Venture Capital

An International Journal of Entrepreneurial Finance

ISSN: 1369-1066 (Print) 1464-5343 (Online) Journal homepage: https://www.tandfonline.com/loi/tvec20

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VENTURE CAPITAL
https://doi.org/10.1080/13691066.2020.1747692

EXECUTIVE FORUM

A gender financing gap: fake news or evidence?

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ABSTRACT

Women-led businesses are less likely to raise venture capital than male-only businesses and the amounts that they raise are lower. Yet women-led businesses deliver better revenue performance and return on investment. So why are venture capitalists reluctant to invest in women-led businesses? One reason is that women entrepreneurs are over concentrated in sectors that are less attractive to investors and have a low presence in technology sectors. Another reason is the lower propensity of women entrepreneurs to seek venture capital. However, women who do approach venture capital funds are almost as likely as men to be successful in raising finance. Moreover, women-led businesses perform well in raising follow-on finance. And women business angels – a minority of all business angels – have a clear propensity to invest in women founders.

ARTICLE HISTORY
Received 24 November 2019
Accepted 21 February 2020

KEYWORDS
Venture capital; female entrepreneurship; women-led startups; women business angels

1. Setting the scene

Investment data indicate that women are underrepresented in both the formal and informal venture capital market (Tooth 2018; Huang et al. 2017; European Commission, 2016). So from a policy point of view this suggests that women can be considered as representing untapped potential, both as – formal and informal – investors and as investees.

Based on this "evidence", policy actions have been developed with the aim of achieving a more gender-balanced entrepreneurial ecosystem. Policy-related research focuses on identifying what are the most effective actions to undertake and what financial incentives could be envisaged to achieve this objective. At first sight, this approach could be considered as a good example of evidence-based policymaking. However, there is a danger of jumping to conclusions. The so-called evidence should be subject to critical review before considering actions which might be inappropriate or even counterproductive. In this paper we analyse the evidence for this male-dominated entrepreneurship ecosystem to ask whether it actually corresponds to economic reality that the data indicates. Our conclusion is that the reality is rather more nuanced than the current narrative suggests.

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2. A gender-unbalanced entrepreneurial ecosystem?

A common shortcoming of existing research is the definition of what constitutes a woman-led startup or a woman-founded business. Many studies define women-led ventures as those with "at least one female founder or a woman at a C-level" (Facklemann and de Concini 2019). Other studies expand the scope to include all-female founders' teams. However, it can be questioned whether a company with males in the CEO, CTO, CFO roles and a woman as CMO is "women-led"? This, in turn, suggests the need for caution in interpreting the conclusions that are drawn from certain studies and statistics. Greater precision is required concerning how women-led and women-founded companies are defined.

Women-led startups are less common than those led by men. Although statistics vary depending on the country and sector of activity, the representation of women in the startup ecosystem is below their proportion in the business environment as business owners, executives or engineers. Women comprise 36% of business owners and 30% of the high-tech industry workers in the USA. In Europe, women constitute 30% of startups entrepreneurs, and 40% of employed scientists and engineers are women (Eurostat 2016). Women are also 41% less likely than men to start a business (Kelley et al. 2017).

Moreover, surveys indicate that women-led startups are concentrated in sectors with lower levels of turnover. Women-founded companies exist in nearly every industry but are concentrated in consumer goods and services healthcare and software. For instance, based on data for Spain and Portugal from the portfolio of one of the largest VC's, with over 500 startups, it was estimated that 35% of all women-led businesses are in the health sector, typically a lower turnover sector. In contrast, only 12% of all the women-founded businesses are involved in fintech and insurtech, two sectors that with the largest turnover figures (Fernández and Prats 2019).

3. Female entrepreneurship: less but better

Most studies draw the conclusion from this evidence that men dominate entrepreneurship. We argue that a performance-related perspective is required to enable robust conclusions to be drawn. Women-led businesses might indeed be relatively scarce but they deliver superior revenue and a better return on investment.

Studies show that businesses founded by women deliver higher revenue – more than twice per dollar invested – than those founded by men (Abouzahr et al. 2018). Startups founded and cofounded by women also perform better over time, generating 10% more in cumulative revenue over a five-year period (USD 730,000 compared with 662 USD,000) (Abouzahr et al. 2018). In addition, they are more effective in turning dollars of investment into dollars of revenue: women founded companies generate 78 cents for every dollar invested compared with 31 cents in male-founded startups (Abouzahr et al. 2018).

This is in line with results in Europe which shows women-led companies – defined as companies having "at least one female executive", in other words, at least one woman currently holding a C-level, founder/founding partner, president, and/or chairperson position – outperform the market in terms of median revenues at later stages (Facklemann and de Concini 2019). Moreover, startups co-funded by women receiving VC investment in the USA perform equally well in terms of exits. The data also show that the percentage of women-founded startups that reach key performance milestones (follow-on financings, IPOs) is similar to non-women-founded firms. The one exception is the acquisition rate which is higher for women-founded startups. Whereas only 9% of all-male funded teams exit successfully, 12% of firms with at least one female founder on the team have achieved an exit (Facklemann and de Concini 2019).

Based on these statistics the widely held perception of male predominance in entrepreneurship has to be nuanced by considering business performance which indicate that women-led enterprises perform better. Less indeed, but better.

4. Venture capital and women-led businesses: a venture capital market perspective

In the light of the superior performance of women-led businesses, and assuming the existence of an efficient market, it should be the case that women-led enterprises will be a major target for investors. However, this does not correspond with reality, with the evidence indicating that women-led startups receive less funding than their male counterparts in both absolute and relative terms. However, this evidence needs to be interrogated in more detail. First, as we have already mentioned, the "women-led" startup definition is not used consistently across studies. Second, there is a need to look more carefully at the extent to which women-led startups are underrepresented in terms of VC funding. Third, the reasons for the apparent lower rates of funding requires further scrutiny.

Based on the 70–30 male-female rate in startup creation, it is the case that female startups attract a smaller share of funding. In 2018, 4.3 USD billion was invested in all female-founded startups in the USA, representing just 1.7% of the 285 USD billion VCs invested (Pitchbook 2019). In Europe, companies started by women received 1.4% of venture capital invested (Facklemann and de Concini 2019). This pattern is confirmed by UK figures where, out of the £5.6bn of venture capital invested in 2017, 89% went to all-male founder teams whereas only 1% of amount invested went to all-female founded teams (Shuttleworth et al. 2018).

The issue is not only the proportion of female startups that received funding, but also how much funding they have received. According to several studies, venture backed women-founded startups receive lower overall amounts of funding (Pitchbook data; Shuttleworth et all, 2018; Facklemann and de Concini 2019). Women pitching for early stage venture capital receive significantly less funding than men – on average, as much as one million dollars less than their male counterparts (Shuttleworth et al. 2018). Investors consider that both the projections and cash needs of women-led start-up are more "conservative". This leads to the incorrect perception that they are less ambitious (Shuttleworth et al. 2018). Investment in companies founded or co-founded by women averaged 935 USD,000, which is less than half the average 2 USD.1 million invested in companies founded by male entrepreneurs.

In Europe women entrepreneurs are not disadvantaged to the same extent as their US counterparts in terms or fundraising shares. Women-driven companies in the EU received a record €5bn in VC funding in the first three quarters of 2018. While this is a fraction of the €34.2bn that women-led companies in the US received for the same period, the EU is catching up (Facklemann and de Concini 2019). Its growth rates in terms of deal value

(27%) and deal volume (23%) exceed those of the US (20% and 16%, respectively) for 2006–2017. In the past eight years, the volume invested in women led startups in Europe has increased five-fold (Facklemann and de Concini 2019). In the US it rose from 7% in 2005 to 21% in 2013 (Hathaway 2019). Taking as an example the portfolio of one of the largest Venture Capital funds in Spain and Portugal, which has invested in 532 startups, 61% of which were male-only startups, 9% were women-founded and 30 had mixed teams (without specifying the gender breakdown).

In summary, it is the case that women-led businesses receive only a fraction of the venture capital that male-led businesses receive, both in number of deals and in amount per deal. The better performance of women-led companies is, at first glance, therefore not reflected in the investment policy that efficient market functioning and rational investment strategy would suppose.

5. Venture capital and women-led businesses: the paradox explained

Here again care needs to be exercised in the conclusions that are drawn from these figures. Market activity is the result of supply and demand factors. Both need to be analysed in order to understand the paradox that superior performance does result in the willingness to invest.

On the supply side, the attractiveness to investors of the sectors in which women entrepreneurs are concentrated is relevant. The way in which investors select businesses in which to invest, such as “affinity or familiarity” with the product, service or sector and “warm” referrals, play a role in the likelihood that a business will get funded. For example, pitch decks received through referrals make up 39% of the total received but 82% of positive funding decisions (Shuttleworth et al. 2018). Hence, the low presence of women in technology sectors and in the venture industry might play a role in the lack of investment in women entrepreneurs. This causality has not been proven, for instance with data on whether VC funds with women in senior positions invest more in women led startups (excluding those funds with a specific mandate to invest in women-led startups), but is important to investigate. Female representation in the venture capital industry is higher than it was a decade ago, but it is still rare (Shuttleworth et al. 2018).

On the demand side, the proportion of all-female teams approaching a venture capital fund is a relevant consideration. There is some evidence that women are less likely to “ask” for financing support for their business, either from debt or equity sources (Kwapisz and Hechavarría 2018). This “modest” demand behaviour for entrepreneurial finance is not related to funding needs or growth prospects but rather to a set of personal attitudes, skills perception or gender stereotypes. Indeed, the proportion of all-female teams that approach a venture capitalist is approximately the same as the proportion that receive approval by the Investment Committee, comprising 5% of the deal flow of venture capital funds and 4% of their investments (Shuttleworth et al. 2018). At the other extreme, 75% of the pitch decks that the venture capital industry receives are from businesses with no women on the founding team. These all-male teams account for 81% of investments. Pitch decks from mixed gender teams make up 20% of all approaches that the industry receives, slightly higher than the proportion of businesses with diverse teams funded (15%) (Shuttleworth et al. 2018). Analysis of the pool of Goldman Sachs 10,000 Women Initiative participants indicates that the majority of female entrepreneurs do not apply for formal financing;

however, those who apply generally obtain the financing that they seek (Brush et al. 2014). In a further examination of the “not asking for funding” female trait, Kwapizs and Hechavarría (2018) show that the presence of startup coaches (advisors, consultants and other) significantly increases the incidence of asking for financing at the nascent stage.

It is therefore possible to conclude that the acceptance or rejection rate is not determined by the gender diversity of the management team. Investment committees are not biased by whether businesses are the women-led or male-led and that gender is not an investment criterion.

6. Venture capital and women-led businesses: next financial rounds

What happens after the initial funding round? Do gender differences continue in later stage financing rounds? The findings show that female-led companies perform well in obtaining finance at later stages. However, this might arise on account of the definition of women-led startups discussed earlier, with longer established businesses that did not have any women in their founding team likely to have subsequently hired one or more woman for C-level positions.

In Europe, close to 20% of companies that have raised a series C funding are women-led. However, there are significant country disparities, with the UK, Sweden, Germany, France and Spain having the most women led companies. In Spain for instance, eight women-led companies received a total of €600 million in series C funding compared with 15 all-male companies that raised the same amount. In other words, companies with at least one woman get more C round money than all-male led companies in Spain. It is therefore the case that at some investment stages and in some countries, companies with women-only or diverse teams outperform all-male teams in later founding rounds. Of course, this evidence does not indicate how the industry perceives women led scale-ups, but simply underlines that supporting female-led businesses boosts growth and create enterprise value, which in turn makes them attractive for scale-up investors. The greater presence of women in scale-ups might be an effective way to deal with the scale-up gap (Aernoudt, 2017).

US data shows that once they have been venture-backed, the percentage of women-founded startups that raised additional rounds of capital is similar to that of non-women-founded firms (Hathaway 2019). Fifty-two percent of women-founded startups raised a second round of capital within three years of a first financing and 37% raised a third round within five years. Those equivalent figures for non-women-founded companies were 52 percent and 36 percent respectively.

The UK shows similar figures for women moving along the funding corridor: 53% of teams with at least one woman got a second round of funding after seed/series in the period 2010–2019. However, the success of all-males teams in subsequent rounds is 61%. This difference persists in each subsequent round (Shuttleworth et al. 2018).

It is therefore not possible to conclude from this evidence that the gender-mix of the team has a significant impact on raising further funding.

7. Women angels

Does the same logic apply in the informal venture capital world? The business angel market is critical for women entrepreneurs. All-female teams have greater success with angels than with early and later stage VCs. All female-founder teams received 394 USD million (5.25%) and mixed teams 1 USD.1 billion (14.6%) out of a total of 7.5 billion for all angel investments. In the early-stage VC segment, all-female teams get 2.7% versus 13.8% for mixed teams, and in the late-stage all female teams get 2.1% versus 9.2% for mixed teams. So quite clearly women have better chances with angel investors (Pitchbook 2018 data on angels[1]). It is important to emphasise that angel investment is not simply about the money that they invest; angels also help to get their investee businesses "investment ready" for later investors. They also have a signalling effect.

Reviewing the gender composition among angel investors, women angel investors account for less than 10% in many European countries, and many of them have only become angel investors recently. The activity of women angel investors is therefore limited but growing. Less than 10% of the women angel investors in Europe had made more than 11 investments with a very small proportion (3%) having made more than 21 investments. A significant proportion (40%) of the women angel investor respondents had made three to ten investments. One out of four had made two investments (23%) and just over one-quarter (27%) had made only one investment (Tooth 2018). Nevertheless, there is a clear appetite among women investors to back women founders or co-founders. A majority (54%) of women angel investors have invested in at least one company founded by women, with nearly 20% of women angel investors having invested in 3 to 10 women founded companies. In contrast, only a small minority of male investors have backed women led businesses with only a few male angels investing in a significant number of women founders (Tooth 2018).

This highlights the importance of this pool of women angel capital to increase the level of investment in female-founded businesses. Indeed, research indicates "there is a strong propensity for women investors to back women led businesses" (Tooth 2018) which suggests that more women investors means more women investees. Besides bringing more women investment-decision makers to the ecosystem the presence of women as angel investors might therefore be one of the tools to fuel the VC funnel with more women led-startups. As the evidence shows, the presence of women in the angel market, despite being very low, seems to be more relevant than in the VC market.

8. Conclusion: investor, policy and research recommendations

There is a gender issue in the ecosystem with figures showing that venture capital mainly goes to male-led companies. But a more detailed analysis shows that the "success rate" of women-led startups asking for funding compared with women led startups that are funded – is quite similar. It can be argued that the funding rate of women-led businesses should be higher as they show a better performance in terms of revenue generated per dollar invested and turnover generated over time compared with male-led businesses and hence should be the first target for investors. Investors who hold the perception that male-dominated companies perform better are missing the opportunity to enhance their investment returns. Female-led should be a positive criterion in their due diligence.

Based on the evidence presented here, government actions should prioritize increasing the deal flow of female-led startups by:

(a) working upstream to foster high-potential female entrepreneurship,
(b) facilitating the access of women-led startups to the right coaching and investment networks, and not only female ones,
(c) seeking to increase the number and professionalism of women as angel investors, and
(d) creating awareness amongst investors that the criterion of “female-led” could be part of their due diligence as it correlates with a better performance.

Future research should focus on performance, later stage financing and exits to fine-tune the conclusions of this paper and the call for better-targeted policy action.

Note

1. https://pitchbook.com/news/articles/the-vc-female-founders-dashboard.

Acknowledgments

The authors would like to thank Professor Colin Mason for his valuable insights on an earlier version of this paper.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

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