiving funding relative to all the deals screened.

We hate to break it to you, but entrepreneurs need to be on their toes. The odds of obtaining funding shown here based on actual investment funnel data are worse than we ever could have imagined after reading research reports. Only one out of 1,000 proposed deals receives funding. If you apply for venture capital funding, the odds are 99.9% that it's not you who is going to be funded.

- 1 Key fact: In general, VCs have established an effective multi-stage investment process with several criteria that helps them identify deals that comply with their rigorous aspiration level.



ABOUT THE INVESTMENT EVALUATION

Illustration 2: VCs' evaluation card

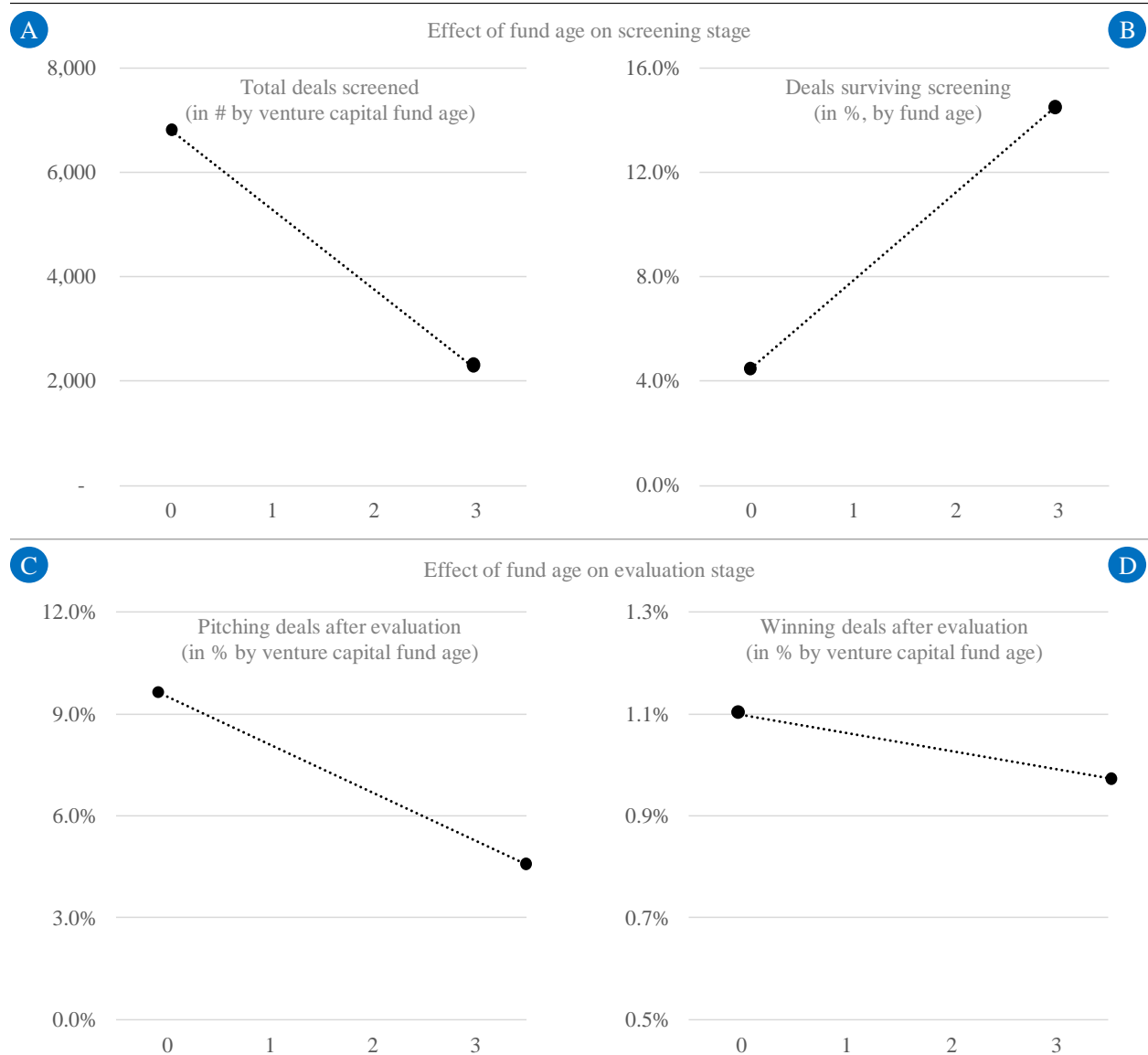
Venture X	
(Source: X; Founded: 2019; Located: Berlin)	
1. Team	(4/5)
<ul style="list-style-type: none">• CEO trustworthy, serial entrepreneur with relevant market knowledge• CIO rather unexperienced but strong academic background	
2. Market	(3.5/5)
<ul style="list-style-type: none">• Huge market but crowded, maybe too late• ...	
3. Product	(5/5)
<ul style="list-style-type: none">• Superior product, UX better than that from established competitors• ...	
4. Business model	(5/5)
<ul style="list-style-type: none">• SaaS business, increasing MRR, CACs low, great scalability• ...	
5. Traction	(4/5)
<ul style="list-style-type: none">• Decent MRR growth over LTM, margin +10% since January, outlook questionable• ...	
6. Defensibility	(5/5)
<ul style="list-style-type: none">• Good platform, deep integration into customer IT systems• ...	
7. Financial aspects	(4/5)
<ul style="list-style-type: none">• Valuation at x, 10% share for y million, co-Lead with VC z, term sheet from VC z	

Note: This is a VCs' evaluation card. Each criterion is graded on a 1–5 scale for all evaluations. The GPs' assessments are conducted independently and anonymously. Finally, the GPs judge their willingness to investment on a scale with the options "Yes," "Rather yes," "Rather no," and "No, veto."

Does VCs' own fundraising interact with venture capital investments?

So, how can you as an entrepreneur increase your chances of belonging to the 0.1% of those being funded? Our data reveals important insights about timing. When looking at all the deals in the data, we see that entrepreneurs seem to be able to time investors. VCs screen much more actively (see Figure 1A) but also more rigorously (Figure 1B) when they raise new funds. However, for those deals that survive screening, numbers indicate looser pockets for VCs with recently raised funds compared to VCs who have to make more rigorous investment decisions as their funds mature (Figure 1C and 1D).

Figure 1: Deal success by venture capital fund age and investment funnel stage



Note: Linear trendlines depict the total N or the share of deals that manage to succeed respective funnel stages (Y-axis) depending on the age of the VC-fund in years (X-axis). All deals of the screening and evaluation stage included (Total N = 14,549 and 1,362 respectively).

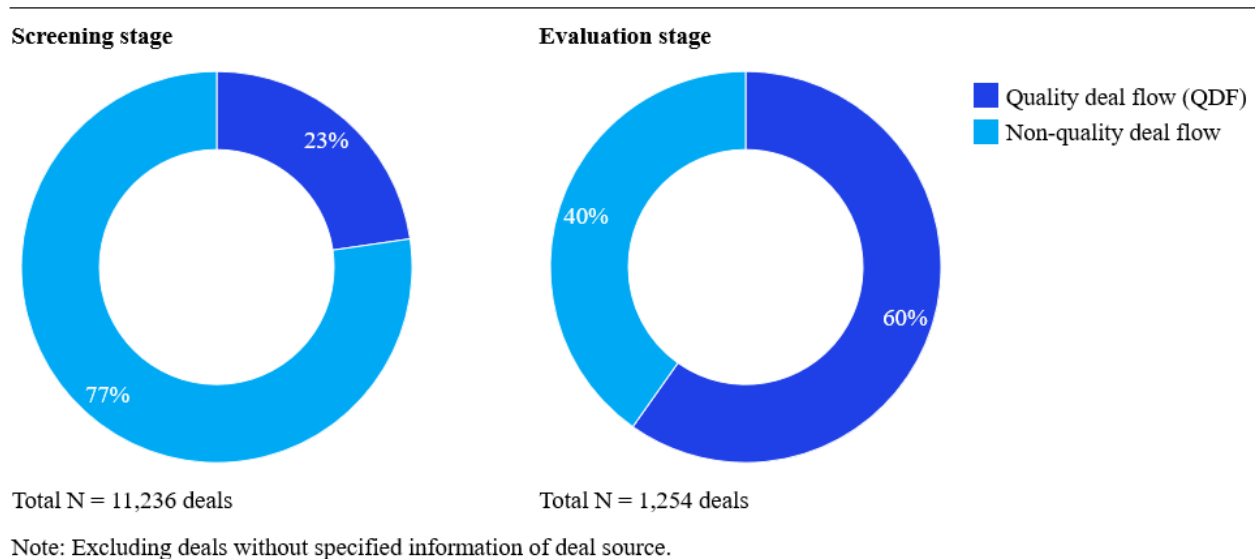
In other words, if you make it to the evaluation stage when funds were recently raised, your chance of pitching in front of the GPs and being funded could slightly increase. Now, this is something you as an entrepreneur can steer. Do your homework and target VCs with newly raised funds.

- 2 Key fact: Be at the right place at the right time. Entrepreneurs seem to be able to time investors. For deals that reach the evaluation stage, our numbers indicate looser pockets for VCs with recently raised funds.

How can you improve your “deal quality”?

Discussions with venture capital practitioners on the screening and evaluation process reveal that it appears to be common knowledge that the deal source is a major differentiation factor when it comes to the quality of a deal. For this reason, investment professionals differentiate between quality deal flow (QDF) and non-quality deal flow (non-QDF). Our data allows us to use such deal-source classifications. Looking at more than 10,000 deals, we find that 23% of all original deals are classified as QDF, and 60% of the deals that pass screening stem from QDF (see Figure 2). This finding is in line with prior research showing the importance of venture capital network access to eventually be recognized as QDF by investment professionals.⁶ As one investment professional in our data stated, *"After three years as investment professional, I know what to look for and whose deal recommendations to follow."*

Figure 2: Share of deals in the screening and first evaluation stages by deal source



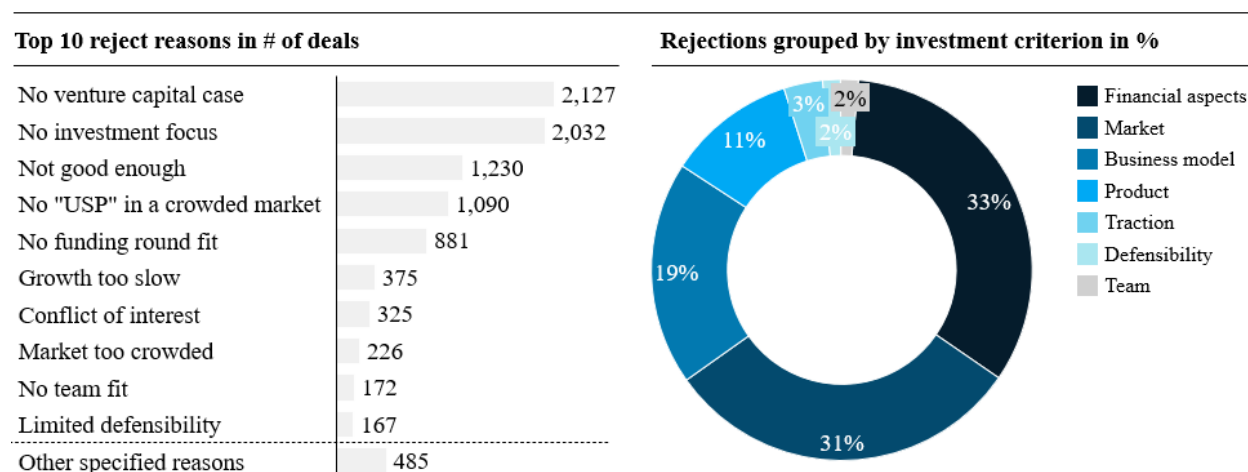
- 3 Key fact: Investment professionals leverage their networks to narrow down the thousands of deals they receive to the hundreds of deals they want to evaluate in detail.

What are simple rejection reasons you can avoid?

Our data also shows why VCs reject deals at the screening stage, enabling new insights into the venture capital decision-making process based on actual deal data. In our sample, we find that the two most common reasons VCs reject a deal at the screenings stage are "no venture capital case" and "no investment focus" (see Figure 3). Discussing these results with investment professionals, we found that the underlying aspects for a "no venture capital case" rejection are either that the target market is too small or too crowded or that the business model is unscalable, both of which typically align with limited upside potential for the deal and the return prospects of the venture capital firm (i.e., target internal rate of return [IRR] or multiple of invested capital [MOIC]). This does not surprise. On the other hand, it is interesting for entrepreneurs to know that investment focus is the second most specified reason for rejection. This shows that VCs specialize, too, both toward industry and geography. In fact, most investors in our sample already had explicit target industries or were about to shift focus toward those industries. Further, VCs prefer deals that are easily accessible. Many deals are rejected because they are in the wrong geographical area. While these rejection reasons are not new to research^{7,8}, we can show the difference in importance of rejection reasons and rank them and a more detailed level. These aspects should be considered by entrepreneurs seeking funding.

Grouping the rejection reasons from the screening stage alongside VCs' investment evaluation criteria, we conclude that investment professionals focus on a deal's financial aspects for VCs as well as its market potential and business model. This all occurs upon initial review during the screening stage. Hence, showcasing the *team* or the *defensibility of the value proposition* are minor motivators for rejection until the more detailed evaluation stage. Remind yourself, investment professionals screen within minutes by looking at a pitch deck and the deal source.

Figure 3: Number of deal rejections by reason and grouped by investment criterion



Note: In total, 13, 187 deals are rejected at the screening stage. Thereof, 9,110 rejections are specified (excluding deals without specified information).

4 Key fact: A first screening of your deal takes place before any personal interaction. Look out for VCs’ industry and geography investment foci and how you present your financials to avoid no-go criteria. Proving your team will have more relevance later in the process.

What is QDF really worth?

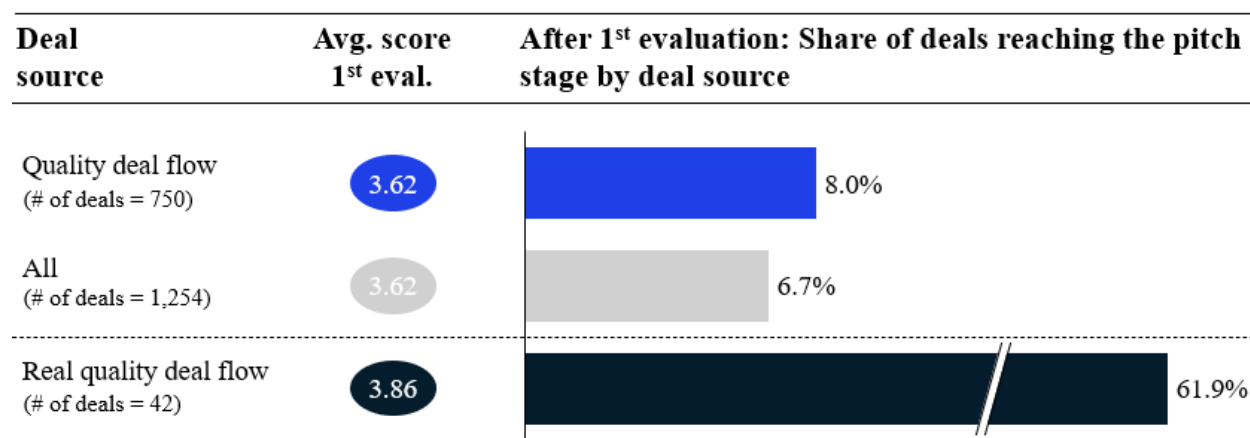
After a deal has successfully passed the screening stage, VCs usually reach out to the venture and do a *first evaluation* to decide whether to invite the entrepreneurs for a pitch. Again, this is something that is rarely discussed. We investigate how QDF is considered in the first evaluation stage and illustrate our findings in Figure 4. We exploit the circumstance that deals are evaluated independently by investment professionals along the seven investment criteria. Here, our data shows that the average QDF score is 3.62, which is not differentiable from the average deal. This means that investment professionals do not attribute higher scores for deal characteristics like team, product, business model, etc., to QDF, which is unexpected. Investigating the effect of QDF for passing the first evaluation stage and reaching the pitch, we find that QDF only marginally increases the likelihood of getting an invitation to pitch (8.0%) compared to the average evaluated deal (6.7%). Thus, it seems that QDF is mainly a screening heuristic and loses its explanatory power at the evaluation stage.

However, we find that some deals indeed leapfrog the screening and initial evaluation stages and directly enter the short-term due diligence just before the pitch. We discussed these results with investment professionals to triangulate our understanding of QDF. According to interviewed practitioners, the story behind these leapfrogging deals is typically twofold: first, they are recommended by partnering investors (i.e., frequent co-investors), and second, *such deals already successfully went through similar screening and evaluation processes with the referring partners*. The combination of these characteristics provides a different signaling effect because other (befriended) VCs have put these deal proposals through their paces, which provides additional legitimacy. Including this differentiation of *real* quality deal flow (rQDF) in our analysis, we see that the average deal quality—as evaluated by investment professionals—is higher (3.86 vs. 3.62, see Figure 4). We also find that 62% of rQDF deals make it to the pitch presentation, which is significantly higher than the average deal (6.7%).

To conclude, while our data indicate that QDF deals are more likely to pass the screening stage, we observe that the role of simple referrals is now ambiguous in the first evaluation stage. *Simple referrals or introductions between insiders of the venture capital scene do not always materialize*, meaning they do not work as a wildcard to move on to the pitch presentation. In contrast, we find that referral deals that have already successfully gone through the investment process at a referring venture capital firm have dramatically increased odds of pitching. For you as an entrepreneur, the message is clear: going to networking events and meeting VCs or the like who can help you tap into the venture capital universe may help you enter the very first door of the process. However, there is no way around; you must flow through the whole investment funnel successfully in one go. Only after that can you leapfrog the initial evaluation stages at befriended venture capital firms and directly pitch.

- 5 Key fact: Simple referrals from other VCs alone do not work. However, deals referred from one VC to another after they have successfully survived the investment process are substantially more likely to pitch in front of other VCs. This is the way to leapfrog the initial investment funnel stages.

Figure 4: First evaluation stage—The path toward the pitch



Note: First evaluation scores range from 1 to 5. Total N = 1,254 deals (excluding deals without information on deal source, so probabilities might differ from all deals depicted in the investment funnel).

So, what about the team?

There is a longstanding discussion in research and among practitioners regarding the question of whether investors bet on the management team or the business.² Also, both researchers and practitioners have identified a common set of factors everyone looks at when assessing deals.^{2,7} However, we have yet only few insights into how these factors relate to each other and how they are valued across the investment funnel, while the common notion remains that *it's okay to have a mediocre idea when you have an A-team and vice versa*. We contribute to this discussion by exploiting our unique access to funnel stage-specific deal evaluation data and investigate the importance of the investment decision criteria depending on the funnel stage and relative to each other.

We have scorecard evaluations for 1,362 deals. Thereof, 427 deals offer the full picture of all evaluated investment criteria. These deal numbers translate into 7,518 and 2,989 individually assessed investment criteria, respectively. Of the seven criteria, we find that the team indeed stands out in terms of relevance for VCs, especially at the beginning of the evaluation process. What we didn't know before this research, however, is that the team is usually the first investment criterion assessed in the *first evaluation*. Indeed, most of the investment professionals we interviewed said the team is a *go/no-go criterion* to proceed (see Figures 5 and 6). In fact, of the 427 deals with full data on all funnel stages, 36% of the teams with a 5-star score make it to the pitch presentation,

while only 2% of the deals with a 3-star score are invited (see Figure 5). The significant relationship between the team and the pitch invite may not sound surprising, but out of the seven investment criteria, only the team exhibits this strong relationship. Unlike all the other investment criteria scores from the first evaluation, we find that the team’s first impression remains imprinted until the investment decision.

We also investigate how the team relates to the other investment criteria. We use five deal-variation scenarios from our data to estimate the probability of reaching the pitch presentation. The exemplified models are based on a deal with a SaaS-business model focusing on B2B customers. Our results show that the base-case deal (with a rating of 4 on all criteria in the first evaluation stage) has a 8% chance of reaching the pitch presentation (Model I, Illustration 3). If the same deal receives a higher team ranking (5 instead of 4), the chance almost doubles to 15%—an increase of 7 percentage points (Model II, Illustration 3). On the contrary, if the business model criterion increases to 5 and the team criterion remains a 4, the likelihood to reach the pitch presentation is 12% (Model III, Illustration 3). If a deal scores 5 on the team criterion but only average on all the other criteria (i.e., a score of 3), its likelihood to make it to the pitch presentation is just 5% (Model IV, Illustration 3). This model illustrates that an outstanding team alone is most likely not enough to make a deal survive the investment funnel, therefore unmasking the “A-team but average case” myth because your chances *are* weak if you have a super-star team but present an average case. Finally, if a deal has full scores across all the other criteria (i.e., all scores of 5) but only an average team score of 3, the chance of reaching the pitch presentation is 13% (Model V, Illustration 3). This result shows that the difference between Model II (great team) with 15% and Model V (great deal) with 13% is not as strong as we expected. These valuable insights about the interactions between and the relevance of the investment criteria are novel to research and practice alike.

6 Key fact: The team is a gatekeeper to the pitch, but the team alone won't make it.

Illustration 3: Estimating the probability of pitching based on deal characteristics on a 1–5 scale

	Model I	Model II	Model III	Model IV	Model V
	Good deal	Good deal	Good deal	Average deal	Great deal
Deal characteristics	Good team	Great team	Great BM	Great team	Average team
1st evaluation stage: Criteria					
Team (***)	4.0	5.0	4.0	5.0	3.0
Business model (BM) (*)	4.0	4.0	5.0	3.0	5.0
Defensibility	4.0	4.0	4.0	3.0	5.0
Financial aspects	4.0	4.0	4.0	3.0	5.0
Market	4.0	4.0	4.0	3.0	5.0
Product	4.0	4.0	4.0	3.0	5.0
Traction	4.0	4.0	4.0	3.0	5.0
Other characteristics					
Venture fixed effects	Yes	Yes	Yes	Yes	Yes
VC fixed effects	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Pitch probability	8%	15%	12%	5%	13%

Note: Pitch probabilities are normalized by the ratio of deals with full first evaluation information divided by total deals at the first evaluation (ratio = 427/1,362 = 0.3135). Logistic regression model: N = 427, AIC score = 341, and residual deviance score = 315. Coefficients that are statistically different from 0 are market with the appropriate asterisk: *** at p < 0.001, ** at p < 0.01, and * at p < 0.05 level.

Figure 5: First evaluation stage selection based on investment criteria scores

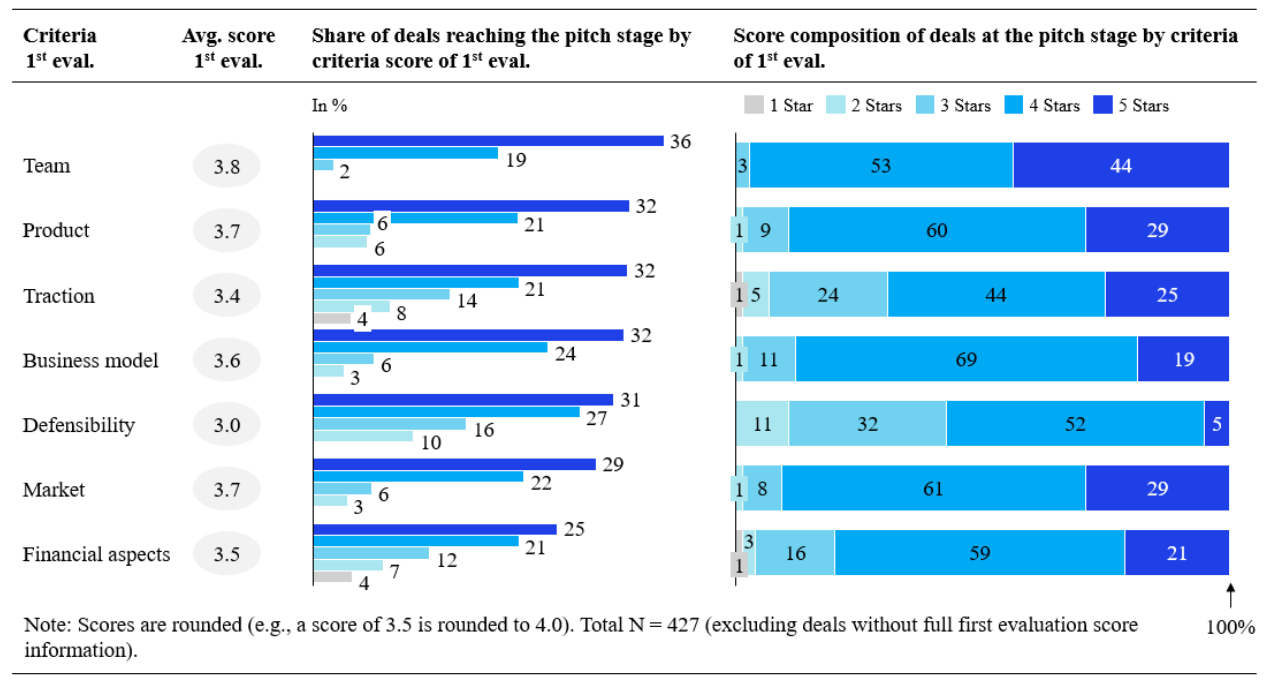
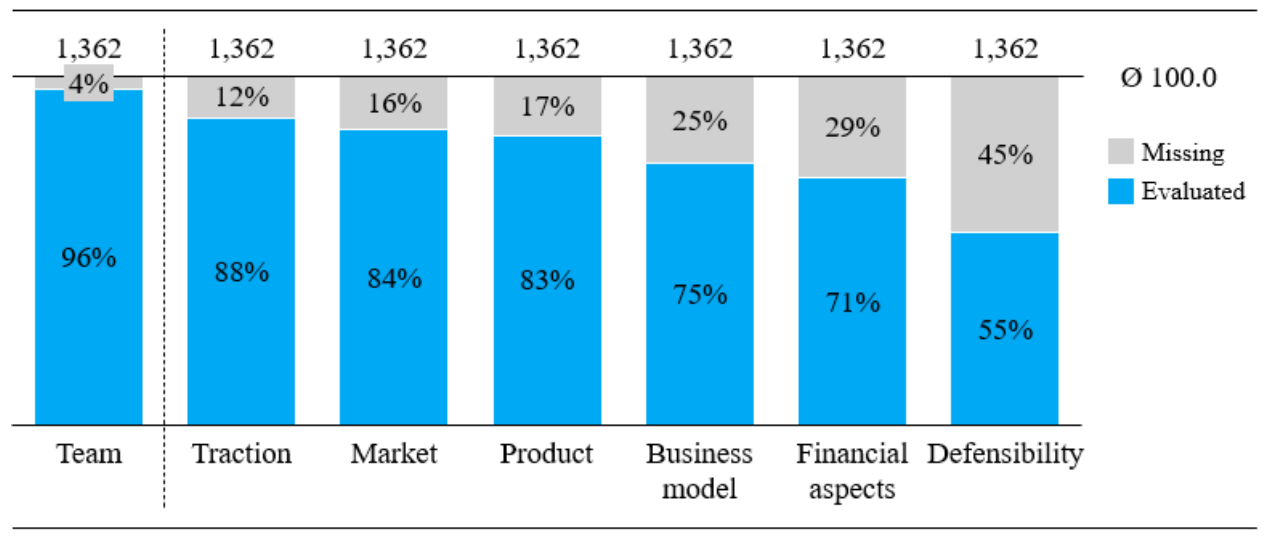


Figure 6: Total number of completed evaluations along the investment criteria in the first evaluation stage



The pitch presentation

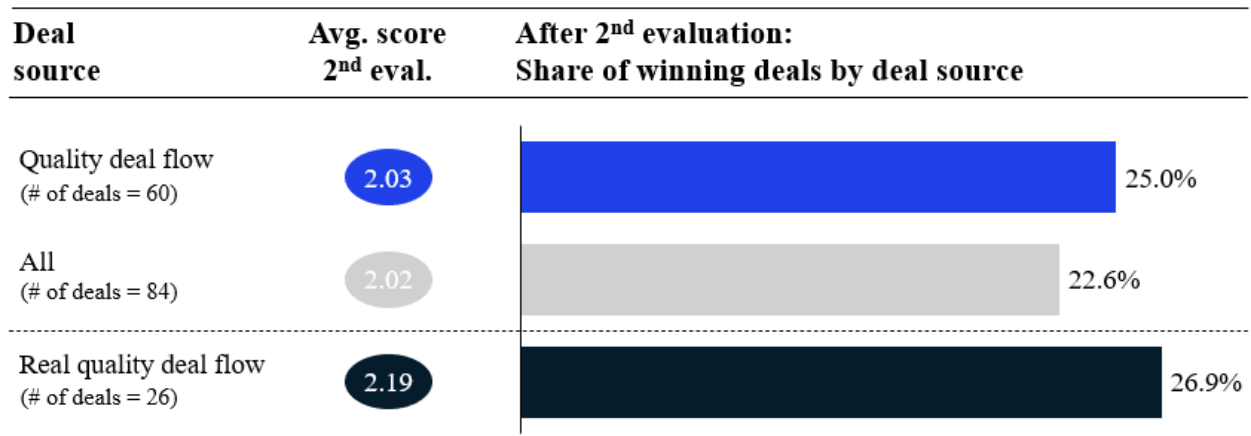
So far, we have captured what is most relevant to navigate through the investment funnel to meet the decision makers—the GPs—at the pitch presentation. It should be clear by now that the importance of criteria changes along the way. Here, at the second evaluation stage, the deal is again evaluated along all seven investment criteria based on the pitch presentation—a key milestone toward funding. This time the GPs conduct the evaluation—anonously and independently—along with indicating their investment willingness.

So, what makes you truly win in the end? Since rQDF allows some entrepreneurs to skip the funnel up to here, we explore if those deals are also more likely to win the pitch compared to QDF deals or other deals that make it to the pitch presentation (see Figure 7). Thus, we first compare QDF to other deal sources but do not find a significant difference in the likelihood of finally being considered for funding. Second, we investigate how rQDF deals compare to other deals and, again, do not find a significantly different likelihood in being considered for funding, which is an unexpected result (see Figure 7). In this stage, VCs seem to conduct their evaluations of rQDF deals as rigorously as they do for other deals. The pitch situation sorts out advantageous characteristics that QDF might have had until this point. Consequently, the final investment decision between the pitching deals is not affected by the source of the deal, although better deal quality results in slightly better odds of receiving funding. This basically implies that the GPs of venture capital firms are not biased when considering rQDF that comes from other VCs but may use it as an opportunity to spare resources in the assessment stage.

Our findings provide important insights into how VCs' deal sourcing and deal selection interact within the actual investment process, a puzzle that was yet unsolved in research.^{2,6}

- 7 **Key fact:** At the pitch, deal quality equalizes irrespective of source. Thus, entrepreneurs cannot just rest and rely on their backing networks.

Figure 7: Second evaluation stage—The pitch evaluation and successive funding



Note: Second evaluation scores are translated to a 0–3 scale. Total N = 84 (excluding deals without information for deal source, so the probabilities might differ from all deals depicted in the investment funnel).

For you as an entrepreneur, the message is clear: being treated as QDF still helps you survive the hard investment process from screening to funding. In particular, if an entrepreneur has the backing of a credible VC, pitching at another VC becomes very likely. However, according to our sample, the QDF signal is not cheap, and entrepreneurs cannot rest on it as competition at the pitch presentation is tough.

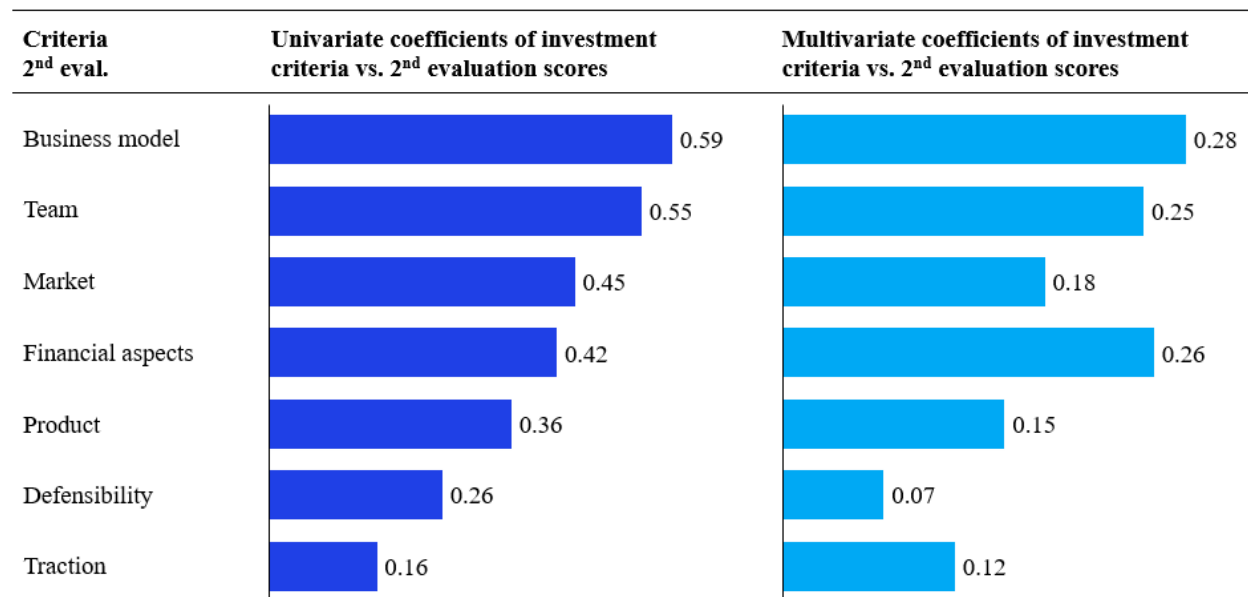
“I know that most other VCs feel the same about this, so if you want to raise money, spending time on producing a great pitch deck is time well spent.” (Quote from a general partner of a venture capital firm)

The overall results of the pitch evaluation show that investors draw a comprehensive picture of the investment cases. While the screening and the first evaluation seem to make use of specific heuristics, such as filtering by deal source or by inferring deal quality based on team impression, the second evaluation seems to leave nothing to chance.

By now, the investors have done their homework. They have conducted their due diligence, made reference calls, had internal discussions, understood the business model, and have prepared some final questions to “grill” the entrepreneur. Based on this preparation, for the second evaluation, we observe that VCs apply multiple investment criteria, of which the majority are also statistically relevant for this evaluation and the respective funding. Figure 8 shows positive relationships

between the second evaluation scores—namely, the GPs’ willingness to invest—and all applied investment criteria.

Figure 8: Inside the lion’s den—Second evaluation scores related to investment criteria



Note: Investment criteria scores are on a 1–5 scale, whereas the second evaluation scores are on a 0–3 scale. The linear regression model behind multivariate coefficients is controlled for venture, VC, and year fixed effects. Total N = 84.

8 Key fact: A strong team carries you to the pitch presentation. However, in front of the GPs, a comprehensive picture of your deal matters.

Conclusion

We conclude that the comprehensive perspective of VCs that we observed firsthand is not fully acknowledged in publications focusing on snapshots and fragmented aspects of the whole investment process. On this basis, we advise entrepreneurs. You need to consider this process for what it is: a process in which several criteria are important, related to each other, and emphasized differently along the way. From an investor’s perspective, we conclude that venture capital investors have found an effective (in terms of rigor and consistency) multi-stage investment process. However, time will show whether their selection of 0.1% of screened deals was right. Using such a structured process to identify deals may contradict the search for the much-desired

outliers. For entrepreneurs seeking funding, we show that VCs will gain a holistic perspective of your proposal—you will not fool them. Thus, do your homework on all the relevant aspects of your business. You cannot shortcut your first funding; there is no way around VCs' rigorous investment process, and you need to run through it at least once. However, you can steer the tough investment process by knowing what criteria to focus on at what point. That said, because trustworthiness matters so much in such a dynamic environment, entrepreneurs should present themselves and their businesses as what they are. Eventually, this is always the upside.

References

1. Hudson, E. & Evans, M. (2005). A Review of Research into Venture Capitalists' Decision Making: Implications for Entrepreneurs, Venture Capitalists and Researchers. *Journal of Economic and Social Policy*, 10 (1) Art. 3.
2. Gompers, P. A., Gornall, W., Kaplan, S. N., & Strebulaev, I. A. (2020). How do Venture Capitalists make Decisions? *Journal of Financial Economics*, 135 (1), 169–190.
3. Zhang, L., & Guler, I. (2019). How to Join the Club: Patterns of Embeddedness and the Addition of New Members to Interorganizational Collaborations. *Administrative Science Quarterly*, 65 (1), 112–150.
4. Kaplan, S. N., Sensoy, B. A., & Strömberg, P. (2009). Should Investors Bet on the Jockey or the Horse? Evidence from the Evolution of Firms from Early Business Plans to Public Companies. *The Journal of Finance*, 64 (1), 75–115.
5. Bronzini, R., Caramellino, G., & Magri, S. (2020). Venture capitalists at work: A diff-in-diff approach at late-stages of the screening process. *Journal of Business Venturing*, 35 (3), 105968.
6. Sørensen, M. (2007). How Smart Is Smart Money? A Two-Sided Matching Model of Venture Capital. *The Journal of Finance*, 62 (6), 2725–2762.
7. Alemany, L., & Andreoli, J. (2018). *Entrepreneurial Finance*. Cambridge, Great Britain: Cambridge University Press.
8. Bernstein, S., Giroud, X., & Townsend, R. R. (2015). The Impact of Venture Capital Monitoring. *The Journal of Finance*, 71 (4), 1591–1622.