

Skills in European entrepreneurial finance

A survey-based analysis of skills and skills gaps in the VC and PE markets



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and skills gaps in the VC and PE markets**



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Foreword



Marjut Falkstedt
EIF Chief Executive



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Digitalisation is changing the way we work and relate, climate change is altering the way our economies and industries function, and new sectors are growing whilst other more traditional ones might be shrinking. In today's context, Europe's workforce needs to remain agile and flexible.

To this end, the European Commission and the EIF are deploying a dedicated financial instrument under the InvestEU programme, which has been used extensively to support access to finance for education and training. In 2023 – which also coincided with the European Year of Skills – we committed €57 million with partners in this field.

However, beyond our own support, at the EIF, we also want to listen to the market. Extending our annual venture capital and private equity mid-market survey with questions on skills and skills gaps in the European ecosystem has prompted important new insights at both fund manager and portfolio company level.

Do fund managers have the necessary sustainability and ESG-related knowledge? How do portfolio companies perceive skills shortages when hiring their own workforce? Are we all feeling 'skilled enough' to excel in our jobs in times when the demand for AI skills, among others, has been growing at an unprecedented pace in the world around us?

Our EIF VC Survey 2023 and the EIF PE Survey 2023 – which have formed the basis of this study – included anonymised responses from 471 VC fund managers and 199 PE mid-market fund managers from across Europe. Some of them, but not all, have been backed by the EIF, thus maintaining a balanced outcome of our surveys. Find out more about the methodology and respondents in the 'Further information' chapter (as of p.36).

The EIF equity surveys are, to the best of our knowledge, the largest regular surveys of VC/PE fund managers across Europe (if not worldwide). Therefore, we recommend the findings of our research-based market analysis to policymakers, fund managers and practitioners in the European equity ecosystem, and those interested in how we can shape the agenda of our future skills needs.

At the EIF, we remain committed to enabling everyone to develop skills for the new opportunities ahead. We wish you an insightful reading.

Key findings

While the importance attributed to specific skills differs among VC and PE Mid-Market fund managers, a common concern is that sustainability-related knowledge and STEM skills are currently missing at investor level.

Venture Capital (VC) and Private Equity Mid-Market (PE MM) respondents differ in the importance they attribute to the skills an investor team should have. According to VC fund managers, professional networking, analytical, problem-solving, and communication skills as well as industry knowledge are considered as the most important skills. For PE MM fund managers though, leadership & people management, problem-solving, analytical, and negotiation skills as well as industry knowledge make up the top-5 of most relevant skills at the investor-team level.

Both VC and PE MM respondents consider sustainability-related knowledge and science, technology, engineering and mathematics (STEM) skills as the main skills currently missing within their teams.

Training is the main means to fill soft-skills gaps. Mentoring is preferred to fill negotiation, leadership & people management, and professional networking skills gaps.

To fill the gap of experience in their teams, both VC and PE MM fund managers mention training as the main means when these gaps refer to soft skills. New hiring or outsourcing is used to fill gaps arising from industry knowledge, legal, and STEM skills.

Mentoring is preferred to fill negotiation and leadership & people management skills gaps for VCs, as well as professional networking skills gaps for PE MM fund managers.

Skills are important considerations when hiring junior and senior talent. Junior staff are mostly evaluated based on team culture fit, personality, and a relevant skillset. In addition to these, senior recruits are also evaluated on the basis of their work experience and network.

A portfolio firm's management team is the most important investment selection criterion for both VC and PE MM fund managers.

Indeed, the presence of a committed and high-quality management team at portfolio-firm level increases the chances of high returns from an investment.

Respondents do not perceive a lack of skilled workforce in their respective VC/PE firms. By contrast, the number of high-quality entrepreneurs is considered as an important challenge, particularly for the VC business; while recruiting skilled professionals is among the top challenges facing VC/PE-backed companies.

Both PE MM and VC fund managers assign a high value on portfolio company performance.

Leadership & people management is the most appreciated skill at portfolio company level and also the one largely missing.

Both VC and PE MM fund managers consider leadership & people management to be the most important skill that a portfolio company's management team should have, followed by commitment/passion and industry knowledge.

Leadership & people management is also largely missing in VC/PE-backed firms and represents the first most important skills gap, followed by selling/pitching skills (according to VC fund managers) and strategic planning skills (according to PE MM fund managers).

In light of the aforementioned evidence, it is therefore not surprising that both VC and PE MM respondents agree that leadership & people management skills will be in most demand in their portfolio companies in the near future. VC fund managers also rank highly selling/pitching and problem-solving skills; while for PE MM fund managers, problem-solving and strategic planning skills complete the top-3.

Fund managers build their teams according to the importance they assign to the different skills. By contrast, at portfolio company level, they tend to assign higher importance to the skills missing in the management team of their portfolio companies.

When fund managers identify a skills gap in their portfolio companies, they seem to overreact in providing importance to this skill.

The future importance that fund managers assign to a skill for the management team of their portfolio companies is always in line with the importance that they assign to this skill today, but higher in case a related skills gap is currently identified in the management team of their portfolio companies.

Investor and portfolio company teams skills can to a certain extent complement each other.

Fund managers identify greater skills gaps in the management team of their portfolio companies, while they perceive their own investment teams to be more endowed with these skills.

For most of the skills considered, their perceived importance at investor-team level is always significantly higher than their perceived importance at portfolio company level.

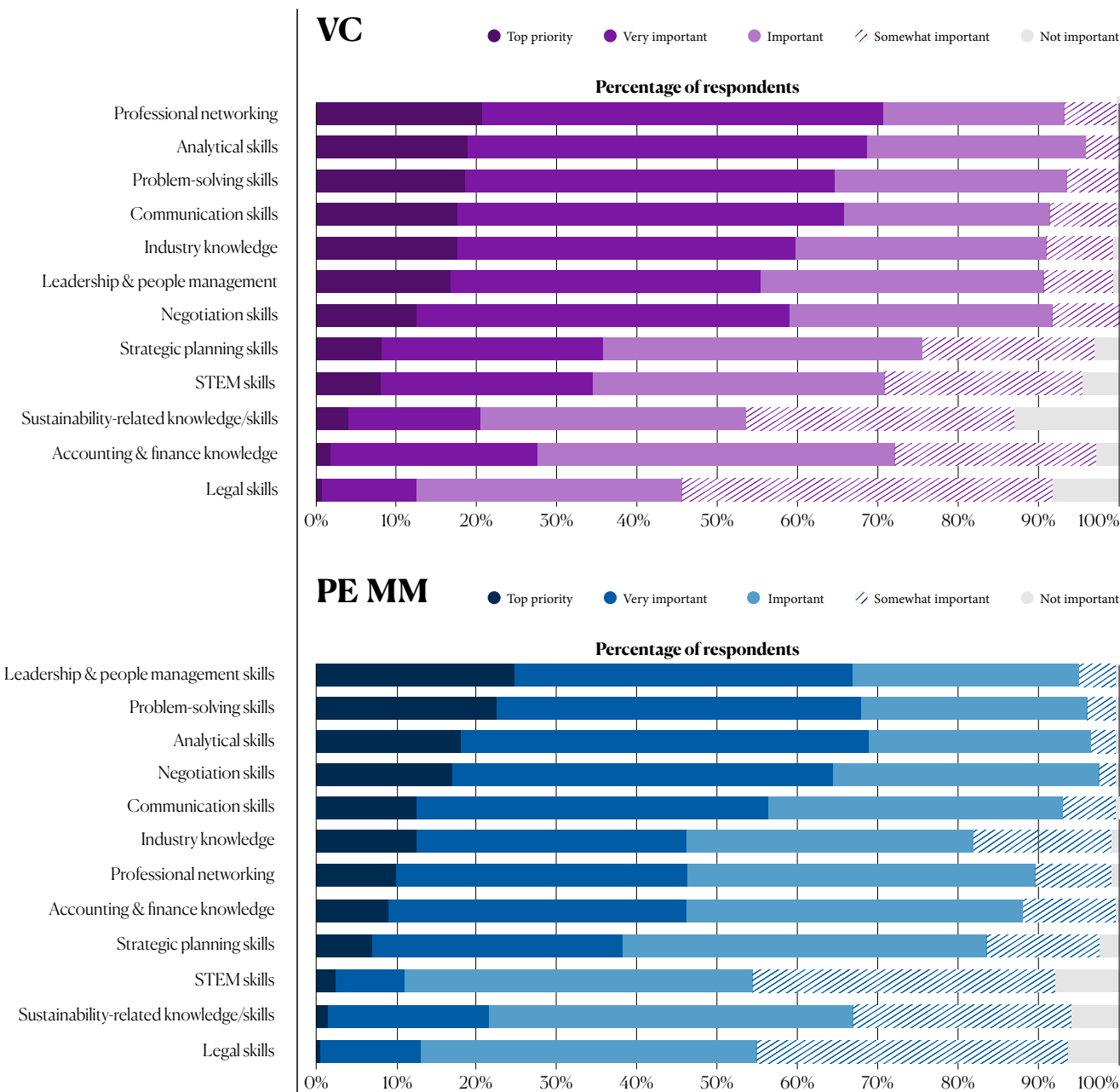
Jointly analysing skills gaps in both the investor team and in the portfolio company team enables us to define clusters of critical skills, i.e. on the one hand, skills for which portfolio companies need to be on average autonomous or self-sustaining; and on the other hand, skills in which fund managers can support and provide value-added to portfolio companies.

The perception of skills gaps (in the investor team as well as in the portfolio company team) can vary with a range of investor/firm characteristics.



Skills and skills
gaps at *investor*
team level

Most important skills for an investor team



Q: Please indicate the importance of the following skills for a VC/PE mid-market team.

“STEM” stands for Science, Technology, Engineering and Mathematics;

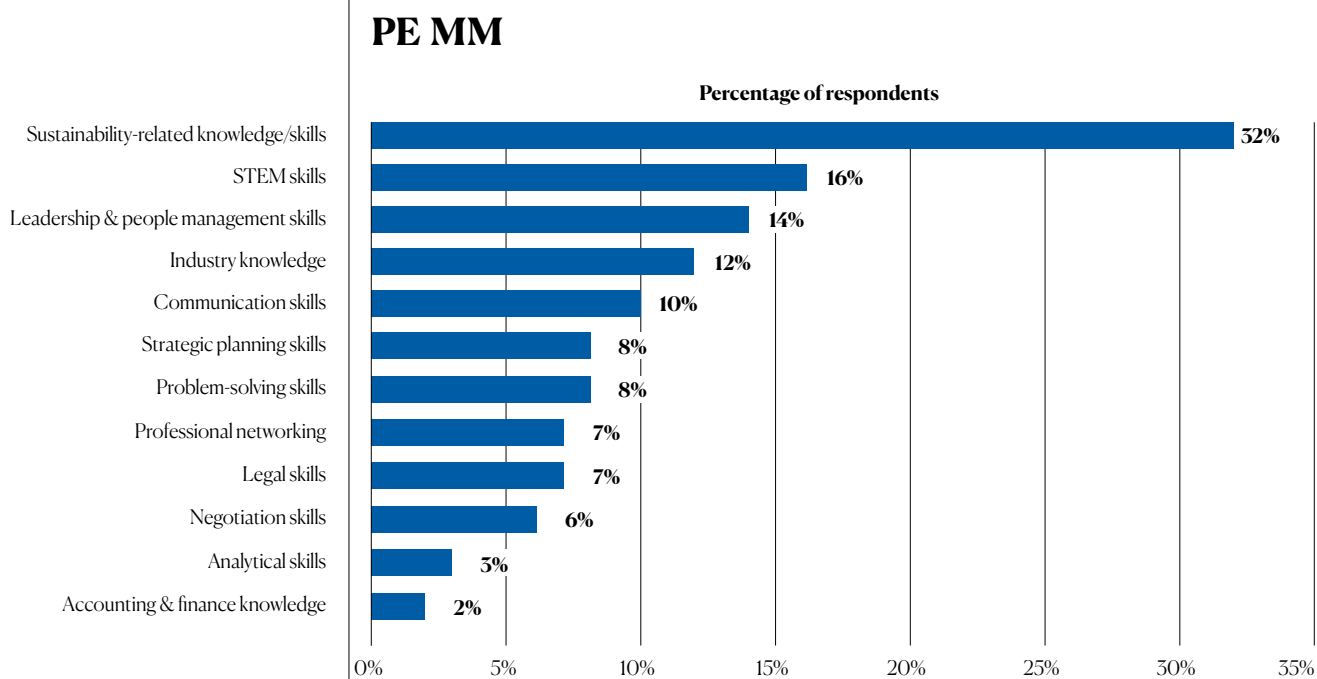
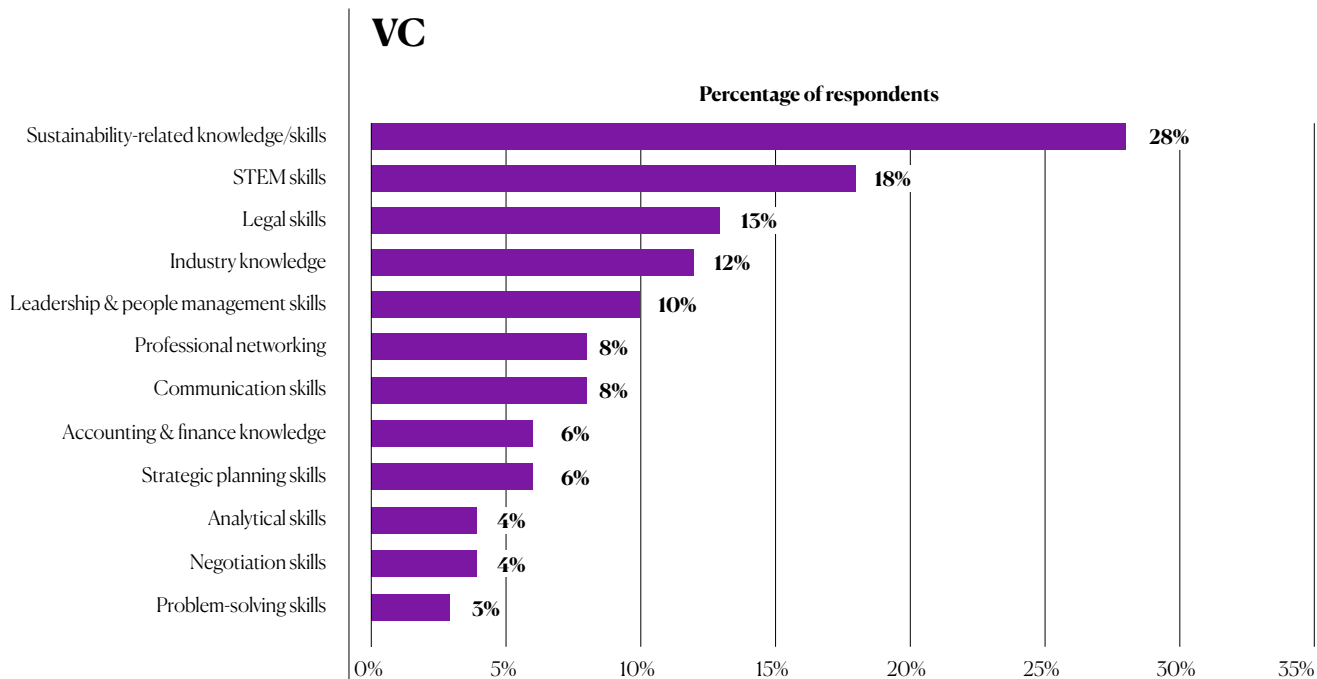
“Sustainability-related knowledge/skills” relates to specific scientific and technical green skills or knowledge and understanding of sustainability and climate action.

VC and PE MM fund managers diverge in their opinions about the most important skills in their respective investor teams.

According to VC fund managers, professional networking, analytical, problem-solving, and communication skills as well as industry knowledge are considered as the most important skills for a VC team.

For PE MM fund managers though, leadership & people management, problem-solving, analytical, negotiation and communication skills make up the top-5 of the most relevant skills at the investor-team level.

Skills missing in the investor team

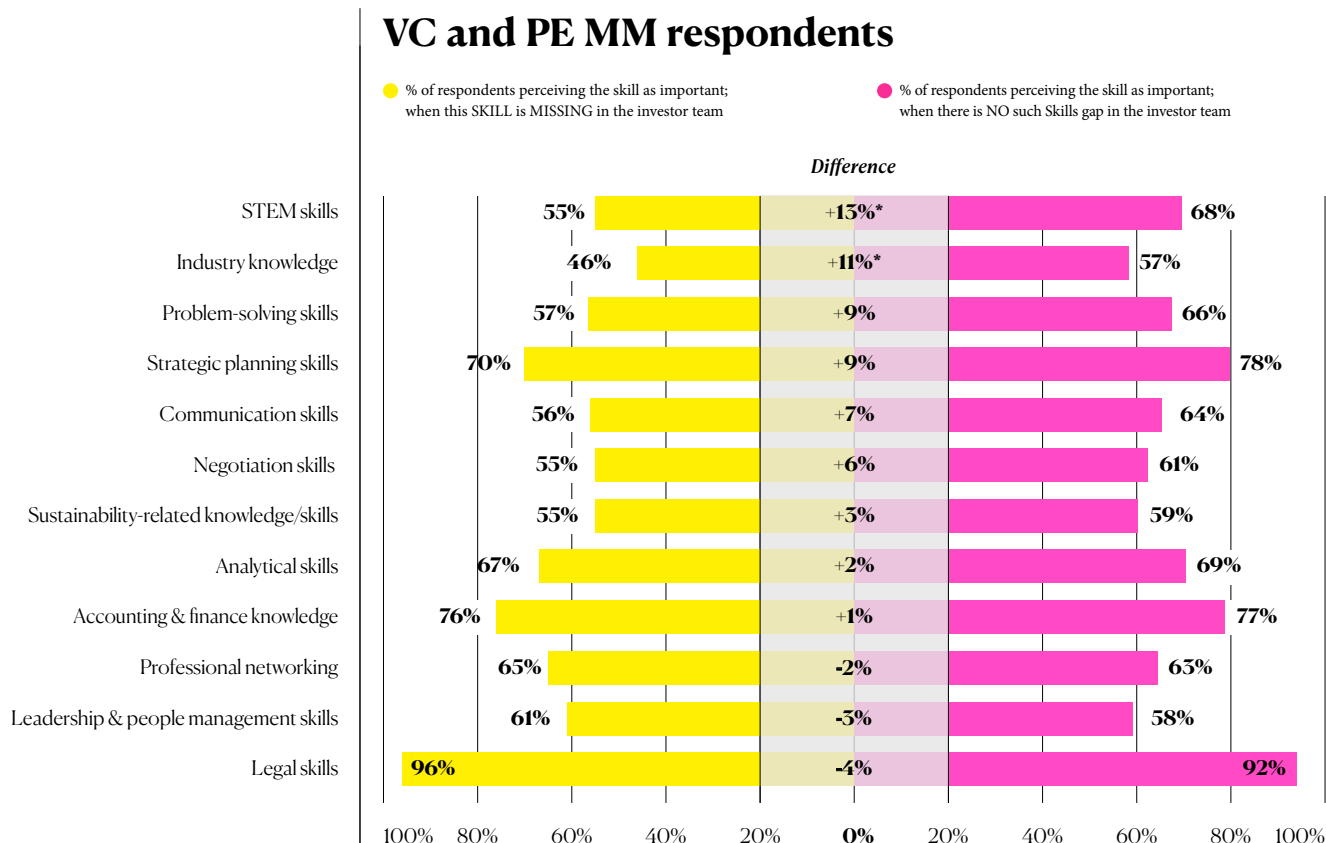


Q: Among the skills that you perceive important, which ones are missing at the moment in your team? (multiple selection possible)

Sustainability-related and STEM skills are missing the most among many VC and PE MM teams.

Both VC and PE MM respondents consider sustainability-related knowledge and STEM skills as the main skills currently missing within their teams.

Perceived importance of a skill for an investor team relative to the existence of a gap (or not) for this skill in the team



Do investors possess the skills perceived as most important?

To explore this, we identify two groups for each skill:

- Fund managers identifying a particular skills gap in their investment team
- Fund managers NOT identifying a skills gap in their investment team

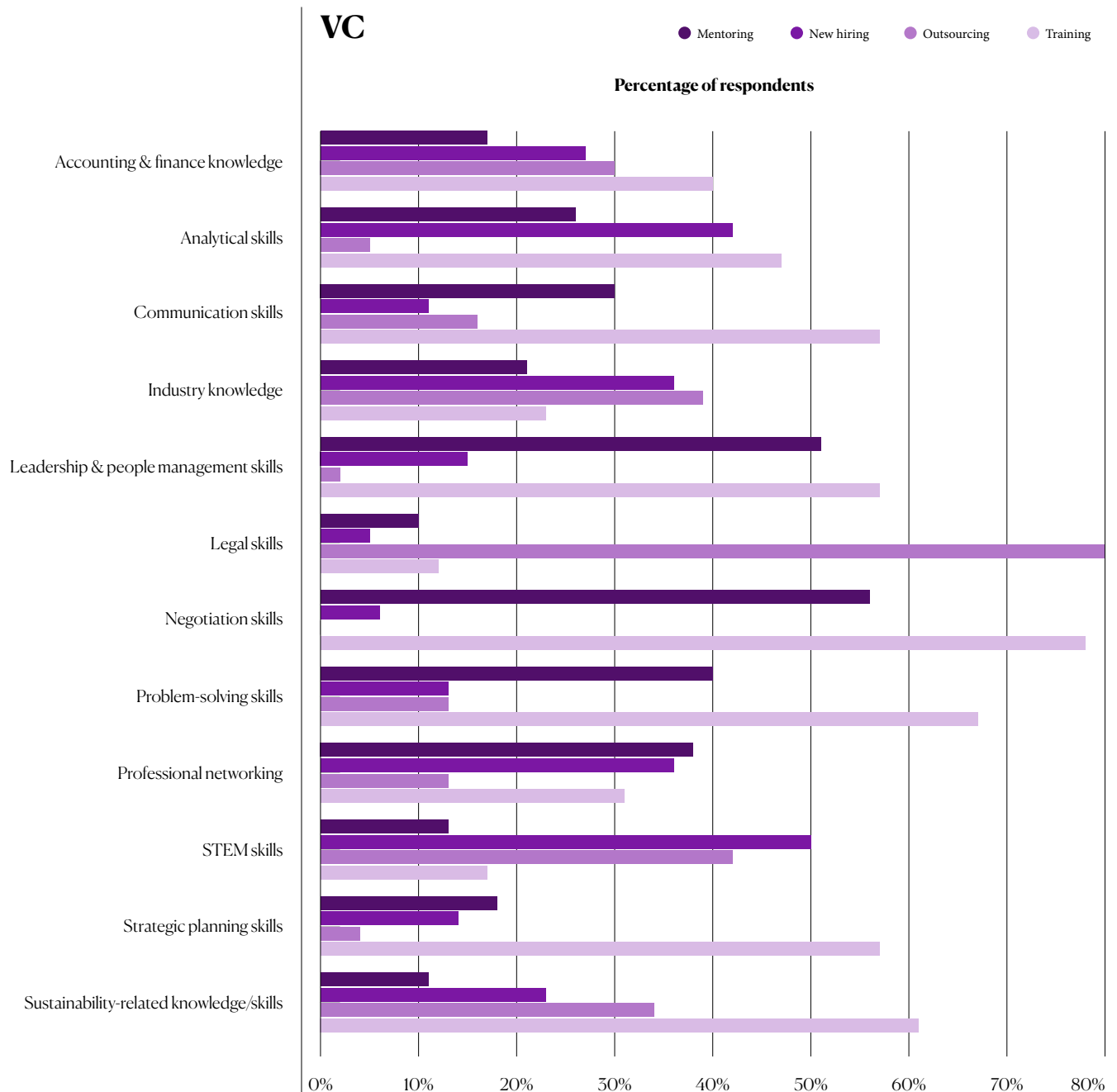
For each group, we consider the % of respondents perceiving a skill as important **when this skill is present** (i.e. no skills gap in the team is identified) **minus** the % of respondents perceiving a skill as important **when this skill is currently missing** (i.e. a skills gap in the team is identified). In the graph, we report the **value of these differences** and we indicate with an asterisk (*) when these become significant from a statistical point of view. The analysis is based on the pooled sample of VC and PE MM respondents.

Fund managers seem to build their team according to the importance they assign to the different skills.

Overall, there is some evidence that fund managers tend to assign relatively higher importance to the skills they are endowed with in their investment team.

However, the reported differences are not that large; and they only become statistically significant in the case of **STEM skills and industry knowledge**. The analysis is based on the pooled sample of VC and PE MM respondents.

Means to fill skills gaps in the investor team



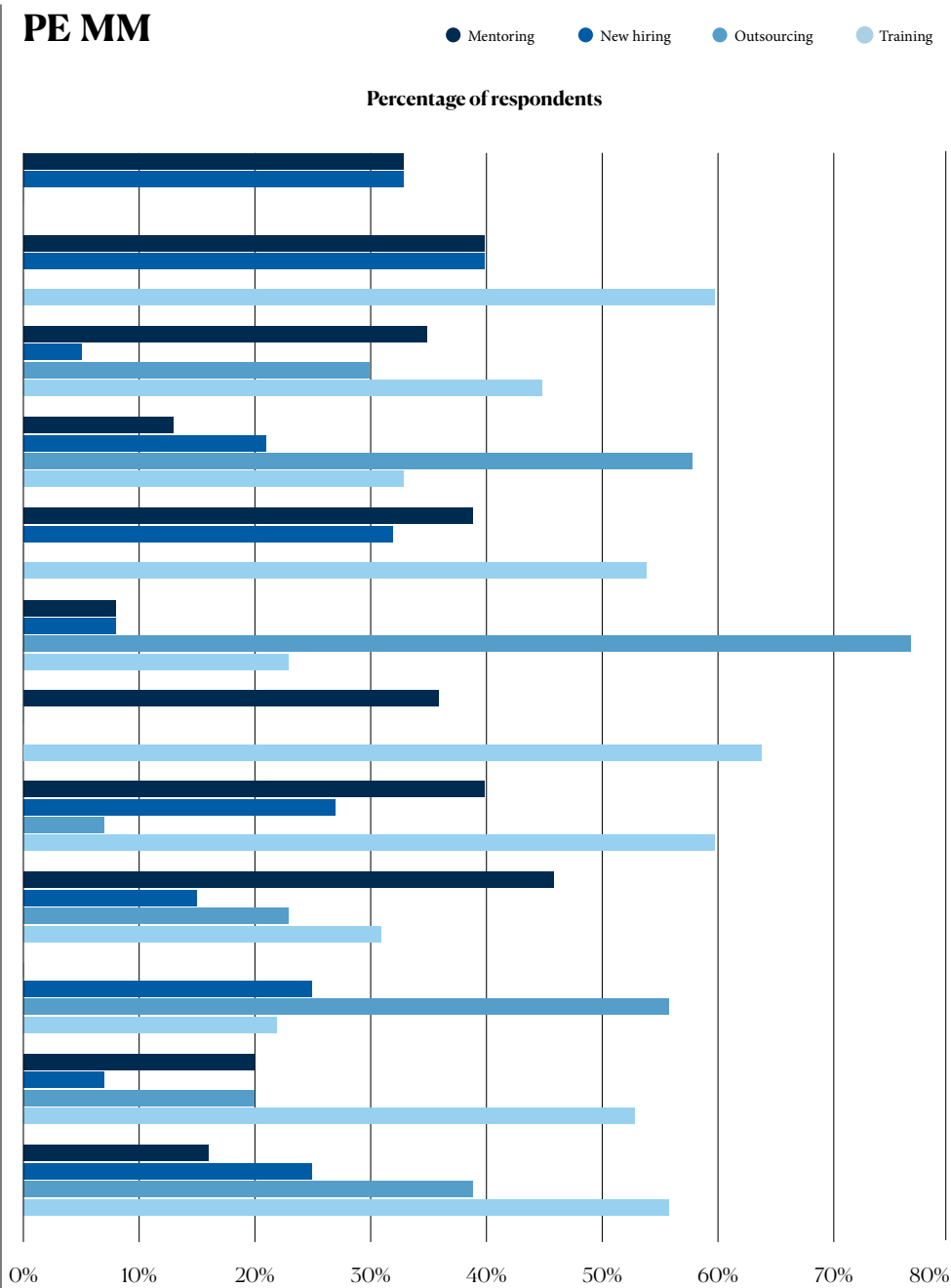
Q: How does your firm intend to fill the gap of experience in the team? (multiple selection possible; question asked only to those respondents who identified a gap in the respective skill in their team)

Training is the main means to fill soft-skills gaps, while new hiring or outsourcing is used to fill gaps arising from industry knowledge, legal and STEM skills.

Both VC and PE MM fund managers mention training as the main means to fill soft-skills gaps (e.g., leadership & people management, problem-solving, communication,

Means to fill skills gaps in the investor team

Q: How does your firm intend to fill the gap of experience in the team? (multiple selection possible; question asked only to those respondents who identified a gap in the respective skill in their team)

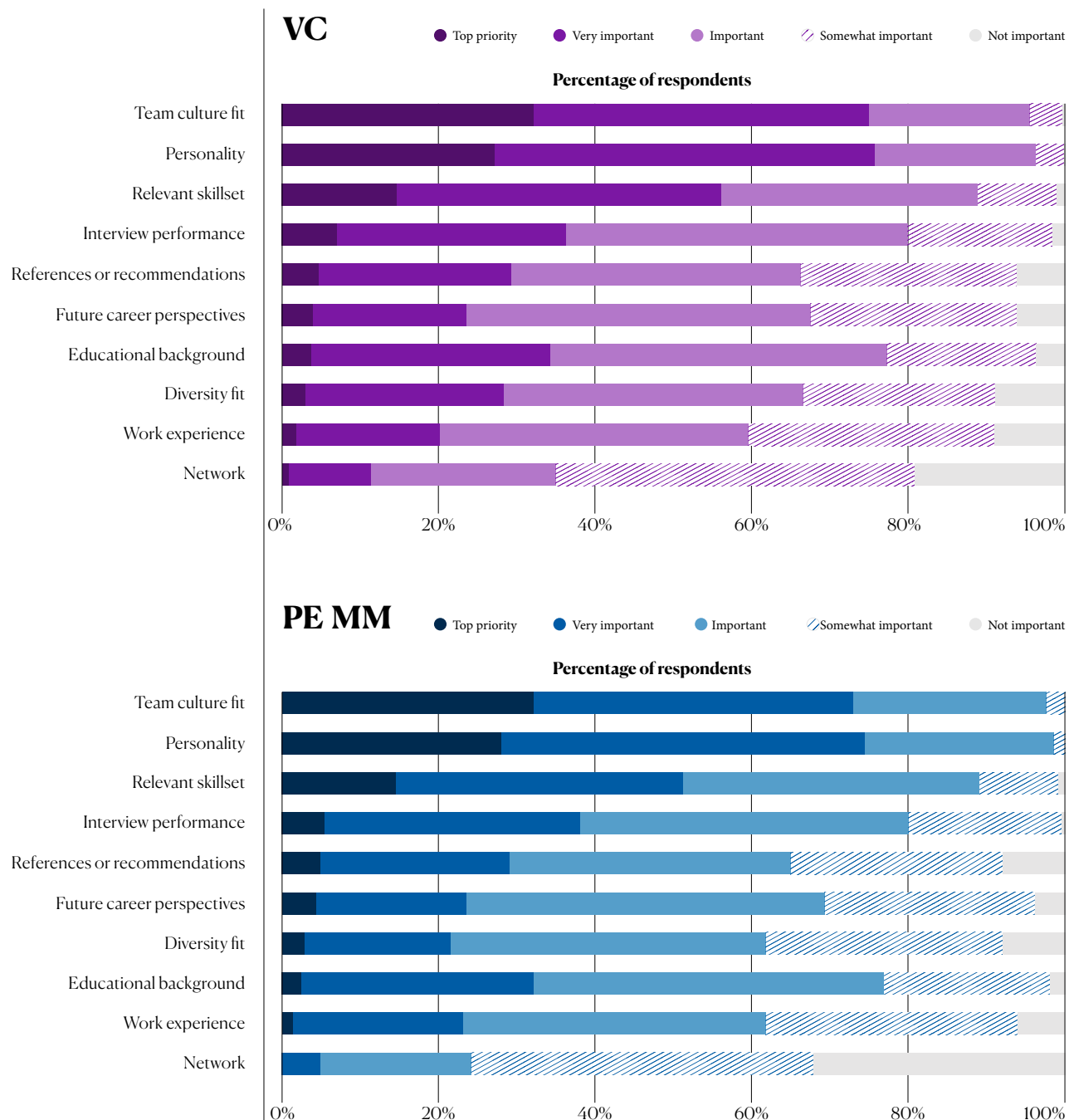


negotiation, and strategic planning skills). Training is also an important means to fill analytical skills gaps.

New hiring or outsourcing is used to fill gaps arising from industry knowledge, legal, and STEM skills.

Mentoring is preferred to fill negotiation and leadership & people management skills gaps for VCs, as well as professional networking skills gaps for PE MM fund managers.

Qualities considered when hiring junior talent

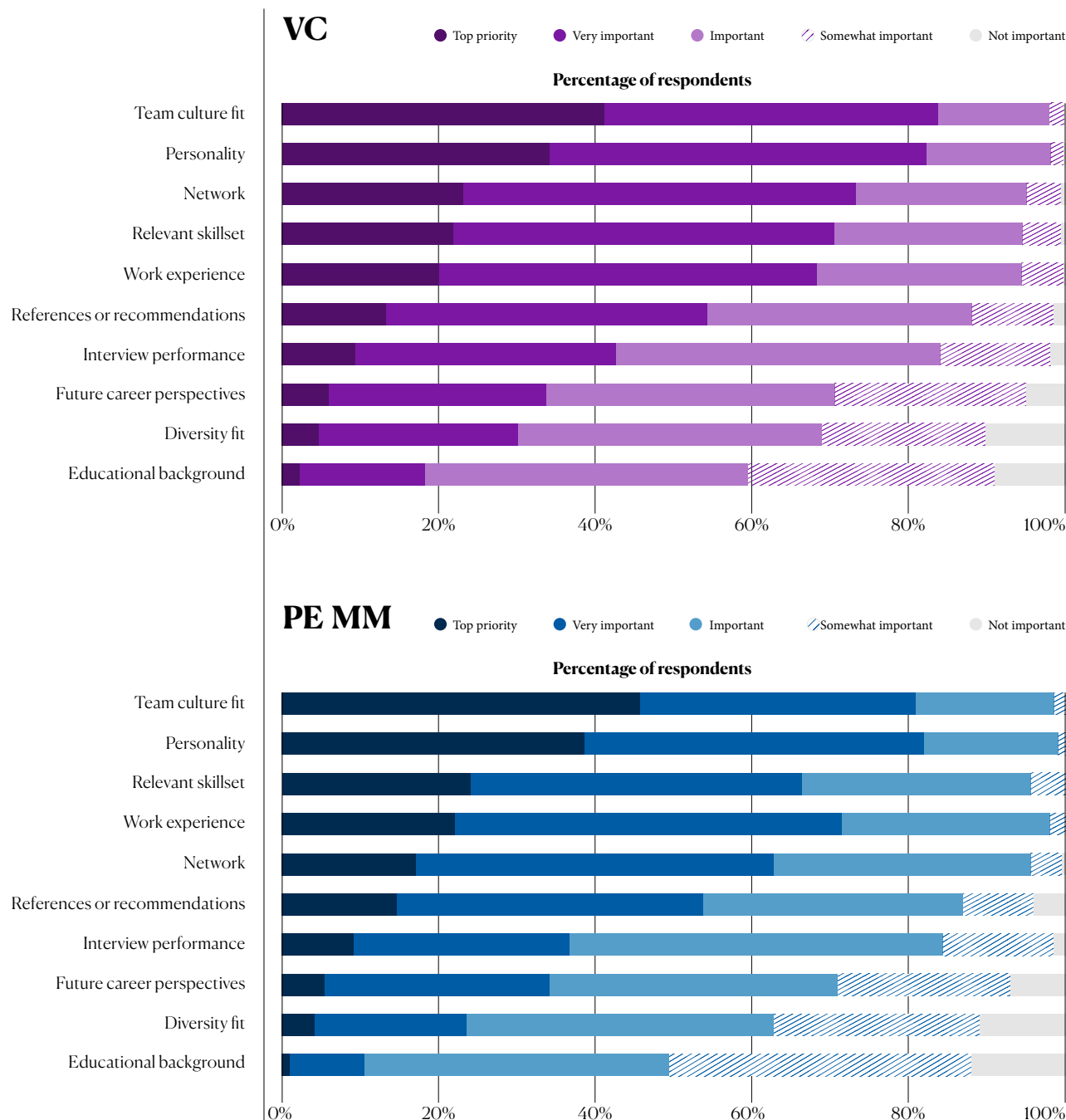


Q: What are the most important qualities when hiring a junior talent?

Team culture fit and personality are the most important qualities when hiring junior talent.

Team culture fit and personality are the most important qualities when hiring a junior talent, followed by a relevant skillset. Interview performance still ranks high in both VC and PE MM assessments.

Qualities considered when hiring senior talent

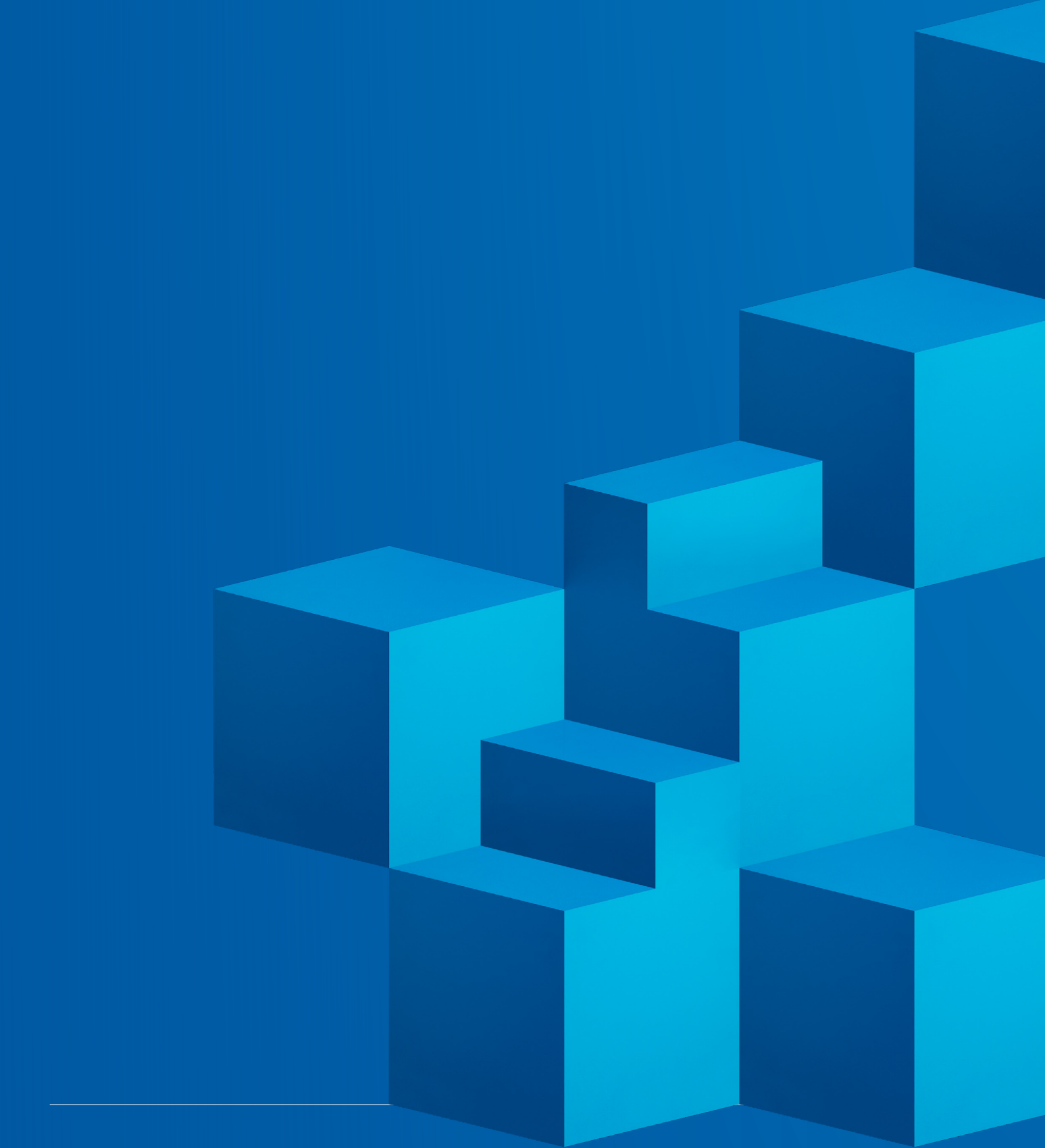


Q: What are the most important qualities when hiring a senior talent?

In addition to team culture fit and personality, network and work experience also matter for senior recruits.

Team culture fit and personality are the most important qualities when hiring a senior talent.

In addition to these, senior recruits are also evaluated on the basis of their work experience and network – and much less so on their educational background.

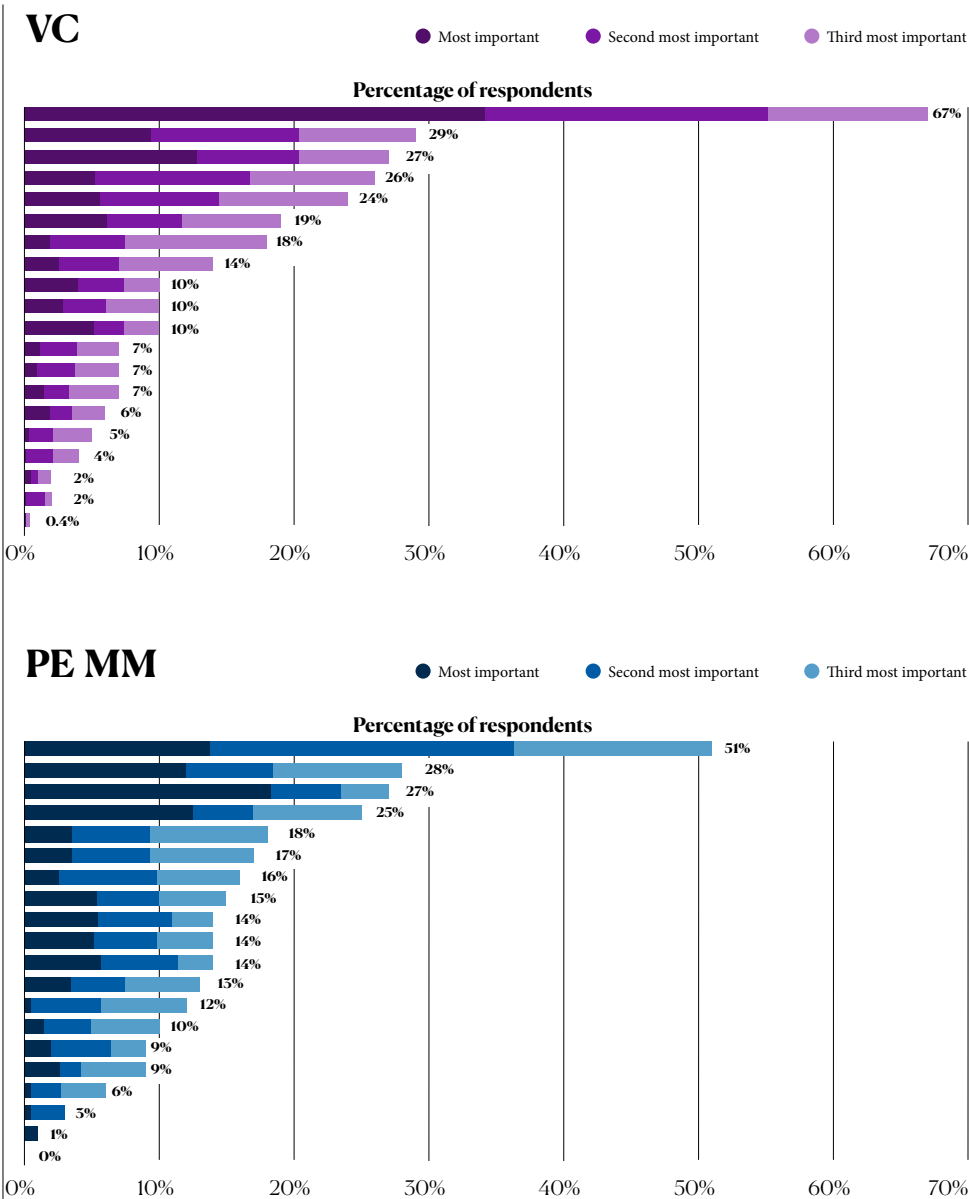


Skills at *portfolio*
company level

Investment selection criteria

Q: Considering your firm's overall activity, what are your most important investment selection criteria? (multiple selection possible)

Note: The graphs show the total percentage of respondents with respect to the three most important investment selection criteria.

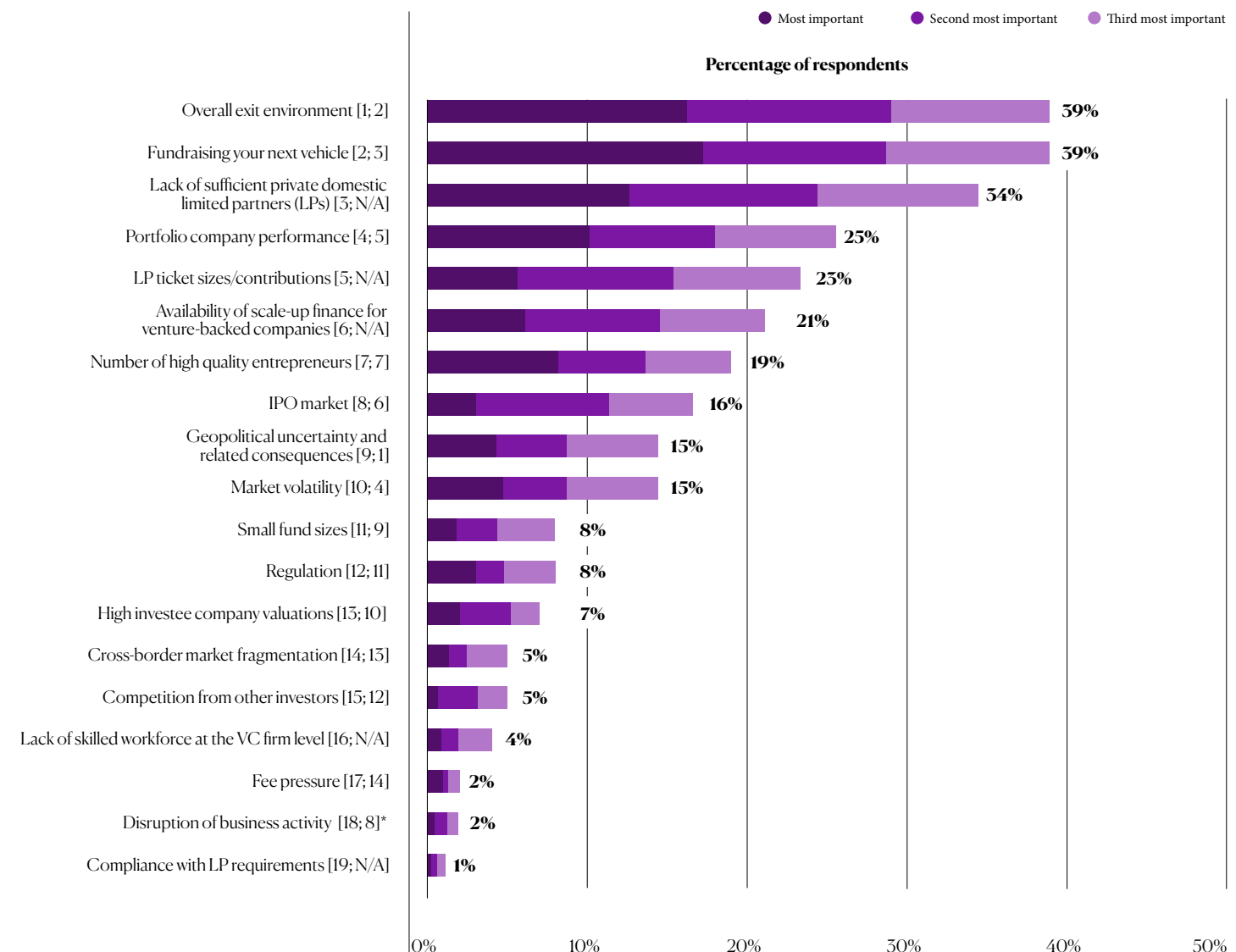


The most important investment selection criterion for both VC and PE MM fund managers is the investee's management team.

The investee's management team is the most important investment selection criterion for both VC and PE MM fund managers. Hence, the skills and personalities in a (potential) investee company's management team seem crucial for investment decisions.

Technology ranks second for VC fund managers, while business models seem to be of higher importance for PE MM fund managers. The strategic fit with fund orientation is the third most important selection criterion for both VC and PE MM fund managers.

High quality entrepreneurs and skilled workers as challenges for VC business



*Disruption of business activity, for example due to Covid-19 measures, sanctions or travel restrictions.

Q: Please select the biggest challenges you currently see in the venture capital business. (multiple selection possible)

Note 1: The first number in brackets [a;b] corresponds to the current (i.e. in 2023) ranking of the challenge, while the second number represents the respective ranking of the challenge in the *EIF VC Survey 2022*.

Note 2: The graph shows the total percentage of respondents with respect to the three most important challenges.

Note 3: Several categories were renamed or added over the years. For example, as of 2023, the categories "Availability of scale-up finance for venture-backed companies", "Lack of skilled workforce at the VC firm level", "Lack of sufficient private domestic limited partners (LPs)" and "LP ticket sizes/contributions" were introduced.

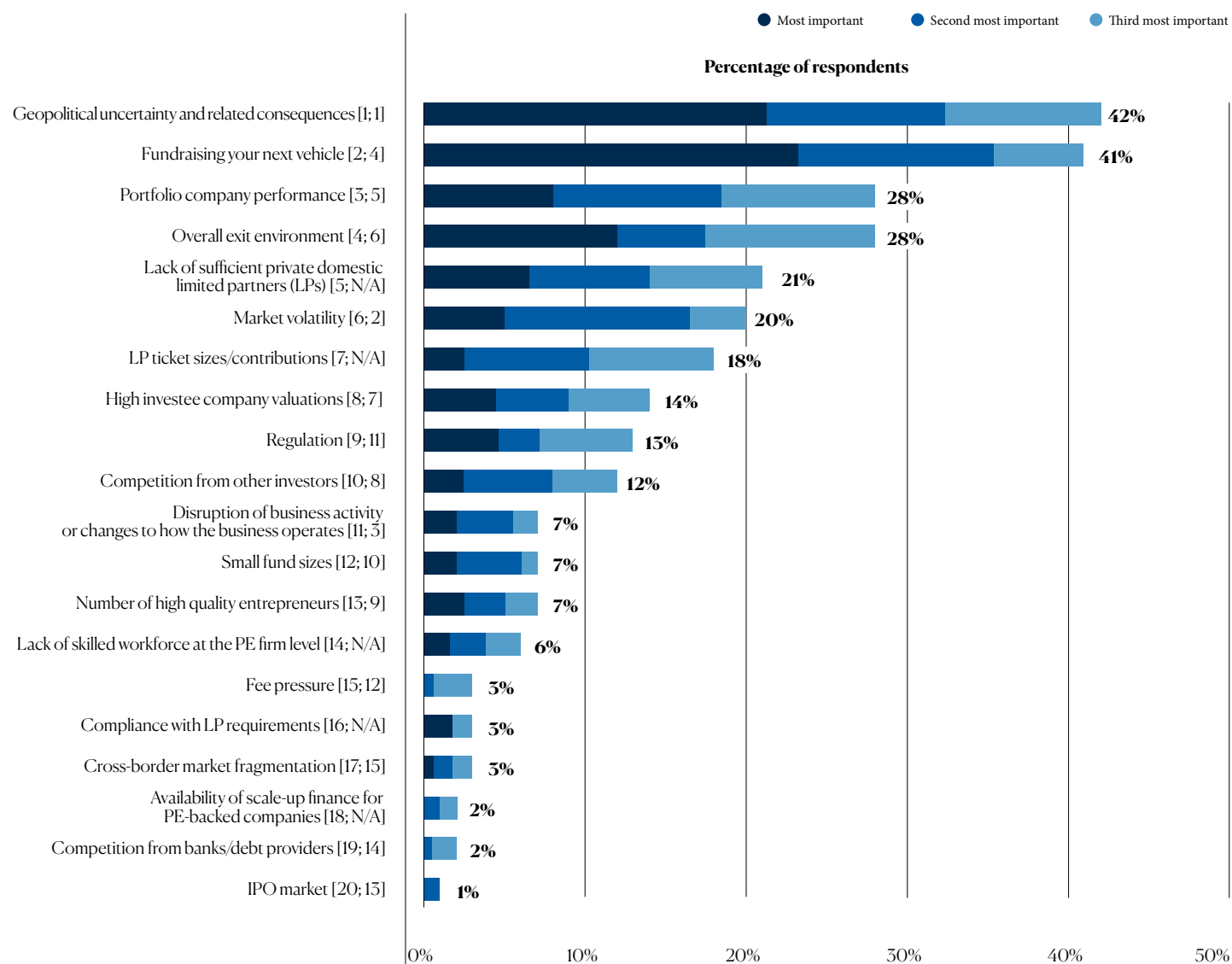
The number of high-quality entrepreneurs represents an important challenge for the VC business.

The "Number of high-quality entrepreneurs" represents an important challenge for the VC business and is ranked seventh among the top challenges.

Reaching out and selecting high-quality entrepreneurs is intrinsically related to the challenge of having portfolio companies performing well ("Portfolio company performance" is the fourth major challenge facing the VC business).

Conversely, the "Lack of skilled workforce at the VC firm level" is not seen as a big challenge. This indicates the presence of a highly-skilled professional workforce in most of the respondents' VC management teams.

High quality entrepreneurs and skilled workers as challenges for PE MM business



Q: Please select the biggest challenges you currently see in the PE mid-market business. (multiple selection possible)

Note 1: The first number in brackets [a;b] corresponds to the current (i.e. in 2023) ranking of the challenge, while the second number represents the respective ranking of the challenge in the *EIF PE MM Survey 2022*.

Note 2: The graph shows the total percentage of respondents with respect to the three most important challenges.

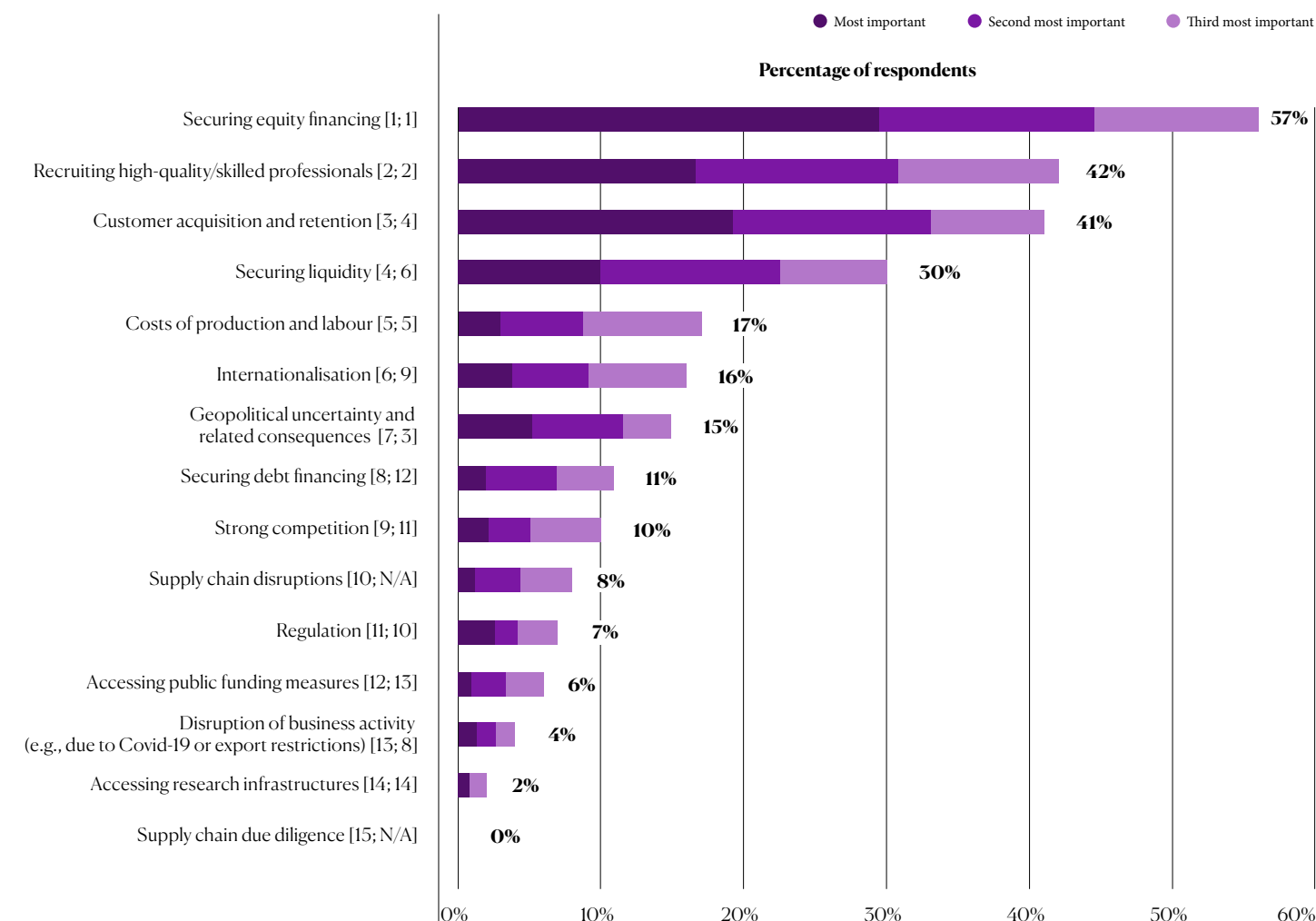
Note 3: Several categories were renamed or added over the years. For example, as of 2023, the categories "Availability of scale-up finance for PE-backed companies", "Lack of skilled workforce at the PE firm level", "Lack of sufficient private domestic limited partners (LPs)" and "LP ticket sizes/contributions" were introduced.

The number of high-quality entrepreneurs and the lack of skilled workforce are not important challenges for the PE MM business.

PE MM respondents do not consider the "Number of high-quality entrepreneurs" as a major challenge for their business. This is ranked 13th among the top challenges (compared to the seventh place for VCs). However, even if this is not regarded as a main challenge, as shown earlier, PE MM fund managers place the management team of potential investees at the top of their investment selection criteria.

The "Lack of skilled workforce at the PE firm level" is not seen as a major challenge for the PE MM business either. Same as with VC, this reflects the presence of highly skilled professionals in most of the respondents' PE management teams.

Skilled workforce as a challenge for VC portfolio companies



Q: Please select the biggest challenges you currently see for your venture portfolio companies. (multiple selection possible)

Recruiting high-quality professionals is a key challenge for VC portfolio companies.

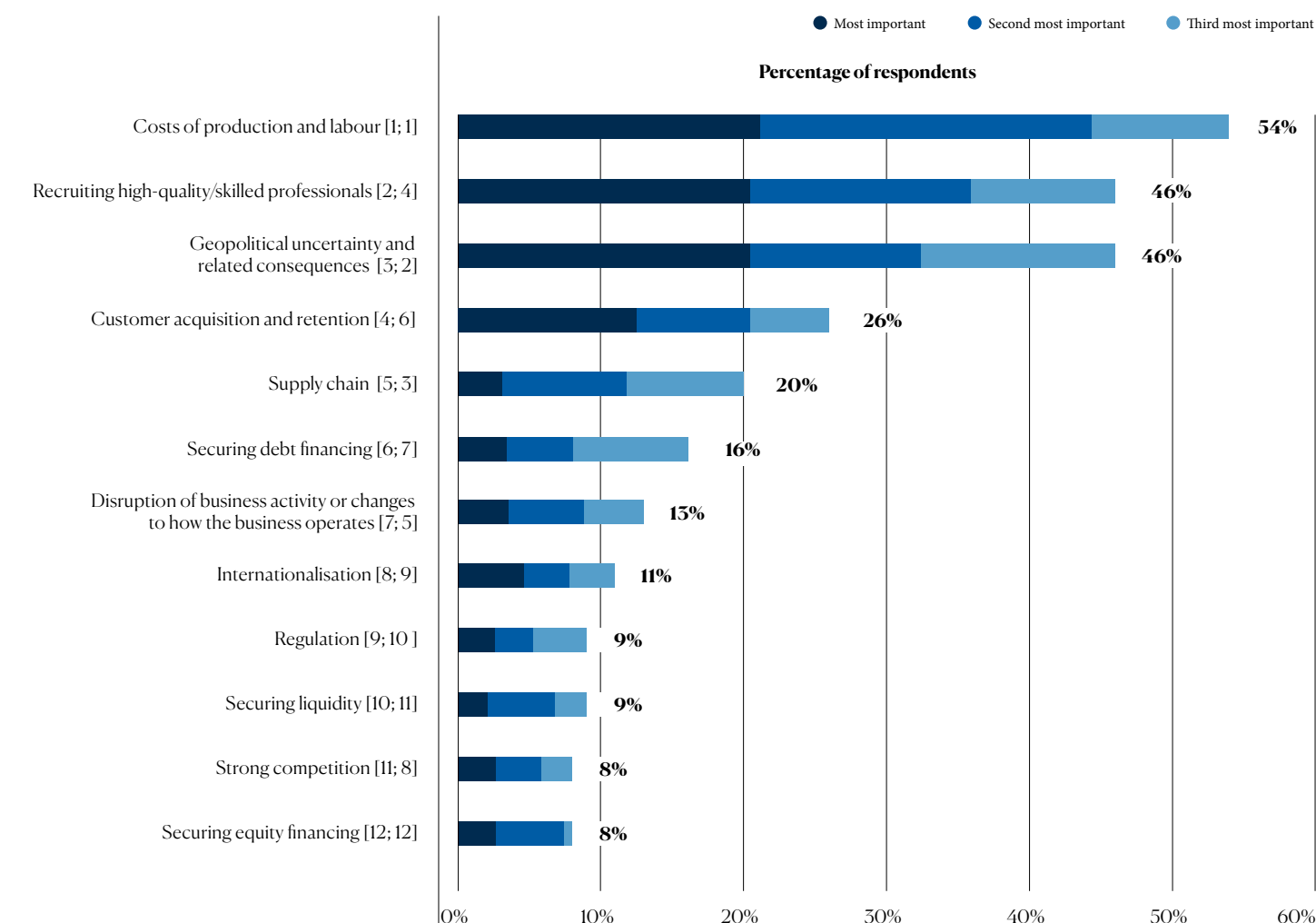
“Recruiting high-quality professionals” is seen as a very important challenge for VC-backed companies (42% of respondents), ranked second after “Securing equity financing”.

Note 1: The first number in brackets [a;b] corresponds to the current ranking of the challenge while the second number represents the respective ranking of the challenge in the *EIF VC Survey 2022*.

Note 2: The graph shows the total percentage of respondents with respect to the three most important challenges.

Note 3: Some categories were not available each year in the same way (e.g., the category “Supply chain” from previous years was split into “Supply chain disruptions” and “Supply chain due diligence” in 2023).

Skilled workforce as a challenge for PE MM portfolio companies



Q: Please select the biggest challenges you currently see for your portfolio companies. (multiple selection possible)

Recruiting high-quality professionals is a key challenge for PE MM portfolio companies too.

“Recruiting high-quality professionals” is seen as a very important challenge for PE MM portfolio companies (46% of respondents), ranked second after “Costs of production and labour”.

While the availability of high-quality entrepreneurs was seen as a challenge mainly for the VC business, there is consensus among survey participants that recruiting skilled professionals is among the top challenges facing both VC- and PE-backed companies.

Indeed, the presence of a committed and high-quality team at portfolio company level increases the chances of high returns from the investment.

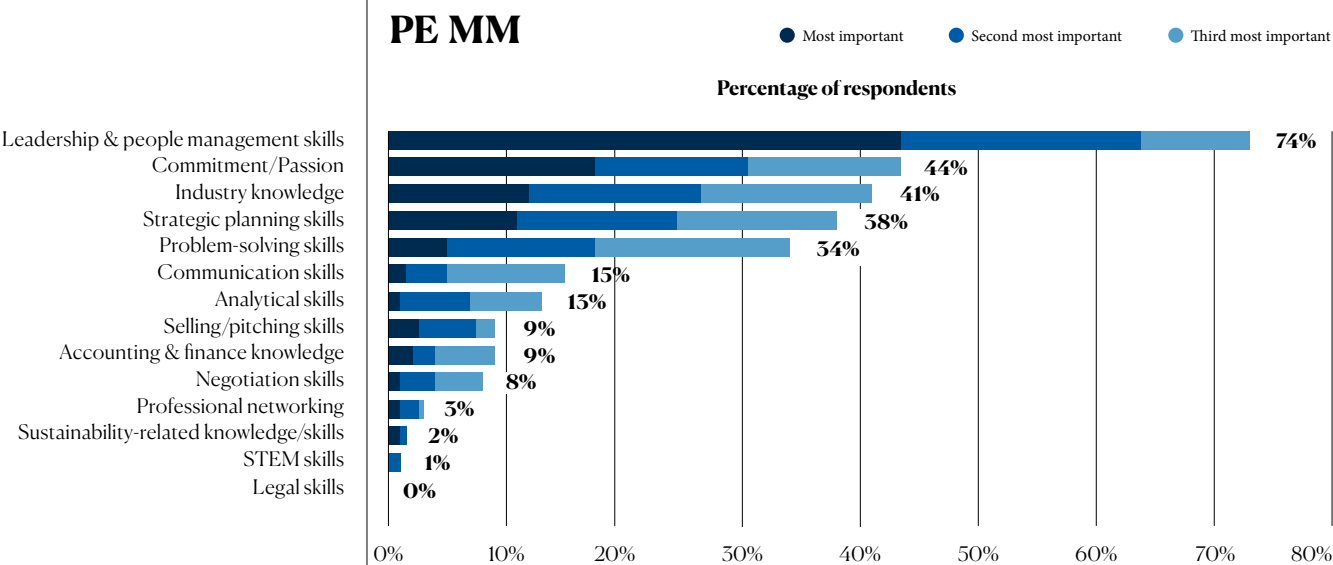
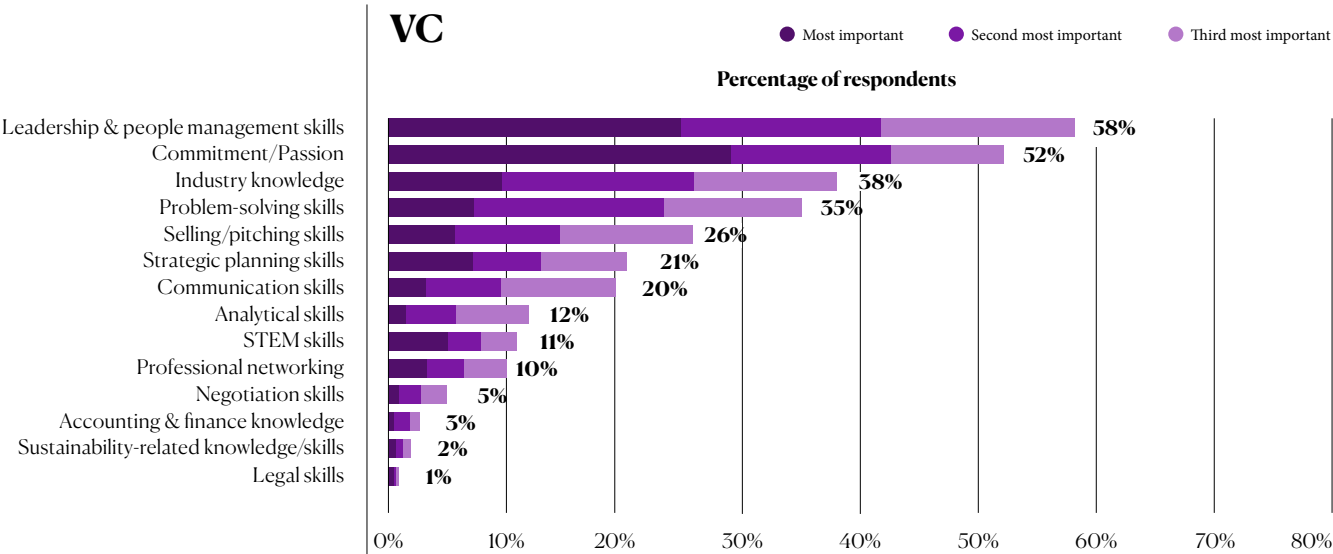
But the fact that finding high-quality entrepreneurs and professionals constitutes such a major challenge is then in line with why the management team of potential investees ranks so highly among fund managers' investment selection criteria.

Note 1: The first number in brackets [a; b] corresponds to the current ranking of the challenge while the second number represents the respective ranking of the challenge in the EIF PE Mid-Market Survey 2022.

Note 2: The graph shows the total percentage of respondents with respect to the three most important challenges.

Note 3: Some categories were not available each year in the same way (e.g., the category “Supply chain” from previous years was split into “Supply chain disruptions” and “Supply chain due diligence” in 2023).

Most important skills for the management team of portfolio companies



Q: Which are the most important skills for the management team of your portfolio companies? (multiple selection possible)

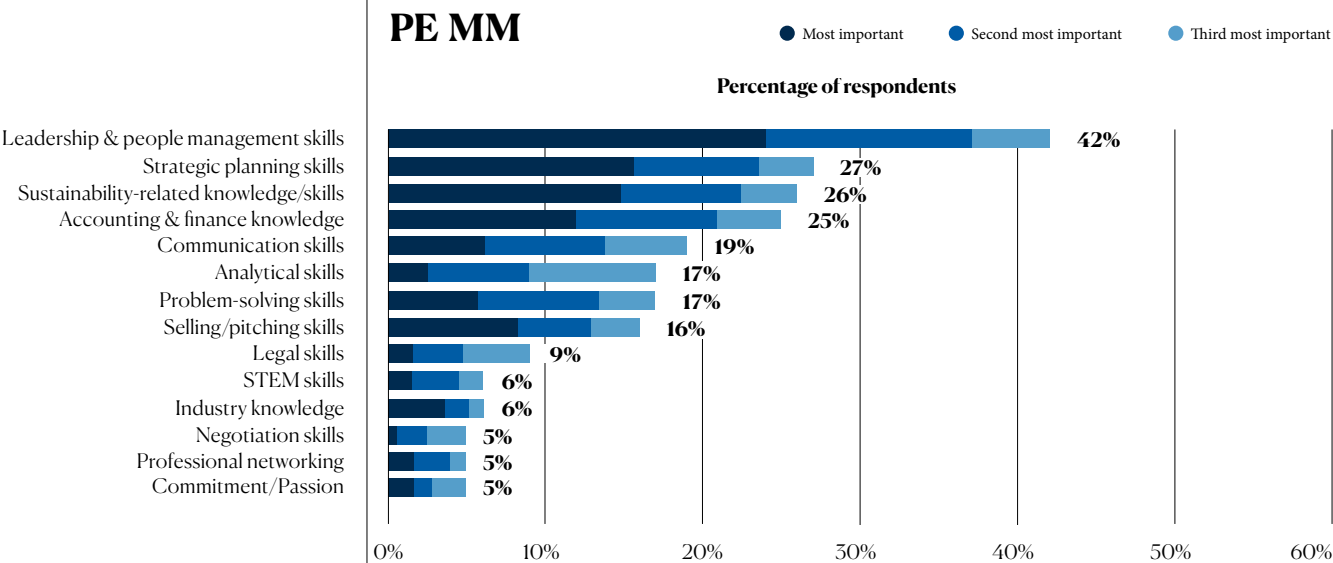
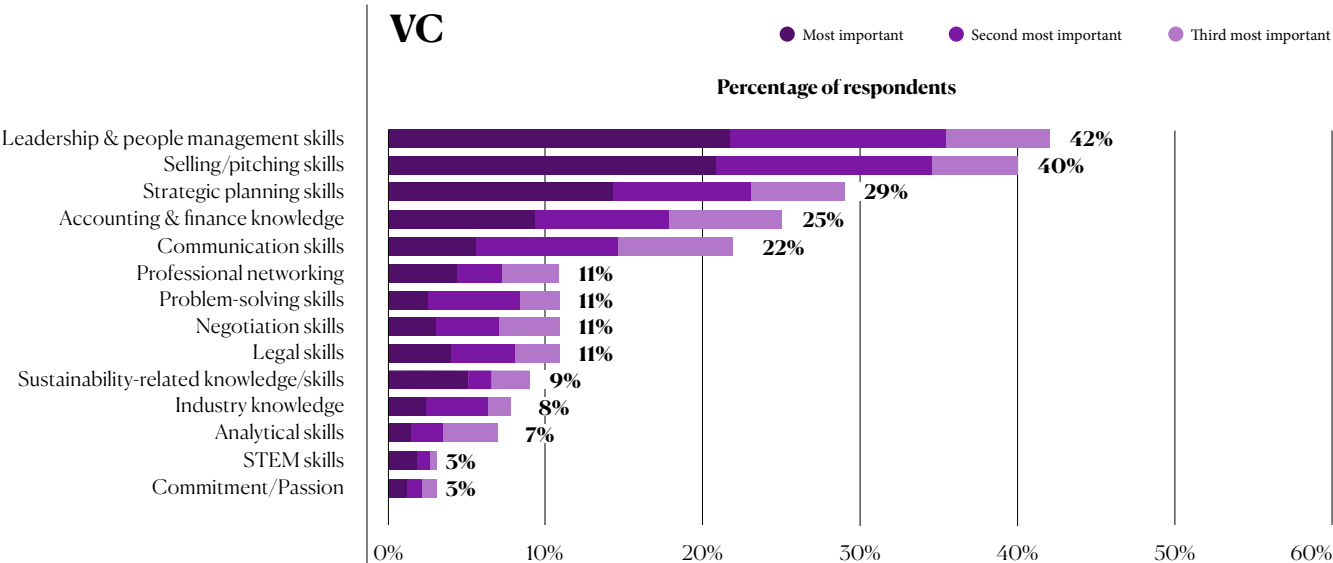
Leadership & people management is the most important skill for the management team of portfolio companies.

Both VC and PE MM fund managers consider leadership & people management to be the most important skill that a portfolio company’s management team should have, followed by commitment/passion and industry knowledge.

VCs consider selling/pitching skills as much more important for the management teams of their portfolio companies than PE MM fund managers do, who instead put a comparatively higher emphasis on strategic planning skills.

Note: The graphs show the total percentage of respondents with respect to the three most important skills.

Skills gaps in the management team of portfolio companies



Q: Which are the most common skills gaps of the management team of portfolio companies you have interacted with? (multiple selection possible)

Leadership & people management is the most important skills gap for VC/PE-backed firms

Leadership & people management is largely missing in VC/PE-backed firms and represents the first most important skills gap.

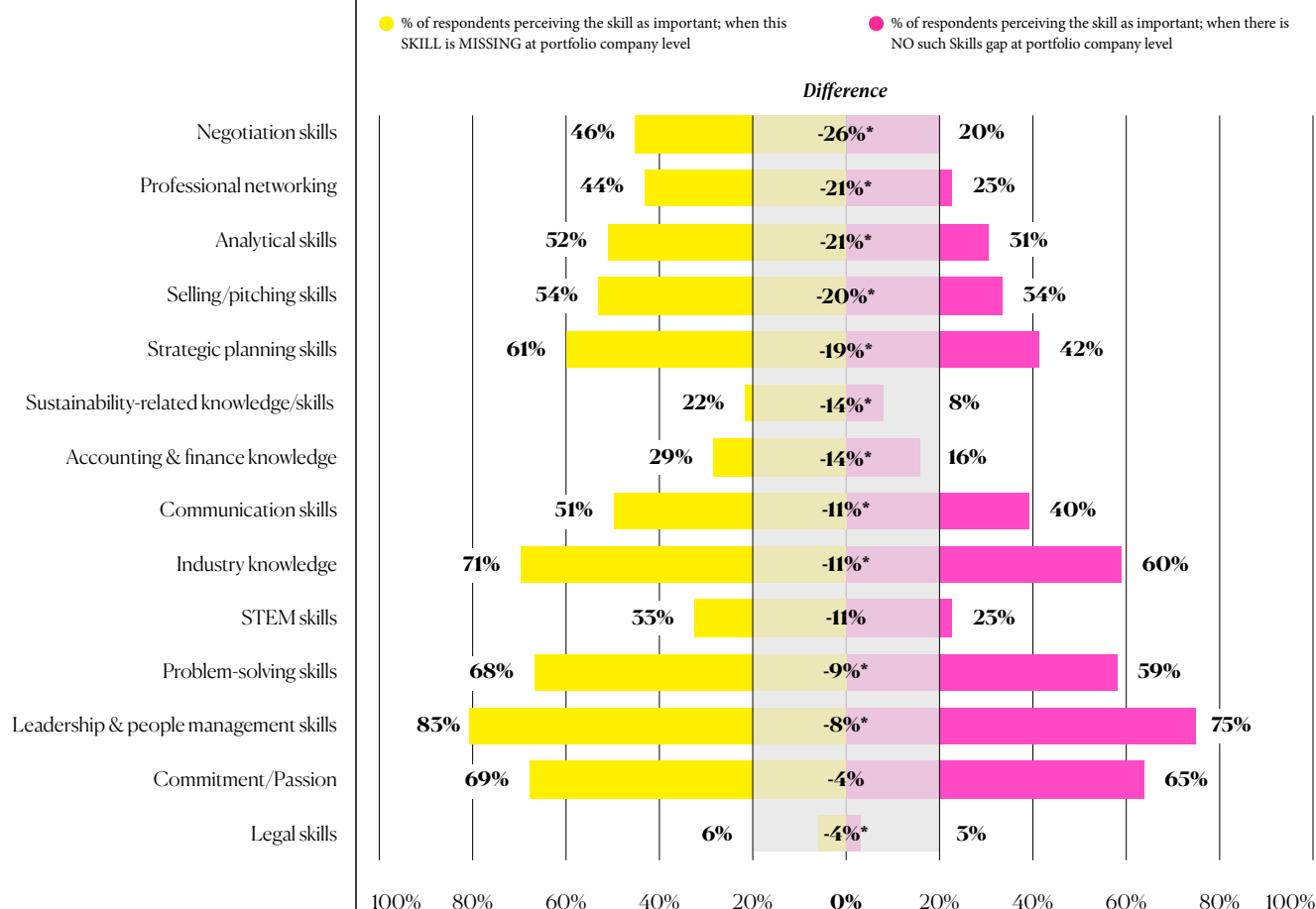
For VC fund managers, the second most important skills gap concerns selling/pitching skills, while for PE MM fund managers, it relates to strategic planning.

PE MM fund managers also frequently indicated a lack of sustainability-related knowledge/skills among their portfolio companies.

Note: The graphs show the total percentage of respondents with respect to the three most important skills gaps.

Perceived importance of a skill for the management team of a portfolio company relative to the existence of a gap (or not) for this skill in the portfolio company

VC and PE MM respondents



Do investees possess the skills perceived as most important?

To explore this, we identify, for each skill, two groups:

- Fund managers identifying a particular skills gap in the management team of their portfolio companies
- Fund managers NOT identifying a skills gap in the management team of their portfolio companies

For each group, we consider the % of respondents perceiving a skill as important for the management team of their portfolio companies **when this skill is present** (i.e. no skills gap in the management team of their portfolio companies is identified) **minus** the % of respondents perceiving a skill as important **when this skill is currently missing** (i.e. a skills gap in the management team of their portfolio companies is identified). In the graph, we report the **value of these differences** and we indicate with an asterisk (*) when these become significant from a statistical point of view. The analysis is based on the pooled sample of VC and PE MM respondents.

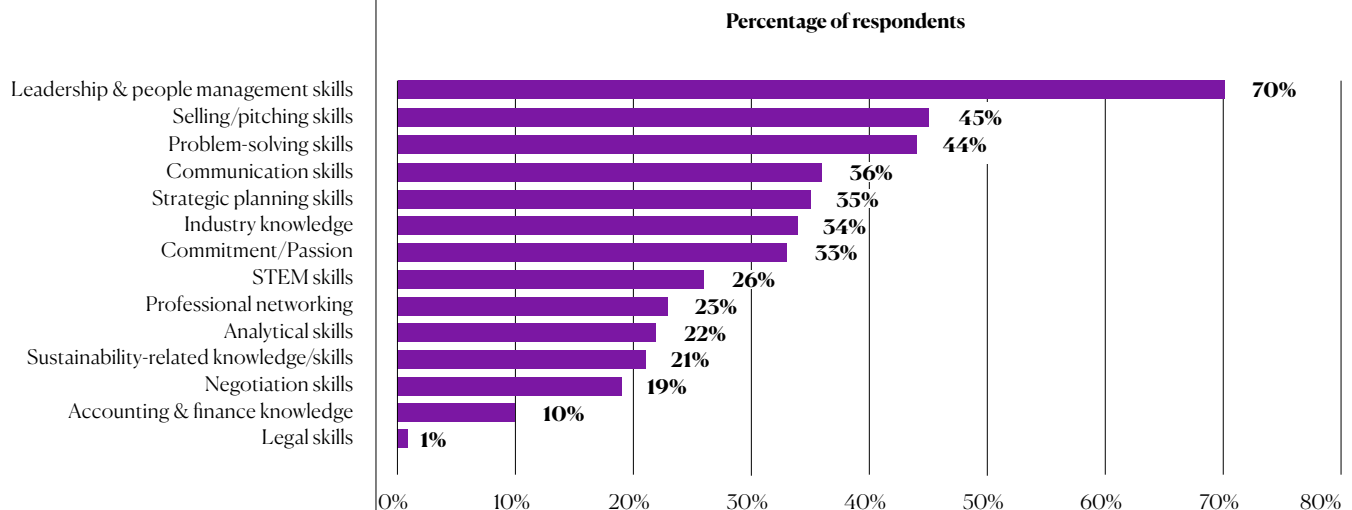
Fund managers consider a skill of higher importance when this skill is missing in the management team of their portfolio companies.

When fund managers identify a skills gap in their portfolio companies, they seem to over-react in providing importance to this skill.

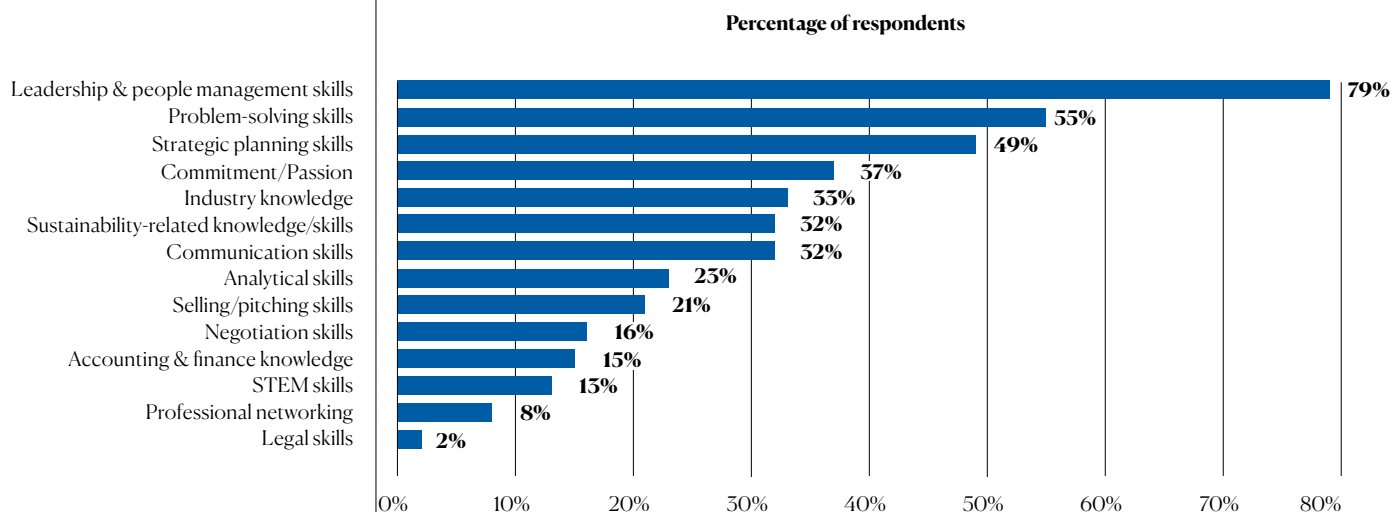
The only exceptions are **commitment/passion** and **STEM skills**, which are always important.

Skills that will be in most demand in portfolio companies in 5 years

VC



PE MM



Q: In your opinion, what are the skills that will be in most demand in 5 years in your portfolio companies? (multiple selection possible)

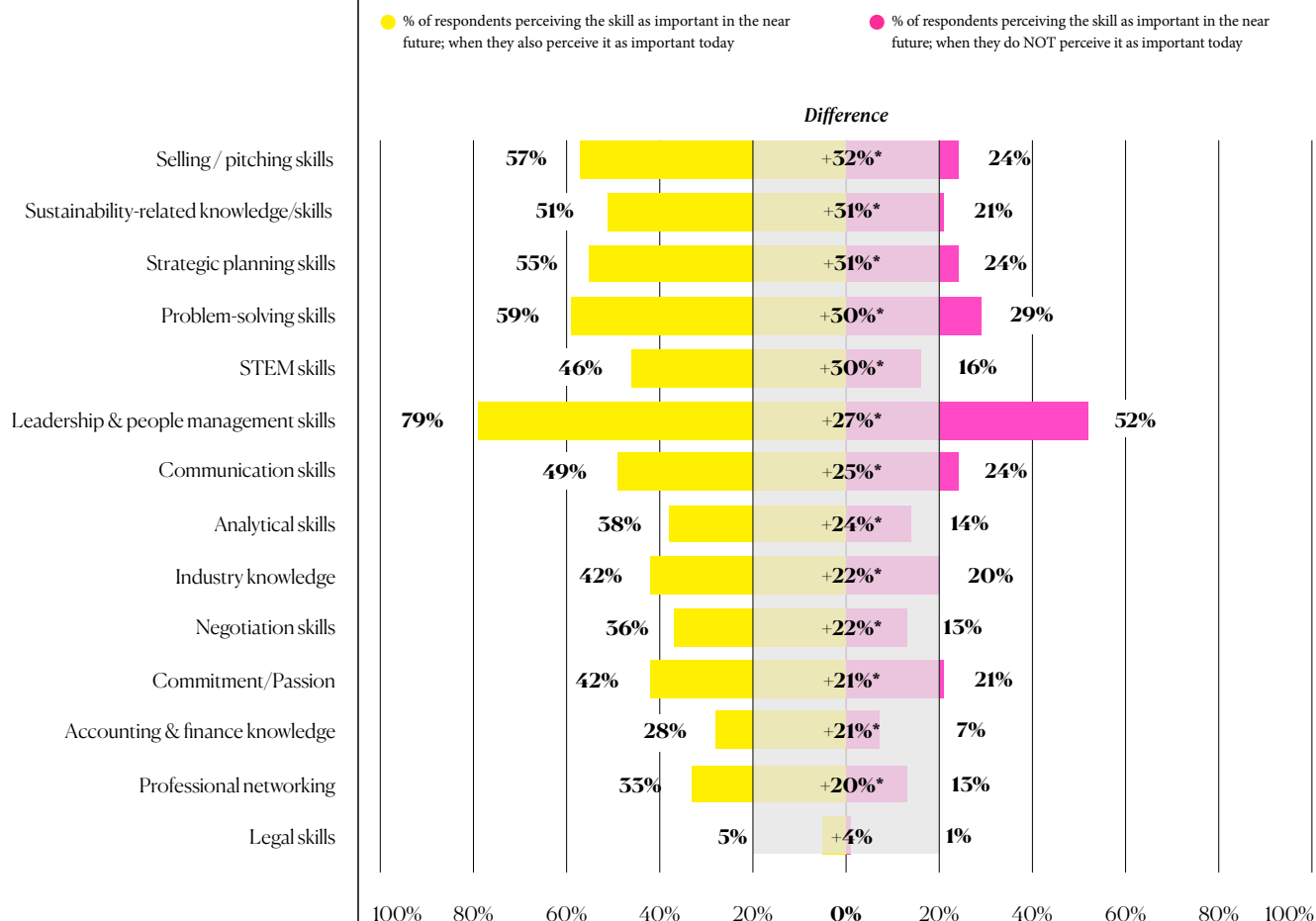
Leadership & people management will be the skill in most demand in portfolio companies in the near future

Both VC and PE MM fund managers indicate that leadership & people management will be the skill in most demand in their portfolio companies in five years.

For VC fund managers, this is followed by selling/pitching skills and problem-solving skills; while for PE MM fund managers, by problem-solving and strategic planning skills.

Importance of skills at portfolio company level, currently and in the near future

VC and PE MM respondents



Are the skills perceived as most important in the near future different from the ones perceived as most important today?

To explore this, we identify, for each skill, two groups:

- Fund managers perceiving the skill as important today
- Fund managers perceiving the skill as NOT important today

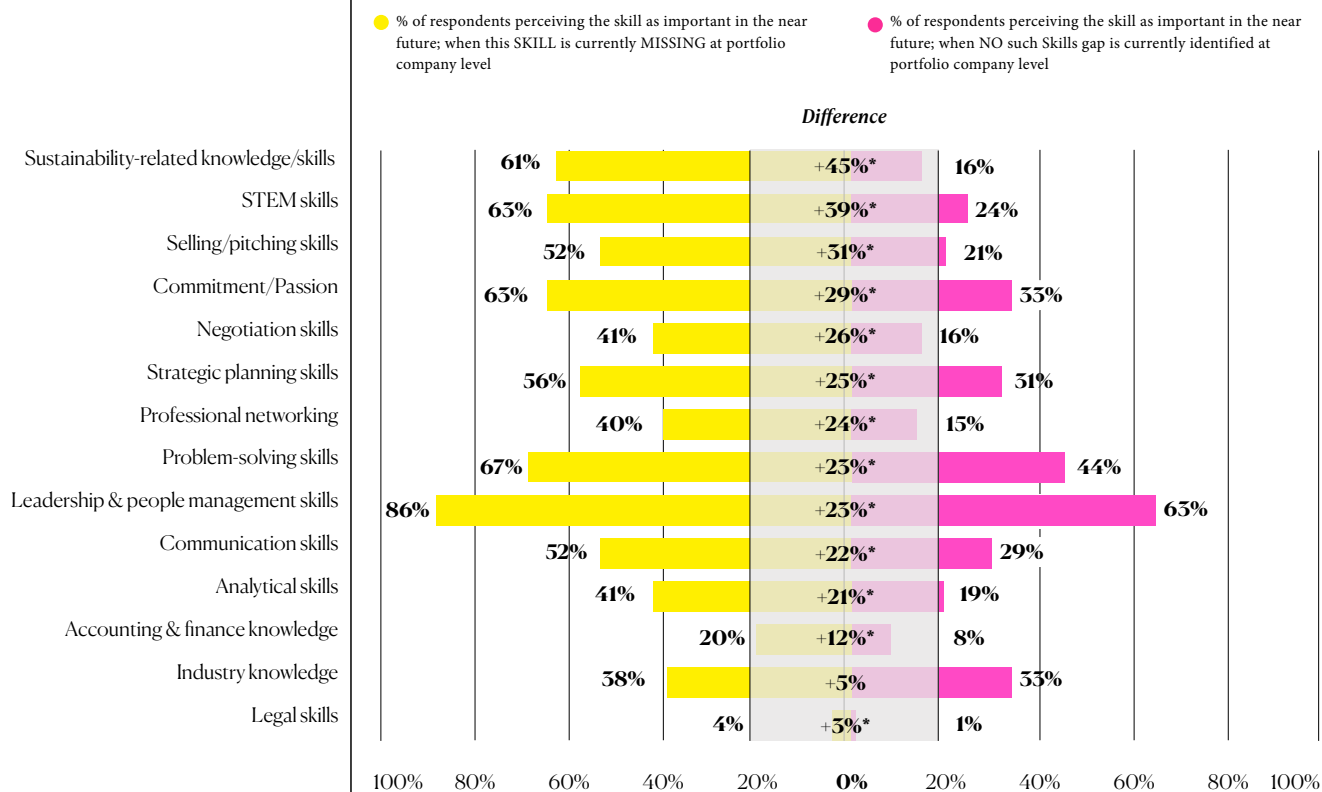
For each group, we consider the % of respondents perceiving the skill as important in the future and we derive the **difference** between these two percentages: % of respondents perceiving a skill as important in the future, when they also perceive it as **important today**; minus % of respondents perceiving a skill as important in the near future, when they do **NOT** perceive it as **important today**. In the graph, we report the **value of these differences** and we indicate with an asterisk (*) when these become significant from a statistical point of view. The analysis is based on the pooled sample of VC and PE MM respondents.

The future importance that fund managers assign to a skill for the management team of their portfolio companies is always in line with the importance that they assign to this skill today.

At the level of the management team of portfolio companies, there are no skills that are expected to significantly gain/lose importance in the near future.

Future importance of skills at portfolio company level, relative to a skills gap identified today

VC and PE MM respondents



Do investees currently possess the skills perceived as most important in the near future?

To explore this, we identify, for each skill, two groups:

- Fund managers identifying a particular skills gap in the management team of their portfolio companies
- Fund managers NOT identifying a skills gap in the management team of their portfolio companies

For each group, we consider the % of respondents perceiving the skill as important in the future, and we derive the **difference** between these two percentages: % of respondents perceiving a skill as important in the future, **when** this skill is **currently missing** (i.e. a skills gap is identified); **minus** % of respondents perceiving a skill as important in the future, **when** this skill is **present** (i.e. no such skills gap is identified). In the graph, we report the **value of these differences** and we indicate with an asterisk (*) when these become significant from a statistical point of view. The analysis is based on the pooled sample of VC and PE MM respondents.

Fund managers assign higher future importance to a skill for the management team of their portfolio companies when they identify a gap in this skill at present.

The importance fund managers assign to a skill in the near future is always significantly higher for most critical skills, i.e. for the skills identified as currently missing in the management team of their portfolio companies.

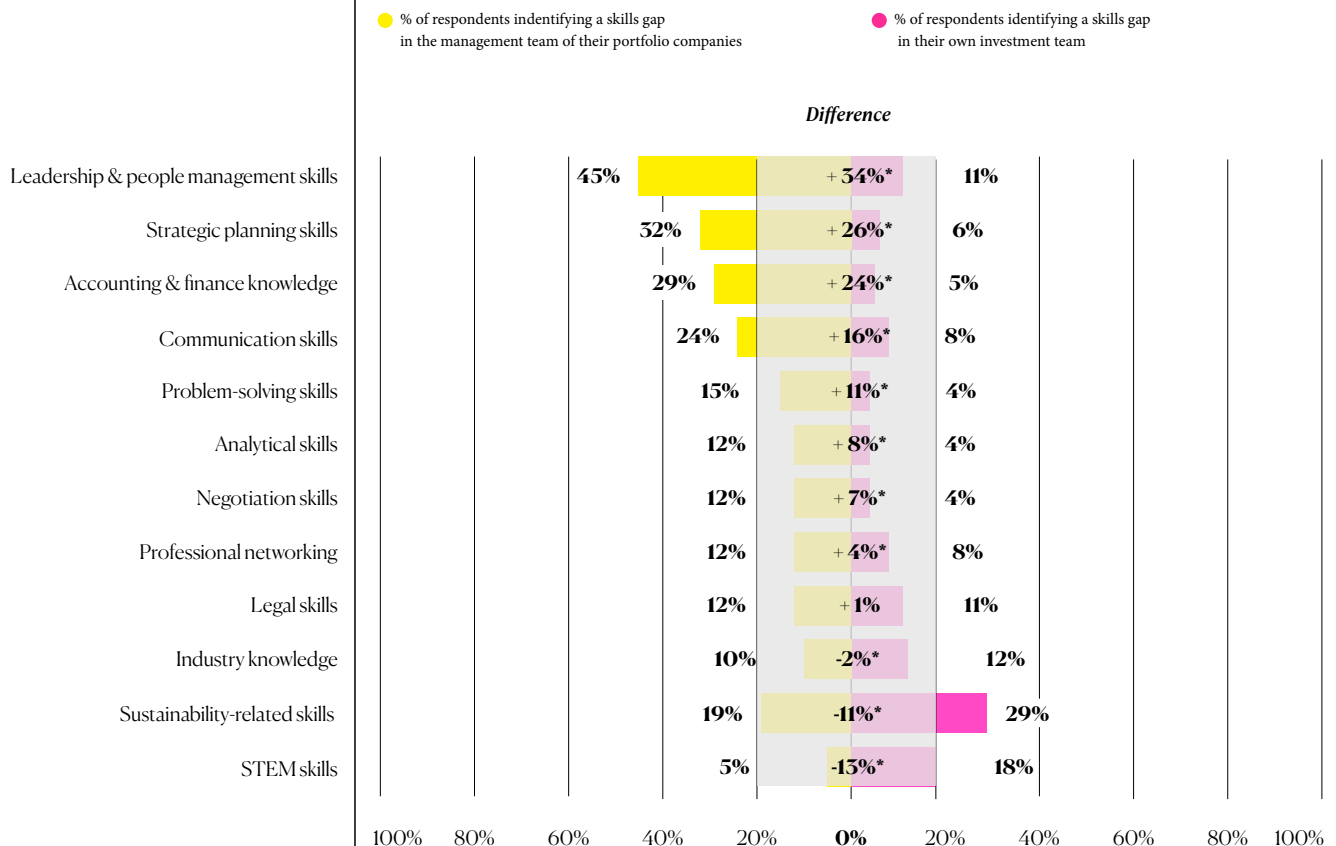
Notably, **sustainability-related** and **STEM skills** are the ones to which fund managers assign significantly higher importance in the near future when a related skills gap is currently identified in the management team of their portfolio companies.

An abstract graphic featuring three blue cubes of varying sizes and orientations on a dark blue background. A thin white horizontal line is positioned below the cubes. The text is written in white, with the first two lines in italics and the remaining lines in a bold, sans-serif font.

*How do skills
and skills gaps*
**compare between
investor teams
and portfolio
companies**

Are skills gaps different between investor teams and portfolio company teams?

VC and PE MM respondents



Are the skills gaps identified at investor-team level different from those identified at portfolio company level?

To explore this, we only focus on skills that are common to both the investor team and the team of a portfolio company. Hence, "Passion" and "Selling/pitching skills" are excluded for the purpose of this type of analysis, as they only apply to entrepreneurs.

We compare the % of respondents identifying a skills gap in the management team of **their portfolio companies** minus the % of respondents identifying a skills gap in **their own investment team**. In the graph, we report the **value of these differences** and we indicate with an asterisk (*) when these become significant from a statistical point of view. The analysis is based on the pooled sample of VC and PE MM respondents.

Fund managers identify greater skills gaps in the management team of their portfolio companies, while they perceive their own investment teams to be more endowed with these skills.

For most skills, the perceived gap at portfolio company level is always significantly higher than the gap identified at investor-team level.

By contrast, with regard to **industry knowledge, STEM and sustainability-related skills**, fund managers perceive significantly higher skills gaps at investor level.

Perceived importance of skills between investor teams and portfolio companies

VC and PE MM respondents



For most skills considered, their perceived importance at investor-team level is significantly higher than their perceived importance at portfolio company level.

This echoes earlier findings whereby fund managers perceive their own investment teams to be more endowed with the various skills (and hence, they might, in turn, consider it less important for the management team of their portfolio companies to possess the same skills).

By contrast, **Industry knowledge and Leadership & people management skills** are perceived as much more important for portfolio companies than for the investor team.

This again echoes previously discussed findings whereby the management team of potential portfolio companies is fund managers' first most important investment selection criterion.

Note: The reported differences reflect the difference between the two groups of respondents, i.e. % of respondents perceiving a skill important for the management team of their portfolio companies minus % of respondents perceiving this skill important for their own investment team. The asterisk suggests that this difference is also significant from a statistical point of view. The analysis is based on the pooled sample of VC and PE MM respondents.

Clusters of critical skills

VC and PE MM respondents

	Skills gap in investor team	Skills gap in portofolio company
	% of respondents	% of respondents
Cluster 1		
Critical skills for investor team		
Sustainability-related knowledge/skills	29%	19%
STEM skills	18%	5%
Industry knowledge	12%	10%
Legal skills	11%	12%
Cluster 2		
Critical skills for portfolio company team		
Leadership & people management skills	10%	45%
Strategic planning skills	6%	32%
Accounting & finance knowledge	5%	29%
Communication skills	8%	24%
Cluster 3		
Not critical skills		
Analytical skills	4%	12%
Negotiation skills	4%	12%
Problem-solving skills	4%	15%
Professional networking	8%	12%
Average (across all skills) % of respondents identifying a skills gap	10%	19%

● Critical skills for the investor team (respectively for the portfolio company team) are those where the percentage of respondents identifying a skills gap is higher than average. These skills are highlighted in grey.

Skills gap in investor team	High	<p>Investor critical skills</p> <p>Skills for which the perceived gap is higher than average at investor level but not at portfolio company level.</p> <p>Skills in which portfolio companies need to be on average autonomous/self-sustaining.</p> <ul style="list-style-type: none"> • Sustainability-related knowledge/skills • STEM skills • Industry knowledge • Legal skills 	
	Low	<p>Not critical skills</p> <p>Skills for which there are no significant gaps neither at investor nor at portfolio company level.</p> <ul style="list-style-type: none"> • Analytical skills • Negotiation skills • Problem-solving skills • Professional networking 	<p>Portfolio company critical skills</p> <p>Skills for which the perceived gap is higher than average at portfolio company level but not at investor level.</p> <p>Skills in which fund managers can support portfolio companies.</p> <ul style="list-style-type: none"> • Leadership & people management skills • Strategic planning skills • Accounting & finance knowledge • Communication skills
		Low	High
		Skills gap in portfolio company team	

Skills gaps in own investment team and investor firm characteristics

* Based on the pooled sample of VC and PE MM respondents, a series of probit models were estimated whereby a dummy variable (on whether a skills gap is identified, or not, for each of the skills considered important for the investor team, or respectively for the portfolio company team) was regressed on the aforementioned investor characteristics.

The following tables present the key findings of a multivariate analysis* aiming at assessing whether differences in fund managers' perception of skills gaps exist depending on a range of investor characteristics.

In particular, the investor characteristics considered are the following:

- investor type: VC vs PE
- firm size (proxied by the number of partners)
- firm age

The following tables present the key findings of a multivariate analysis* aiming at assessing whether differences in fund managers' perception of skills gaps exist depending on a range of investor characteristics.

In particular, the investor characteristics considered are the following:

- investor type: VC vs PE
- firm size (proxied by the number of partners)
- firm age
- gender diversity (percentage of female representation in senior investment team higher than 20%)
- investment-stage focus: early stages vs. later stages
- region (most important country for investments)
- industry focus

We tried to consider both the existence of a skills gap and the importance assigned to this particular skill, by considering the existence of a skills gap only for those skills that are perceived as most important by the respondents.

	Important gap in own investment team
<i>Communication skills</i>	PE
<i>Sustainability-related knowledge/skills</i>	PE
<i>Communication skills</i>	Older firms
<i>Legal skills</i>	Younger firms
<i>Analytical skills</i>	Smaller firms
<i>Leadership & people management skills</i>	More gender diverse firms
<i>Negotiation skills</i>	More gender diverse firms
<i>Sustainability-related knowledge/skills</i>	More gender diverse firms
<i>Professional networking</i>	Firms investing in earlier stages

PE teams have higher communication and sustainability-related skills gaps than VC teams.

Fund managers in older firms report higher gaps in communication skills.

Fund managers in younger firms report higher gaps in legal skills.

Fund managers in smaller firms report higher gaps in analytical skills.

Fund managers report higher gaps in leadership & people management, negotiation, and sustainability-related skills the higher the gender diversity in their investment teams.

Investors focusing on early stages report higher gaps in professional networking in their investment teams.

Skills gaps in the management team of portfolio companies and investor firm characteristics

	Important gap in the management team of portfolio companies
<i>Negotiation skills</i>	VC
<i>Selling / pitching skills</i>	VC / More gender diverse firms
<i>Sustainability-related knowledge/skills</i>	PE
<i>Industry knowledge</i>	Firms investing in earlier stages
<i>Professional networking</i>	Firms investing in earlier stages
<i>Selling / pitching skills</i>	Firms investing in earlier stages
<i>Strategic planning skills</i>	Firms investing in later stages

Vcs identify higher gaps in their portfolio companies than PEs with respect to negotiation skills and selling/pitching skills.

Higher gaps in selling skills in portfolio companies are also perceived by fund managers with more gender-diverse investment teams.

Vcs identify lower gaps in their portfolio companies than PEs with respect to sustainability-related skills.

Investors focusing on early stages identify higher gaps in industry knowledge, professional networking, and selling/pitching skills in their portfolio companies.

By contrast, investors focusing on early stages identify lower gaps in strategic planning skills in their portfolio companies.



Further information about this study

- Human capital characteristics of respondents
- VC/PE firm characteristics

General survey approach

The EIF equity surveys are **online surveys** of VC and Private Equity Mid-Market fund managers investing in Europe.

Our surveys target **both EIF-supported as well as non-EIF supported** fund managers. **A part of the sample** for the *EIF VC Survey 2023* comprises **Invest Europe members**.

All surveys are conducted on an **anonymous basis**.

The vast majority of the respondents in the VC and PE MM surveys hold the position of CEO or Managing/General Partner, suggesting that their responses reflect the **views of the decision-makers** in the respective VC/PE firms.

Respondents and survey period

This study is based on the *EIF VC Survey 2023* and the *EIF PE MM Survey 2023*.

The 2023 wave of the EIF Surveys included anonymised responses from **472 VC fund managers** (from 371 VC firms), and **199 PE mid-market fund managers** (from 173 PE firms).

The headquarters of the VC/PE firms contacted were predominantly in the EU 27 countries. Firms with headquarters outside of Europe were still included in the sample if they had an office in Europe and were active in the European VC market / PE mid-market sector.

Responses were received between 17 July and 4 September 2023 (*EIF VC Survey*); and between 25 July and 11 September 2023 (*EIF PE MM Survey*).

In some cases we show comparisons with the 2022 survey waves. These waves were conducted from 13 July – 29 August 2022 (*EIF VC Survey*) and 14 July – 29 August 2022 (*EIF PE MM Survey*).

Topics

The main topics covered in the 2023 EIF Surveys were market sentiment, scale-up financing, European strategic autonomy, and the role of human capital (in particular skills and diversity).

The present EIF Working Paper focuses on the topics of skills and skills gaps in VC/PE investment teams as well as in VC/PE-backed companies.

Note on how to read the results

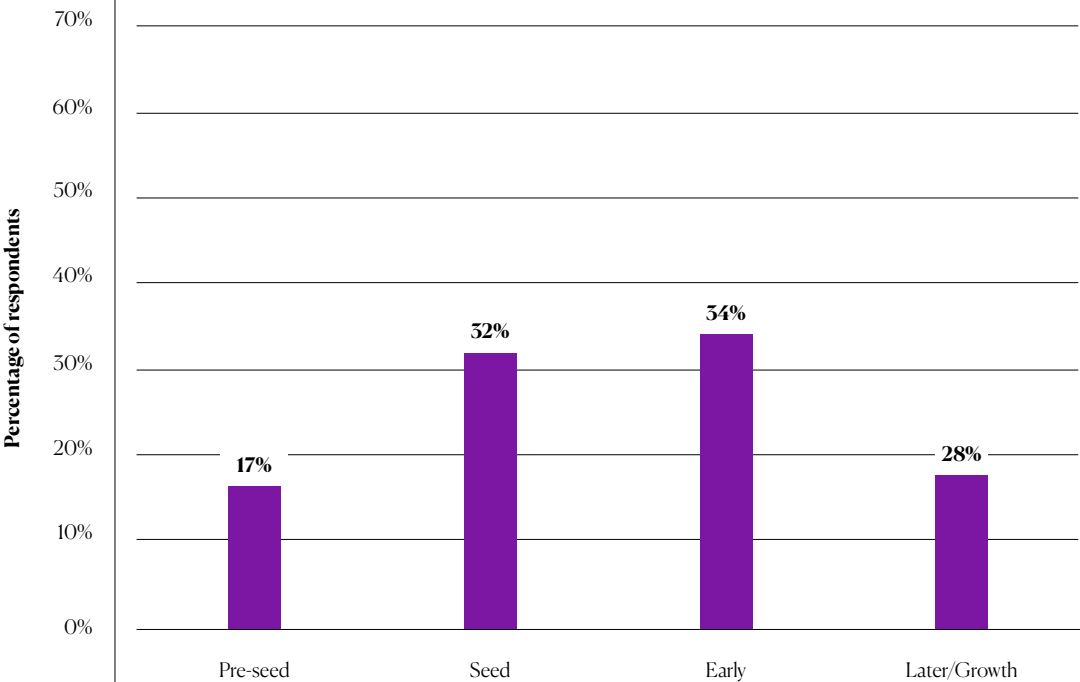
Due to rounding, percentages may not always add up to 100%, and may not be exactly equal to the difference between two preceding percentages.

The EIF VC Survey 2023 at a glance

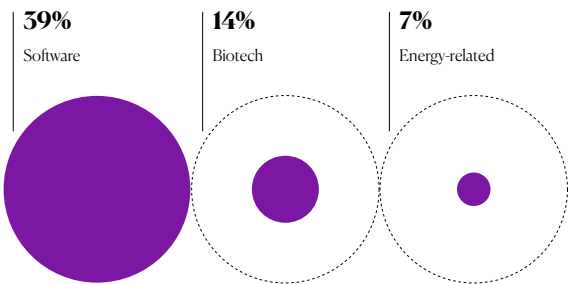
Number of VC respondents

472

Investment stages of VC respondents



Top sectors for VC investments

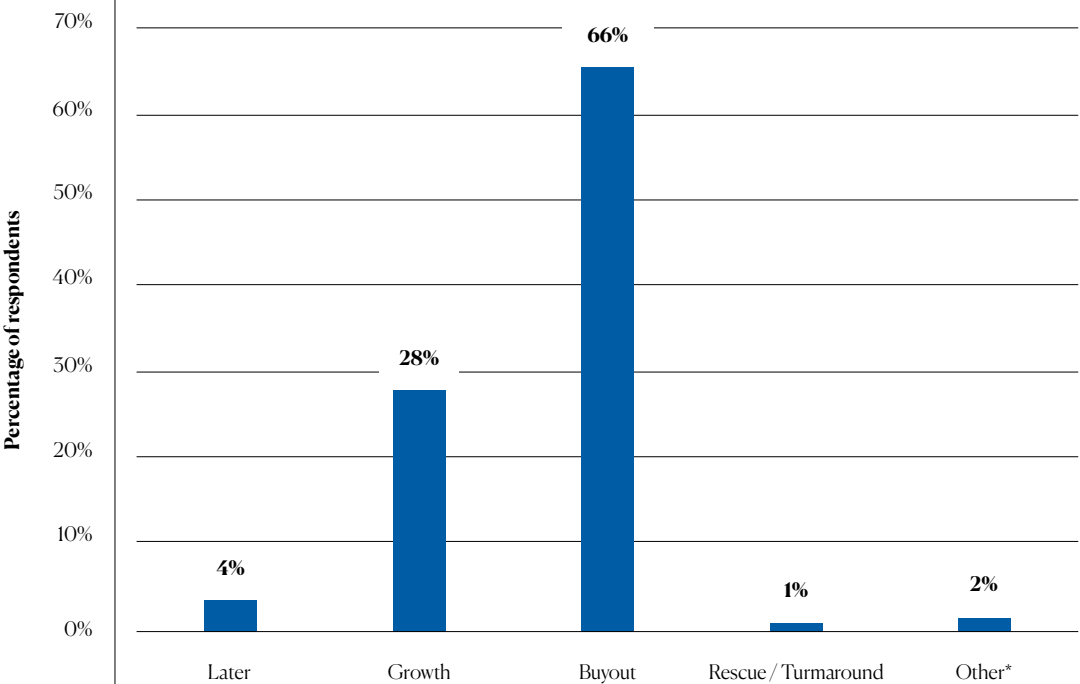


The EIF PE Mid-Market Survey 2023 at a glance

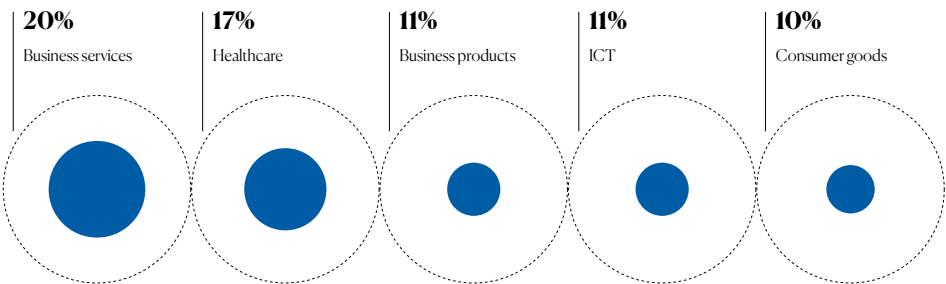
Number of PE MM respondents

199

Investment stages of PE MM respondents

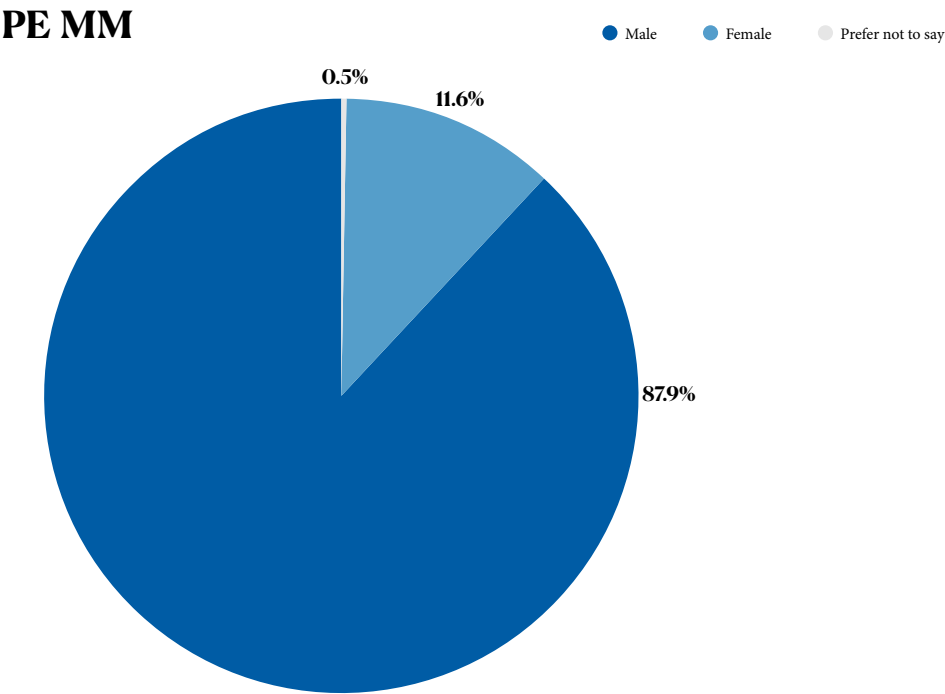
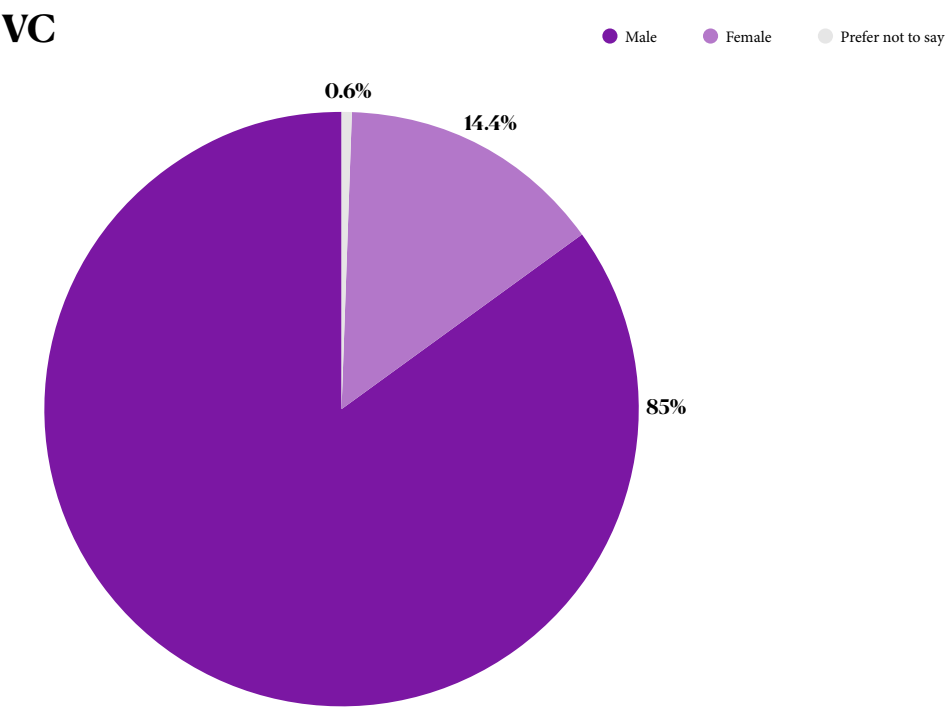


Top sectors for PE MM investments



* "Other" includes the "Pre-seed", "Seed" and "Early" investment stages.

Gender

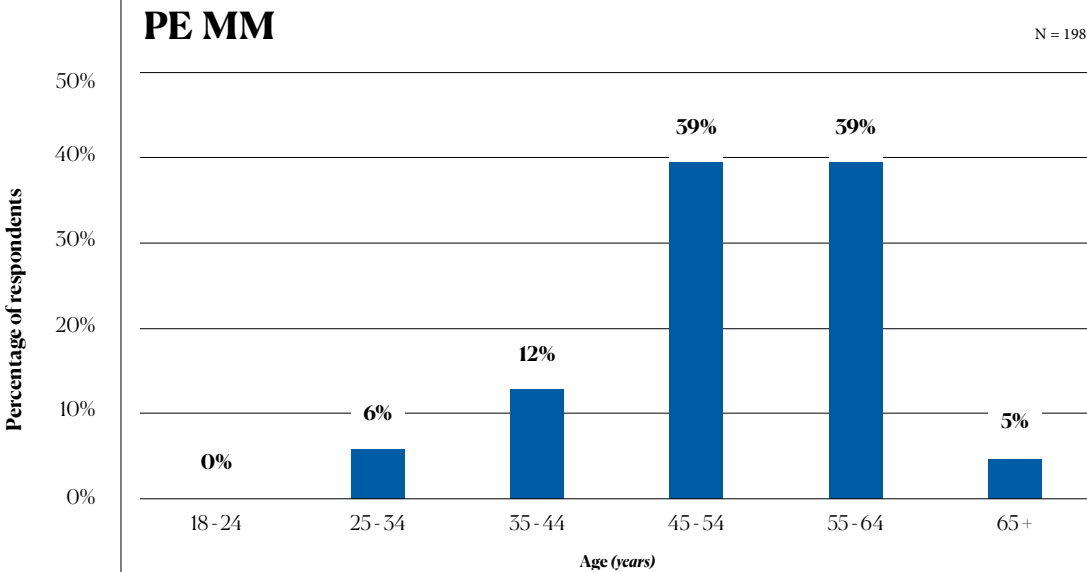
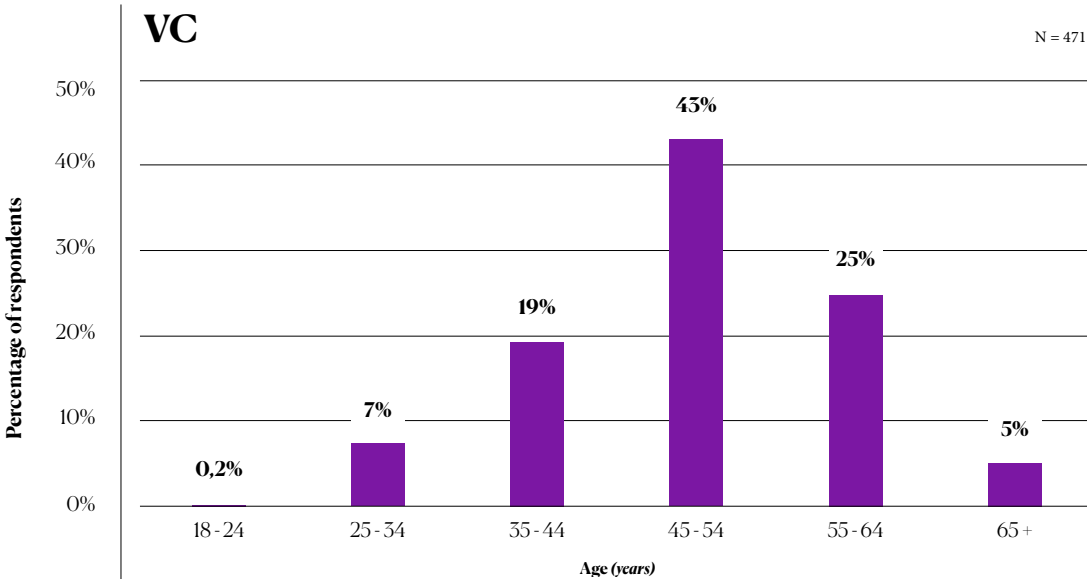


Q: How do you identify?

Almost 9 in 10 respondents in both surveys are male.

Age

Q: What is your age?



VC and PE MM respondents are mostly in their middle age.

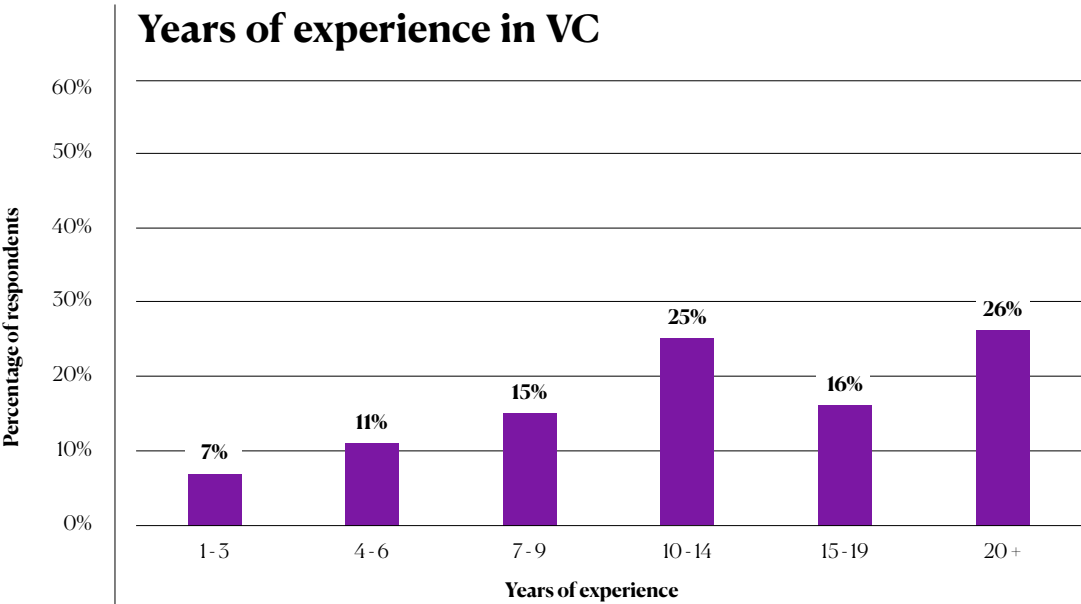
Nearly half of the VC respondents (43%) are middle-aged (between 45 and 54 years old), while this percentage is lower (39%) for PE MM respondents. The graphs show a higher concentration of PE MM respondents in the 55-64 category (39%), compared to VC respondents (25%).

A low incidence of young fund managers is found among both VC and PE MM respondents. In fact, only about 7% and 6% of, respectively, VC and PE MM fund managers are below 35 years old. This result is largely related to the high level of seniority of the survey respondents.

Note: The response option "Prefer not to say" was excluded from the graphs.

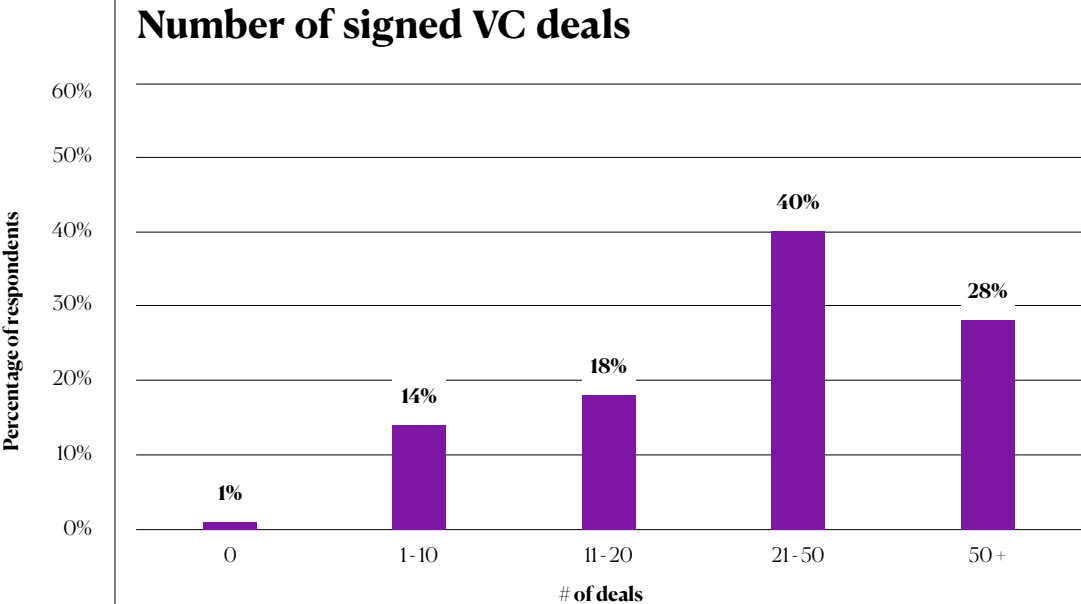
Experience in VC

Q: In total, how many years of experience in investment-related activities in the VC industry do you have?



Most VC respondents have more than 10 years of experience, while 26% have a long-lasting experience in the VC industry.

Q: In total, in how many signed VC deals have you been involved in your career?

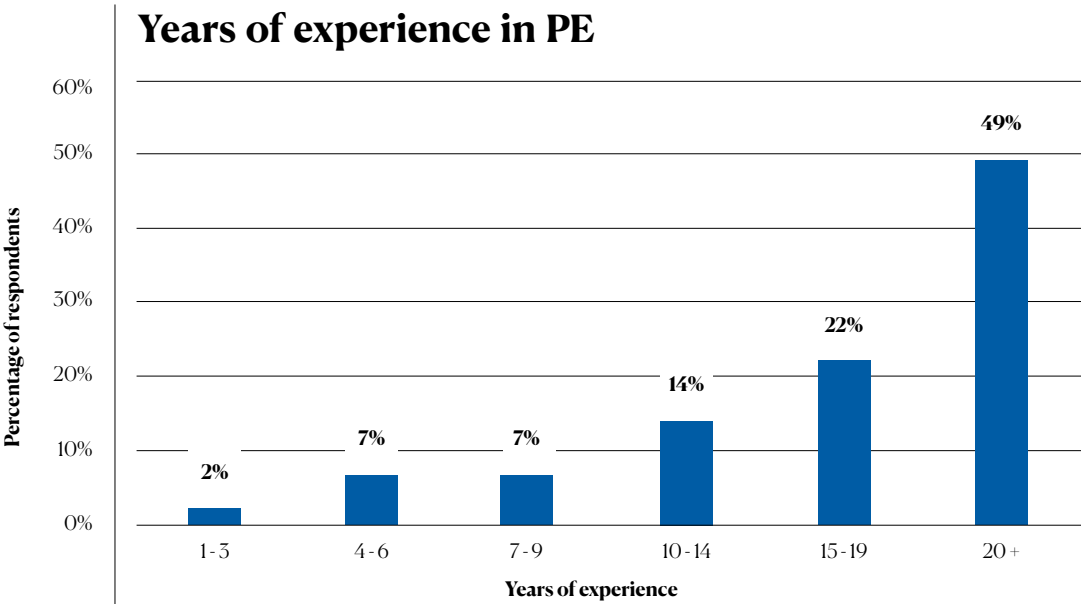


Two-thirds of VC respondents have been involved in 20 or more signed VC deals.

Despite VC respondents' younger age and fewer years of experience compared to PE MM respondents, 7 in 10 VC fund managers have been involved in 20 or more signed deals, highlighting their strong experience in terms of deal activity.

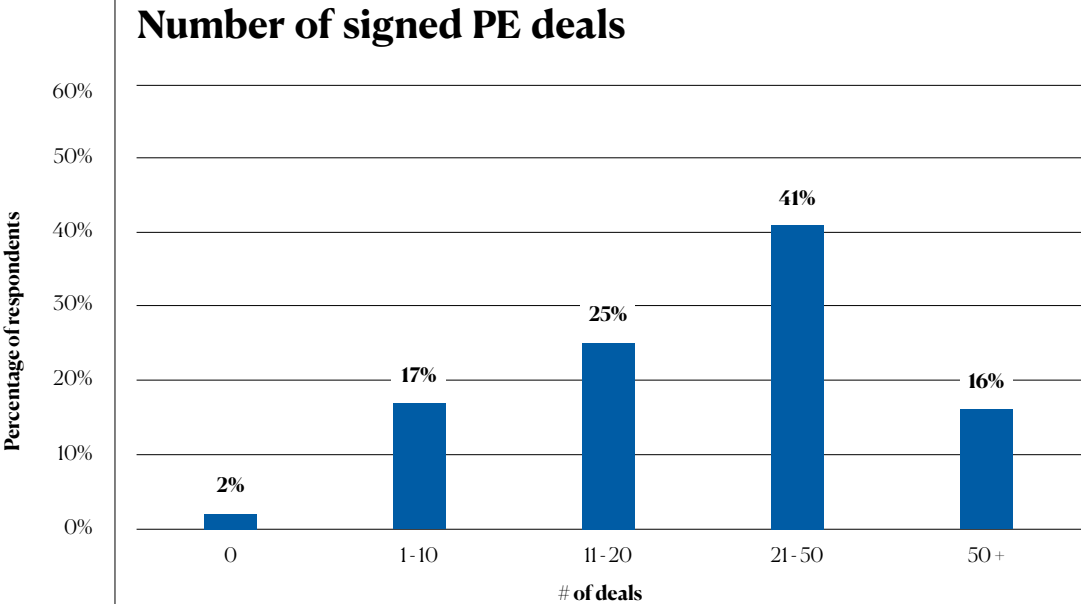
Experience in PE

Q: In total, how many years of experience in investment-related activities in the PE industry do you have?



The vast majority of PE MM respondents are experienced PE investors, with almost half of them having more than 20 years of experience.

Q: In total, in how many signed PE deals have you been involved in your career?

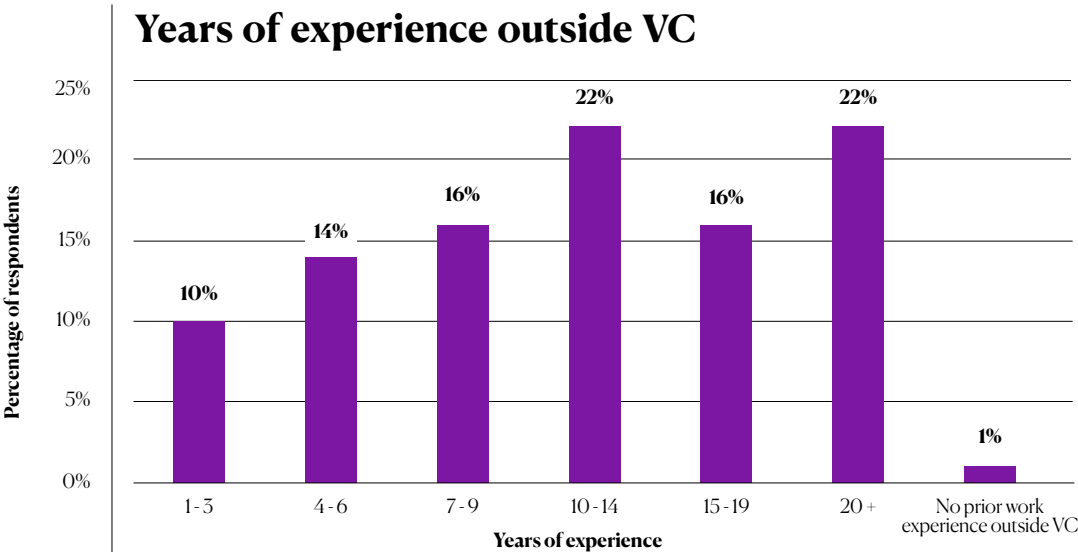


Almost 6 in 10 PE MM respondents have been involved in 20 or more signed PE deals.

Compared to VCs, PE MM fund managers are older and have more years of experience in the industry.

General experience outside VC

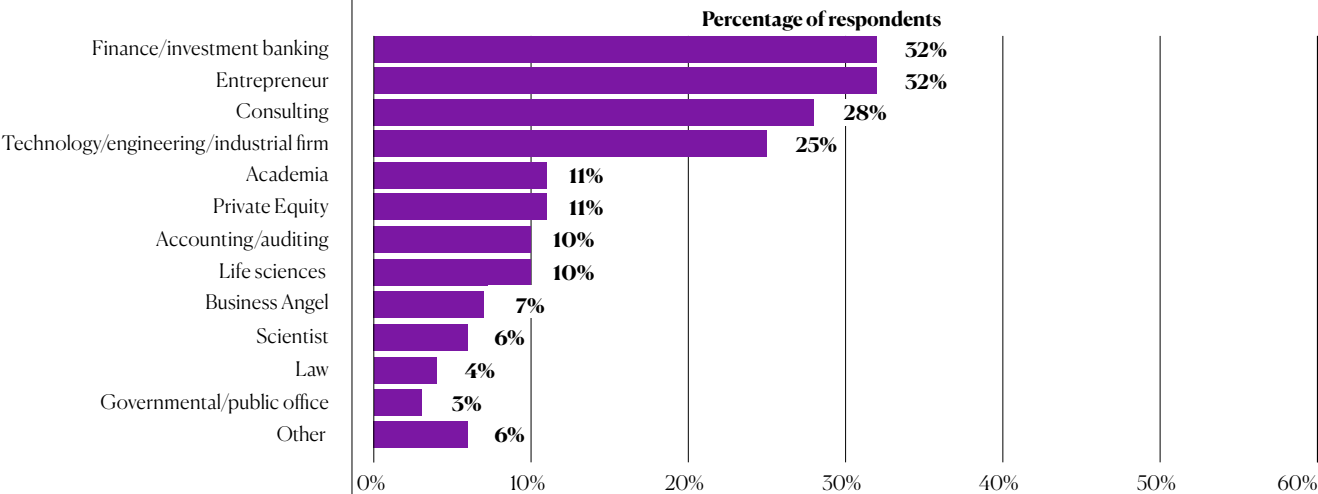
Q: How many years of work experience outside the VC industry do you have?



6 in 10 VC fund managers reported more than 10 years of experience outside the VC industry.

Type of experience outside VC

N = 471



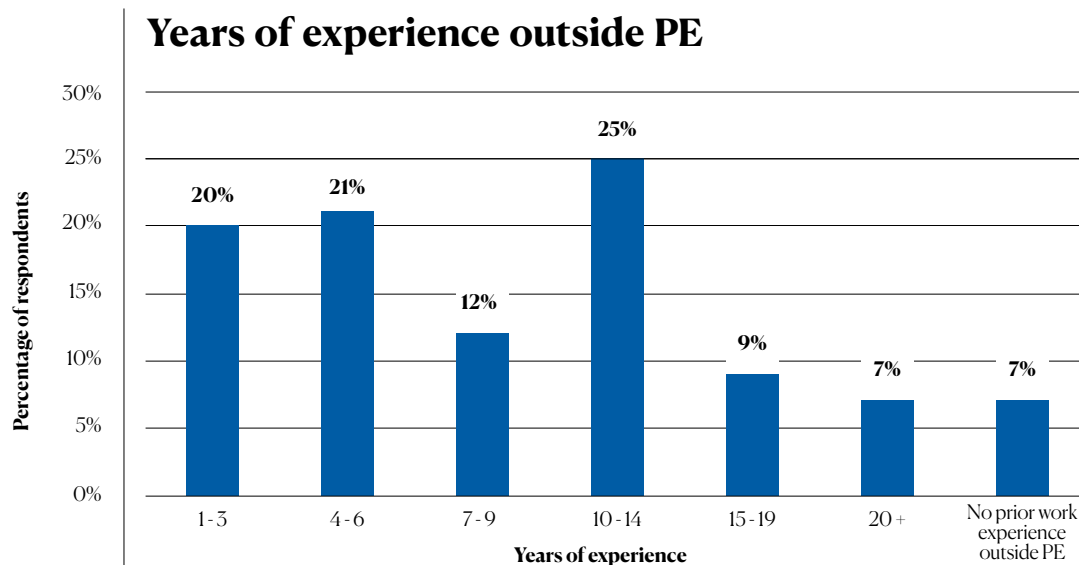
Q: Which of the following would best describe your type of work experience (outside the VC industry)? (multiple selection possible)

VCs are more often former entrepreneurs or investment bankers; 7% have experience as business angels.

VC fund managers reveal a long-standing experience, mainly as prior entrepreneurs, consultants or professionals in the finance/investment banking sector. A quarter of respondents have background experience in engineering, technology or industrial firms.

General experience outside PE

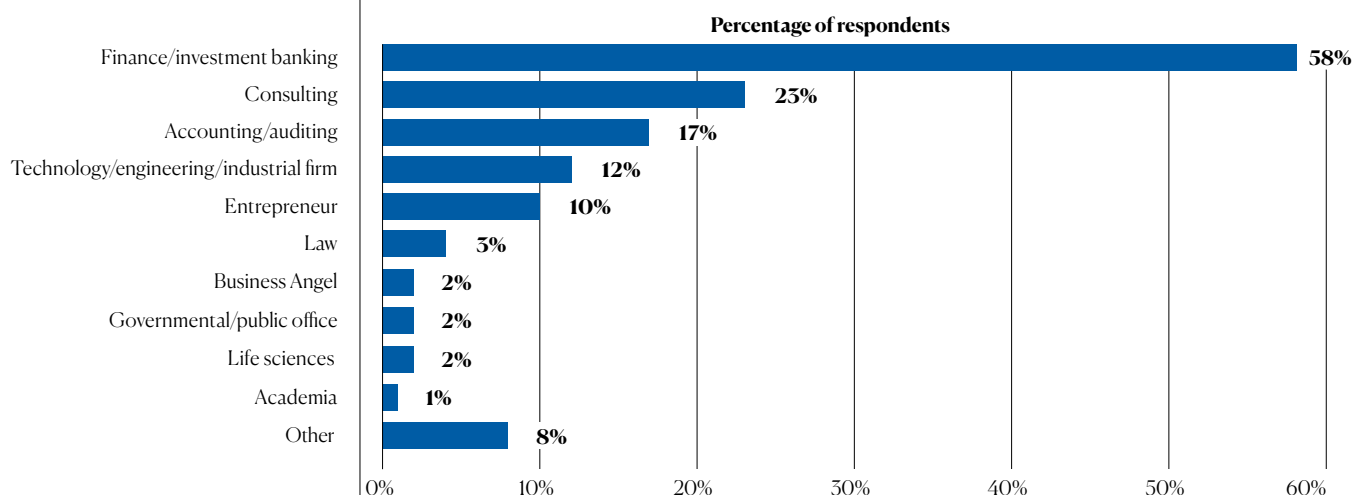
Q: How many years of work experience outside the PE industry do you have?



4 in 10 PE MM fund managers have more than 10 years of experience outside the PE industry

Type of experience outside PE

N = 186



Q: Which of the following would best describe your type of work experience (outside the PE industry)? (multiple selection possible)

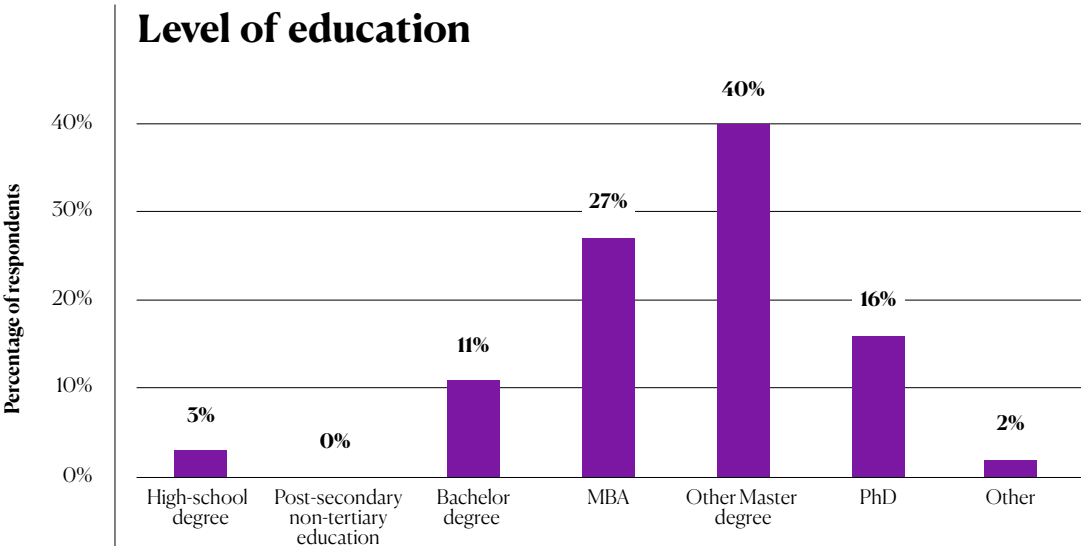
PE MM fund managers are more often former investment bankers or consultants; only 1 in 10 are former entrepreneurs.

Compared to VC respondents, PE MM respondents have fewer years of experience outside the PE industry. The share of respondents having had positions in finance/investment banking is much larger among PE MM fund managers (58%; compared to 32% for VCs). Only 10% of PE MM respondents (compared to 32% for VCs) were former entrepreneurs.

Education

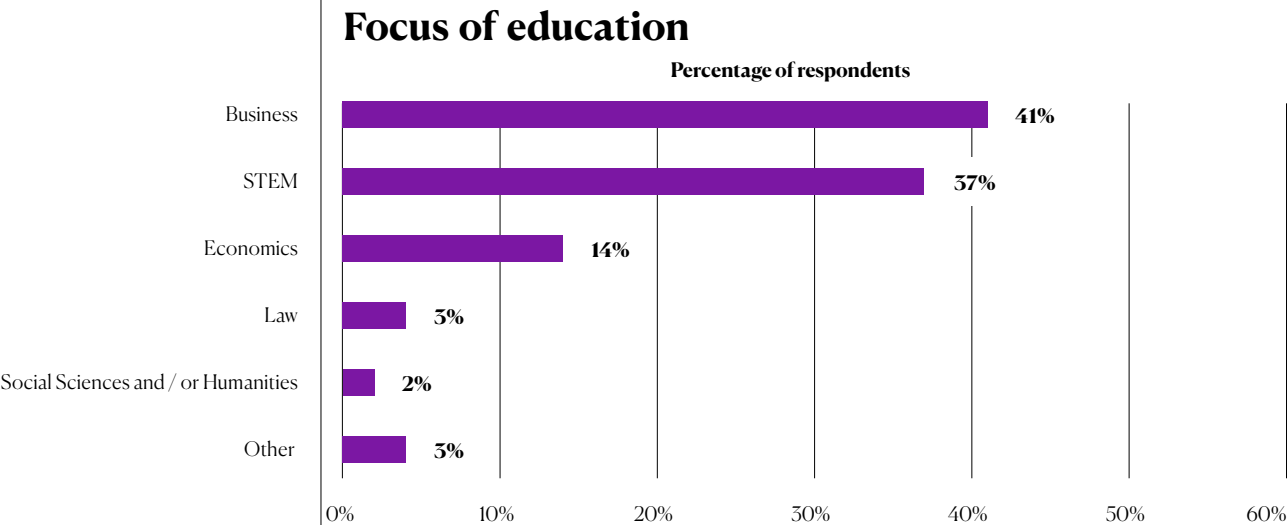
VC respondents

Q: What is your highest degree of education?



VCs are highly-educated investors, with 8 in 10 having a post-graduate qualification.

Q: What was the main field in your education?



Approximately 8 in 10 VCs have studied either business or a STEM degree.

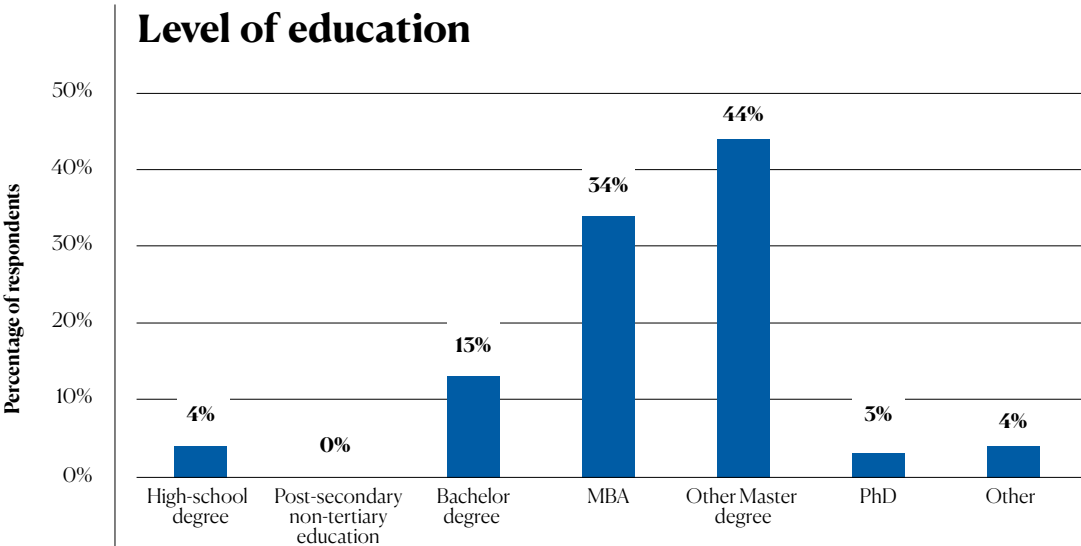
Approximately 8 VC respondents in 10 have a post-graduate degree. VCs’ education focus was largely on business or STEM.

Indeed, VC respondents have a long-standing experience in fields where an educational background in business or engineering is required, such as consultancy, finance, investment banking, entrepreneurship and technology.

Education

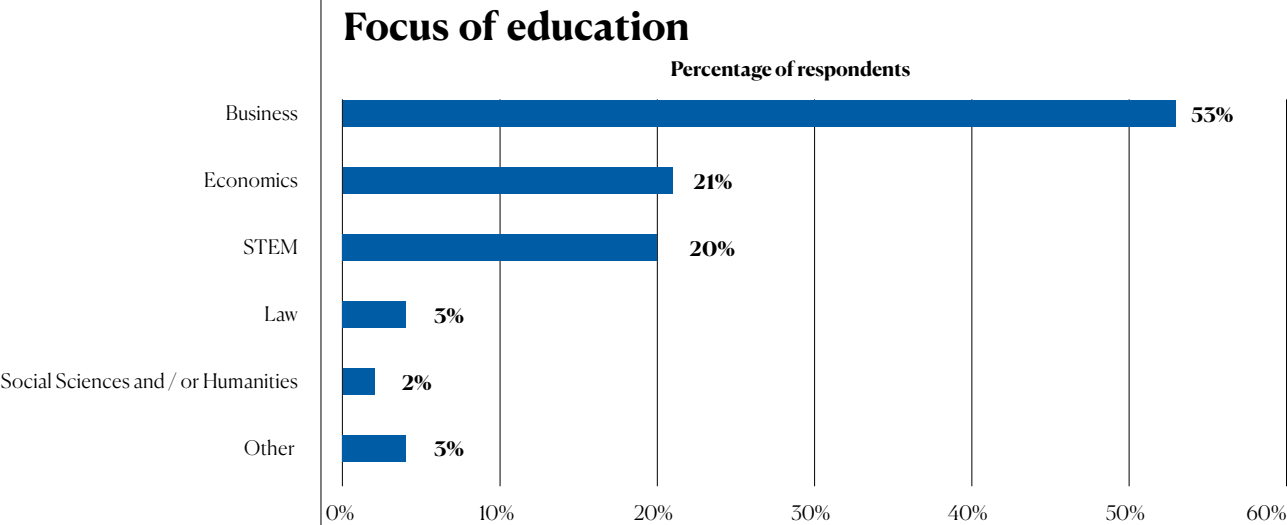
PE MM respondents

Q: What is your highest degree of education?



PE MM fund managers are highly-educated investors, with 8 in 10 having a post-graduate qualification.

Q: What was the main field in your education?



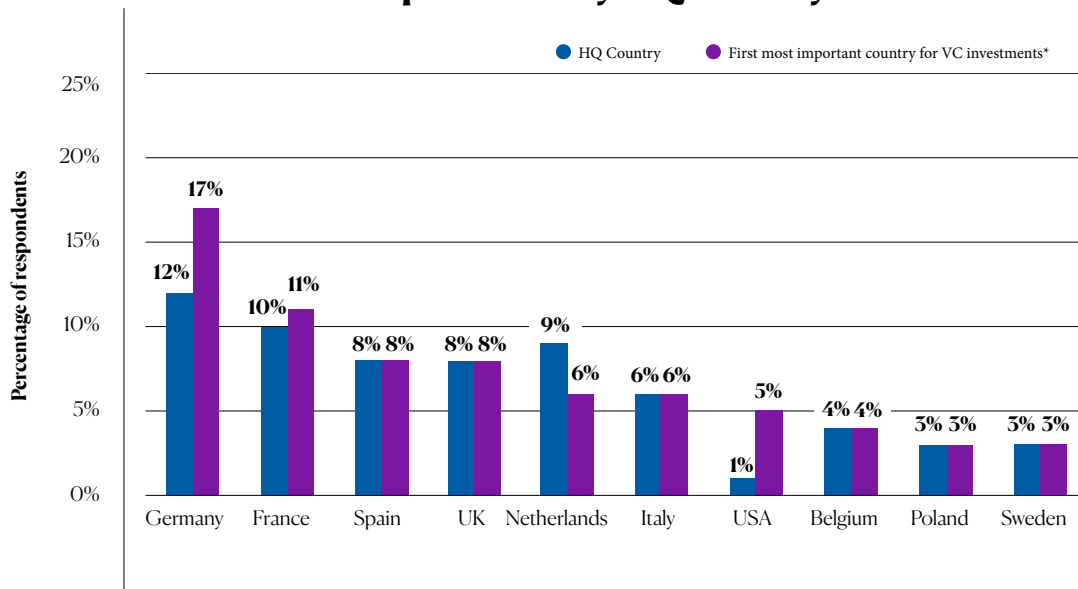
More than half of PE MM fund managers hold a business degree.

8 PE MM respondents in 10 have a post-graduate degree, largely focused on business, economics or STEM subject matters.

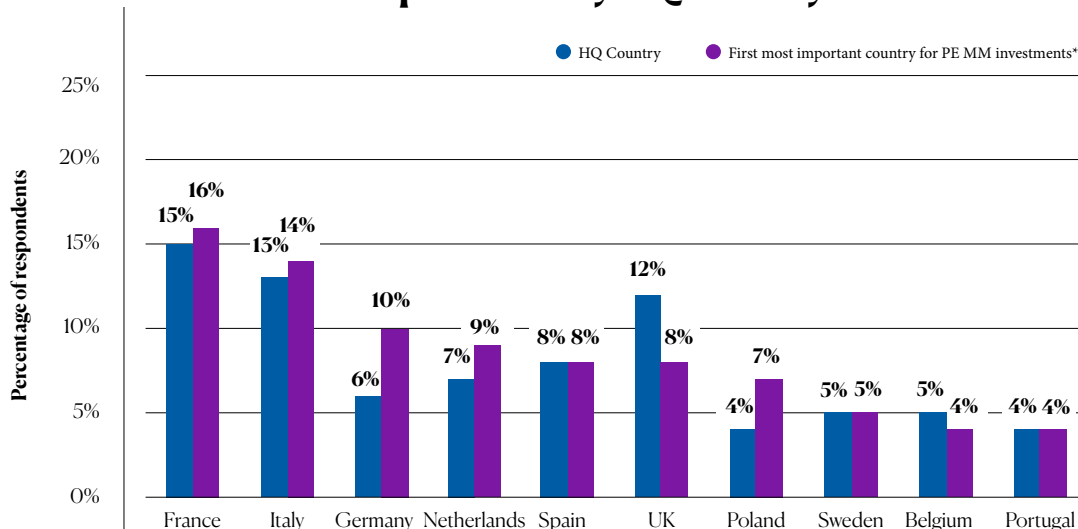
Compared to VCs, a lower share of PE MM respondents hold a STEM degree, while a greater percentage hold a business or economics degree. This is reflected in PE MM respondents' prior work experience, largely dominated by positions in consultancy, finance and investment banking domains.

HQ & investment location

Distribution of respondents by HQ country of VC firm



Distribution of respondents by HQ country of PE firm



*The graphs show only the top-10 countries in the sample.

Q: In which country/geography is your firm headquartered?

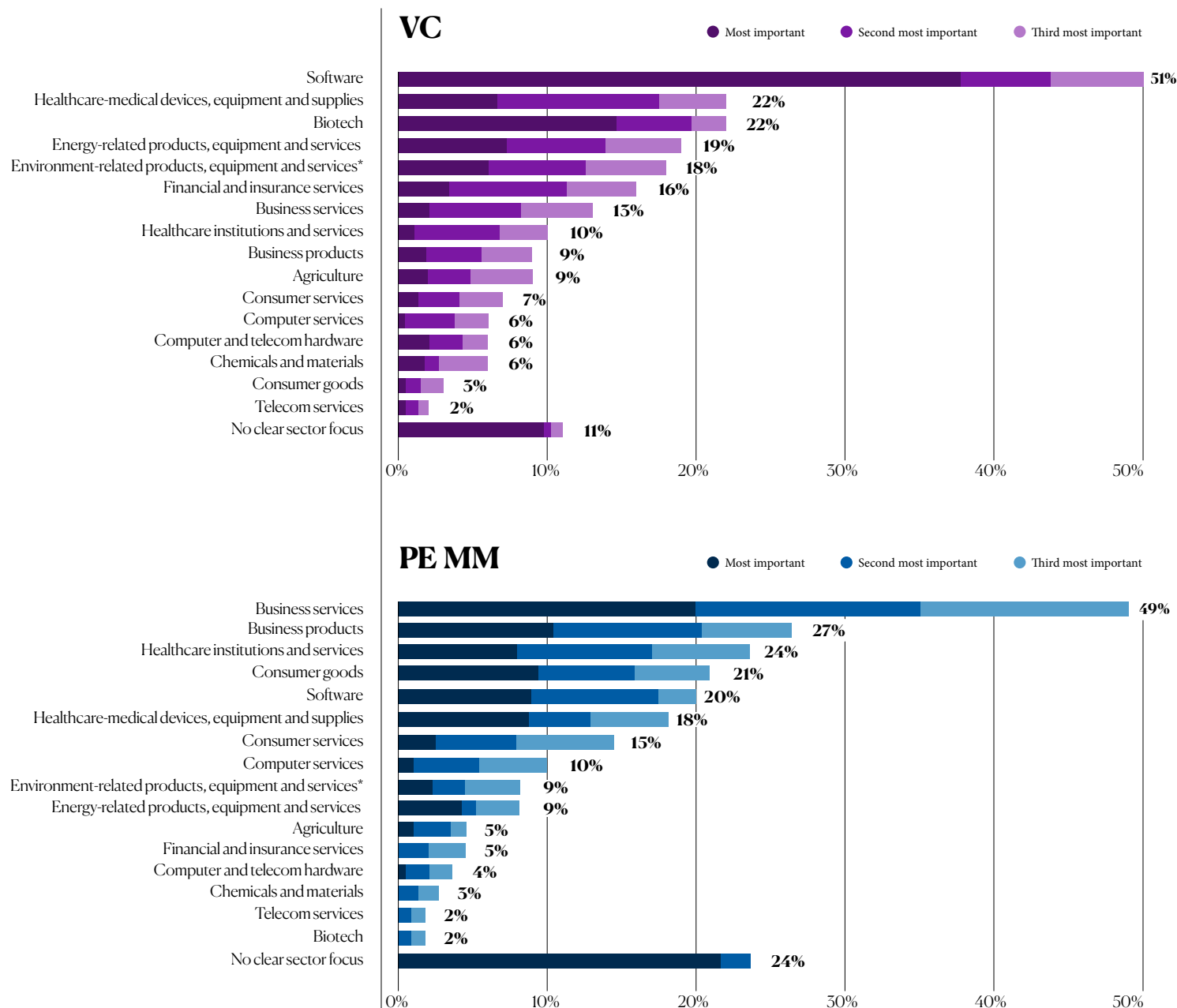
Q: Please select the most important countries in which your firm invests in venture/PE mid-market. (multiple selection possible); and then "rank them by importance."

Approximately 5 in 10 VC fund managers come from VC firms headquartered in Germany (12%), France (10%), the Netherlands (9%), the UK (8%), and Spain (8%). In the case of PE MM respondents, 5 out of 10 come from PE firms headquartered in France (15%), Italy (13%), the UK (12%), Spain (8%), and the Netherlands (7%).

Overall, the frequency with which a country is selected as the most important country for investments is closely linked with the HQ country, for both VC and PE MM.

Germany is mentioned more frequently as the most important country for investments than would be expected from the frequency with which it is mentioned as a HQ country, for both VC and PE MM. This also applies for the USA in the case of VC and for Poland in the case of PE MM.

Most important industries for investments



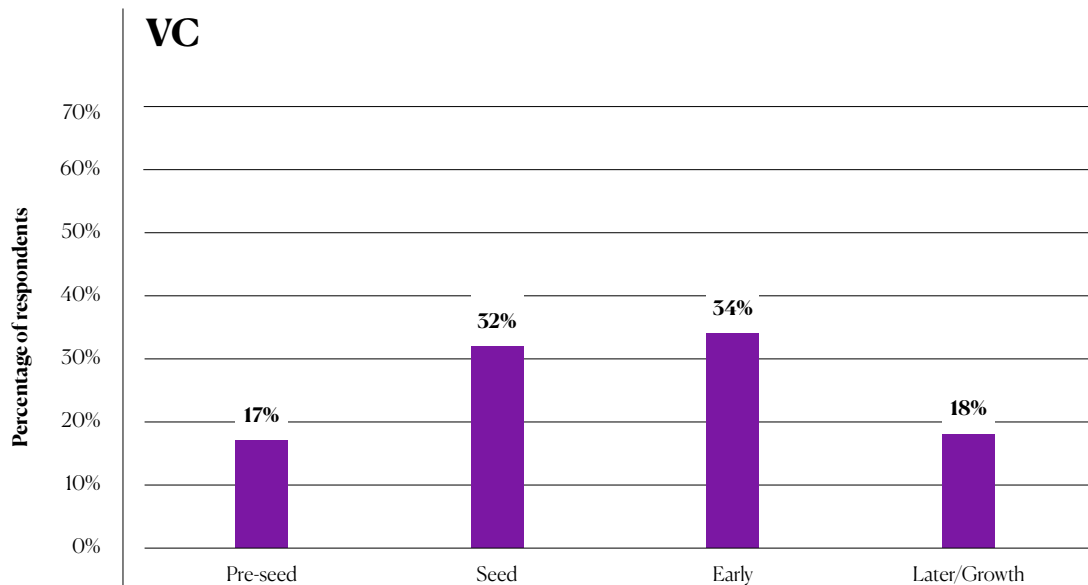
* "Environmental-related products, equipment and services" excludes energy, which is included in "Energy-related products, equipment and services"

Q: Please select the most important industries in which your firm invests in venture/PE mid-market. (multiple selection possible); and then "rank them by importance."

The most important industry in which VCs invest is Software, followed by Biotech, Energy & Environment, and Healthcare equipment. As for PE MM investments, the most important industry is Business services, followed by Business products, Healthcare institutions & services, and Consumer goods.

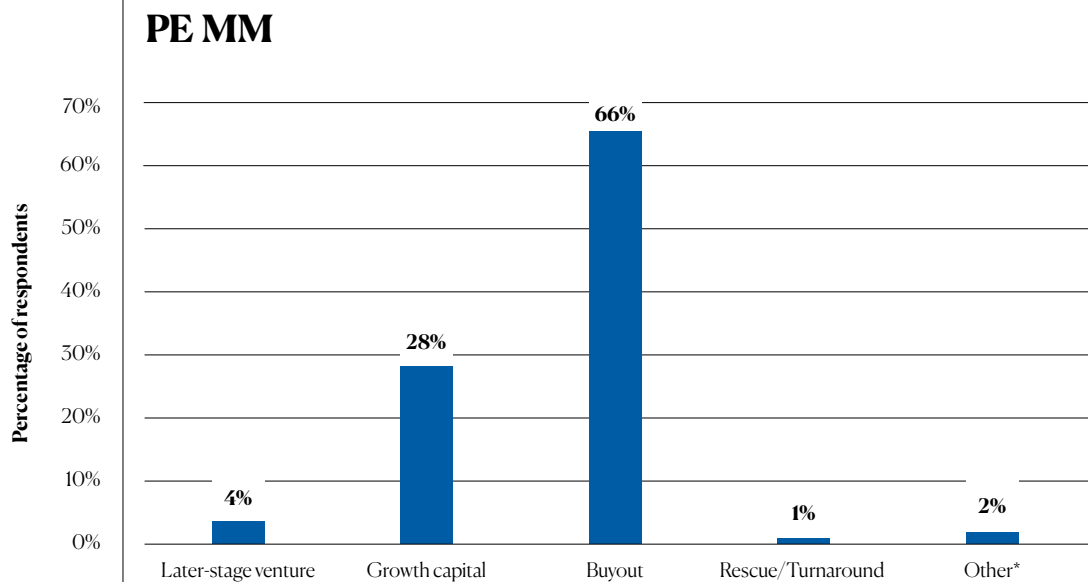
PE MM respondents also appear to be more generalist investors in terms of investment focus compared to VC ones. Biotech is ranked highly by VCs, while it seems to gather the attention of just a small number of PE MM fund managers.

Investment stage focus



Approximately 7 in 10 VCs invest in seed (32%) or early-stage (34%) companies.

Just about 2 in 10 VCs focus on later stage/growth or on pre-seed.



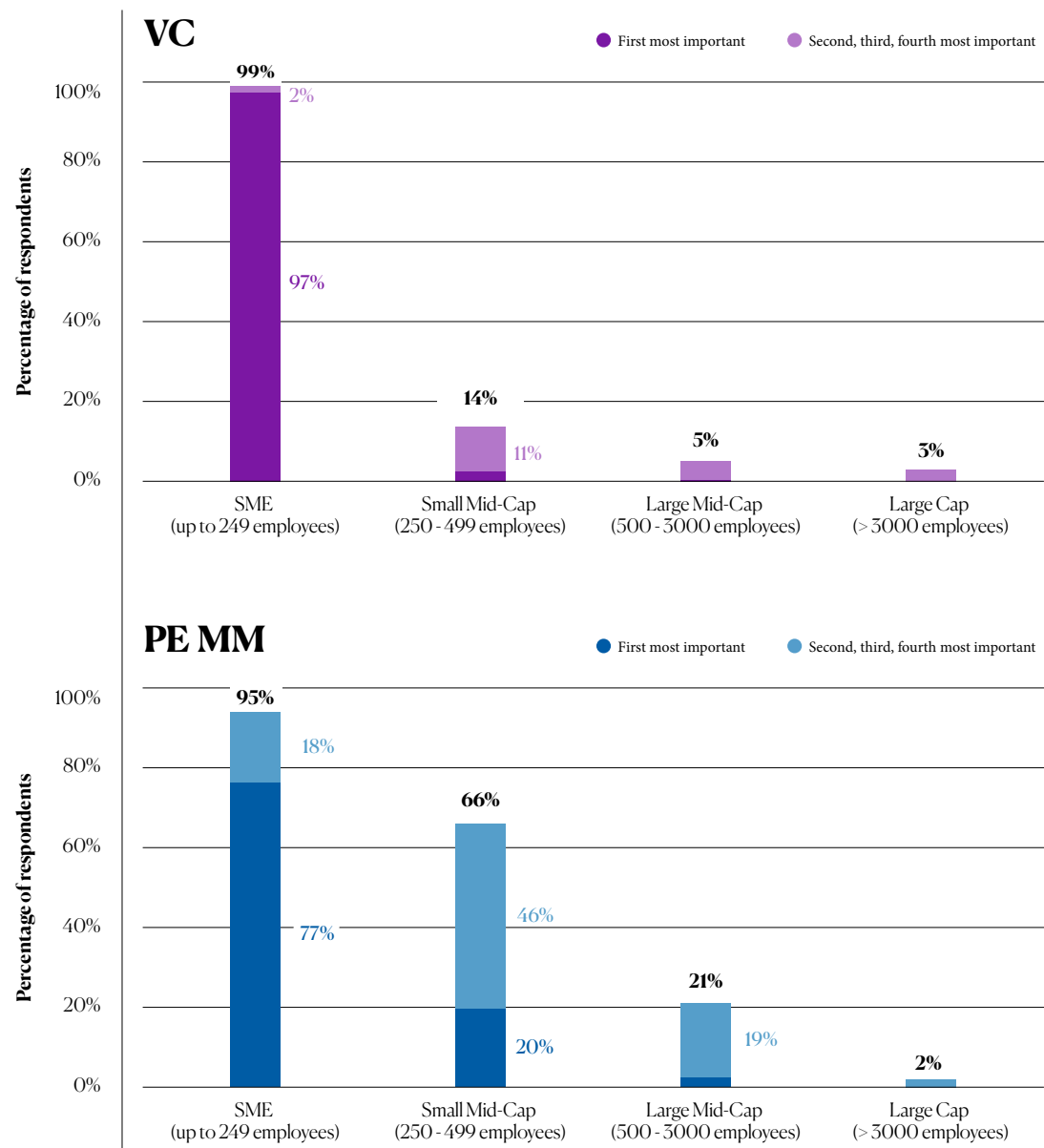
* "Other" includes the "Pre-seed", "Seed" and "Early" investment stages

Q: What is (are) the most important stage(s) in which your firm invests?

Note: The graphs show the first most important stage for VC/PE mid-market investments.

Two thirds of PE MM respondents (66%) focus on buyouts, followed by growth capital.

Sizes of companies in which fund managers prefer to invest



Q: What are the sizes of companies in which your firm prefers to invest (enterprise sizes, by number of employees at the time of the first investment)? (multiple selection possible); and then “rank them by importance”.

Note: Percentages in **black font** on top of the bars show the aggregate percentage of respondents who have selected the respective market segment. Reading example: 99% of VCs invest in SMEs; for 97%, it is even their first most important investment target.

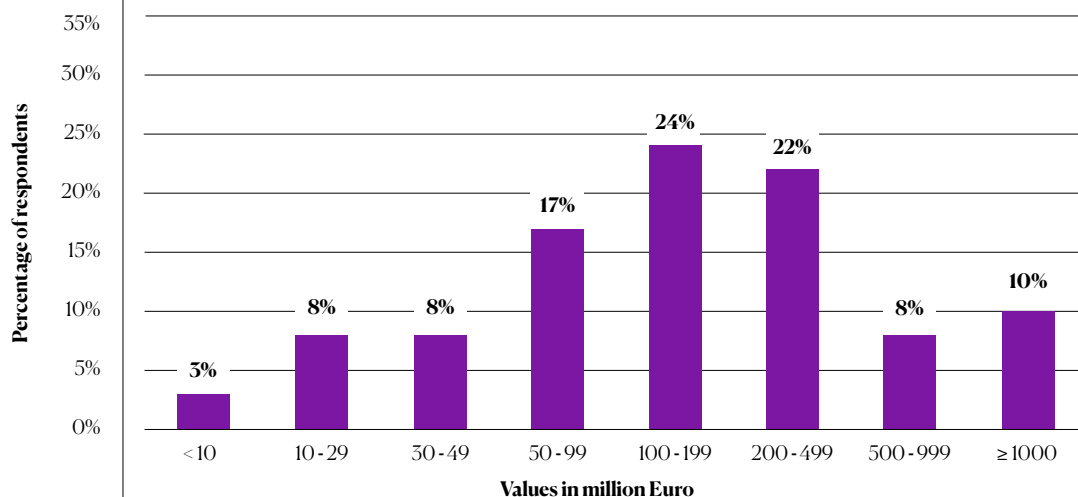
Both VC and PE MM fund managers are predominantly targeting investments in SMEs.

The vast majority of VCs tend to invest only in SMEs. The same occurs for PE MM fund managers, followed by investments in Small Mid-Caps.

Some VCs tend to also invest in Small Mid-Caps and Large Mid-Caps, probably indicating the participation in later funding rounds in scale-ups. A much higher proportion of PE MM fund managers invest in Large Mid-Caps, suggesting the participation in later funding rounds in scale-ups or in build-up processes.

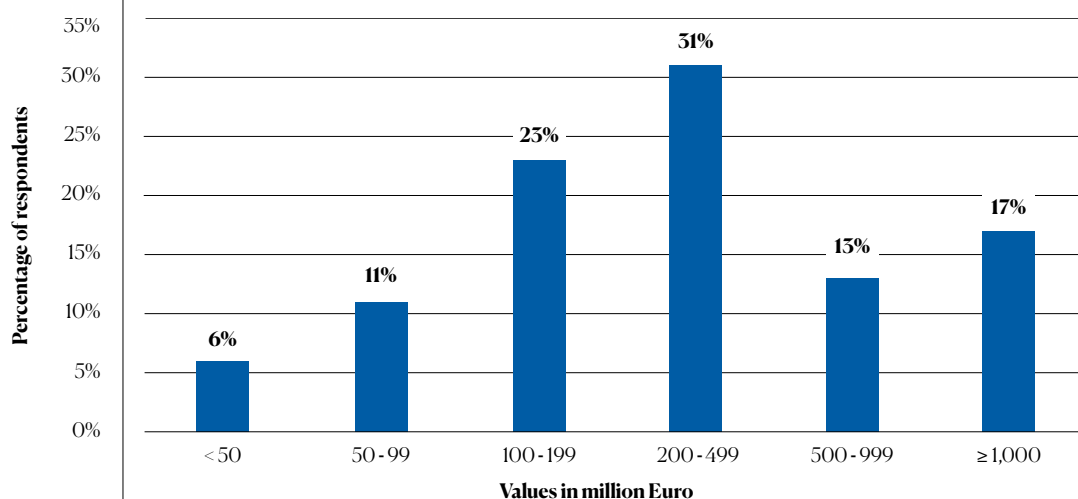
Assets under management

VC



6 in 10 VC firms have AUM between EUR 50m and EUR 500m.

PE MM



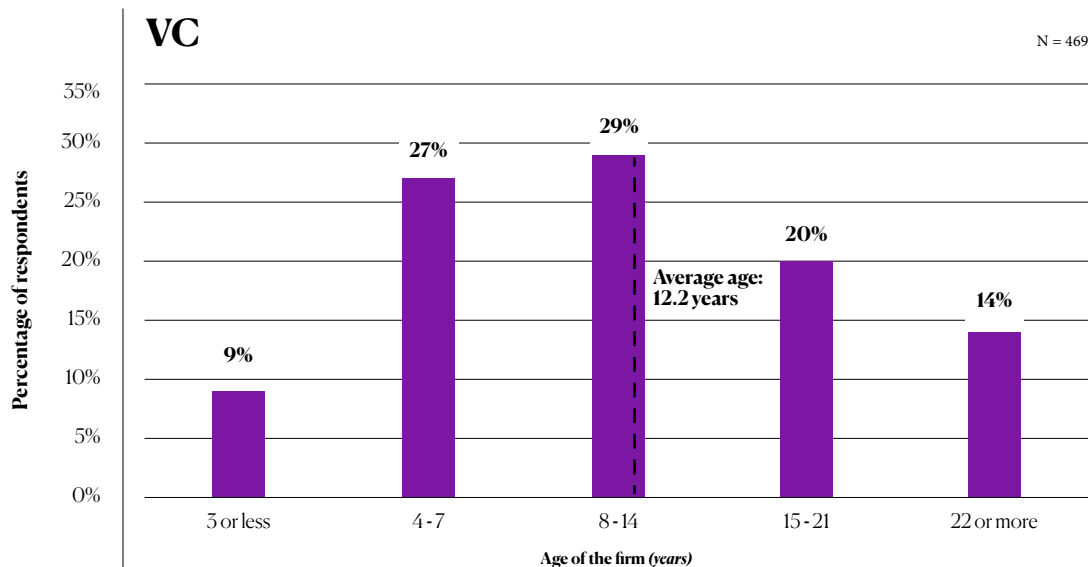
61% of PE MM fund managers report AUM above EUR 200m in their PE firms.

Overall, PE firms have AUM of greater value than VC firms. Indeed, 6 in 10 PE MM fund managers report AUM above EUR 200m, while this is true for 4 in 10 VCs.

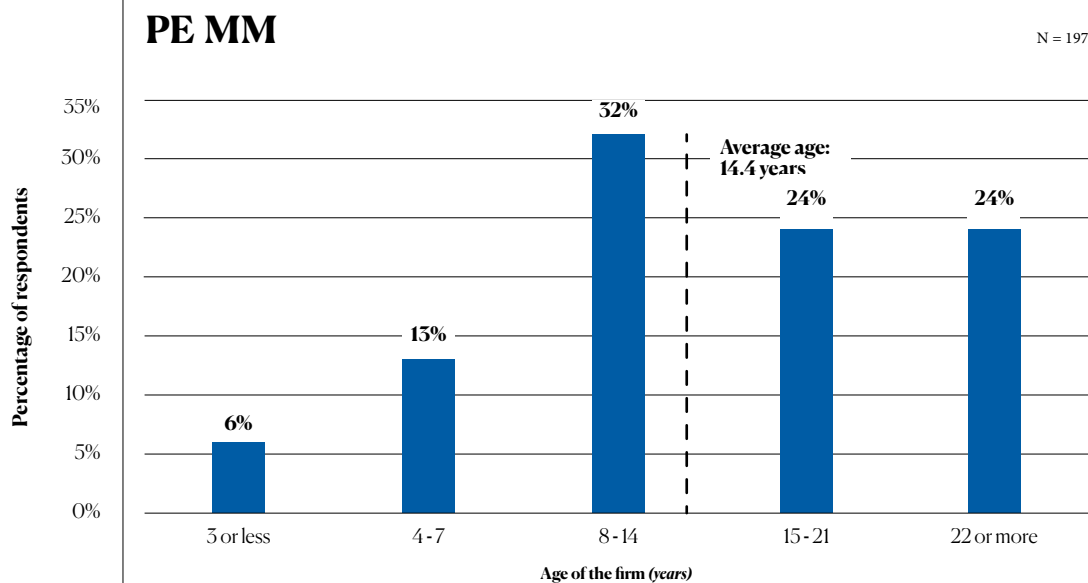
Only 6% of PE MM fund managers report AUM below EUR 50m, compared to 19% of VCs.

Q: What are your firm's total approximate assets under management (defined as "the sum of capital committed in all active funds")?

Firm age



The average VC firm was established in 2010/11, making it on average 12 years old.



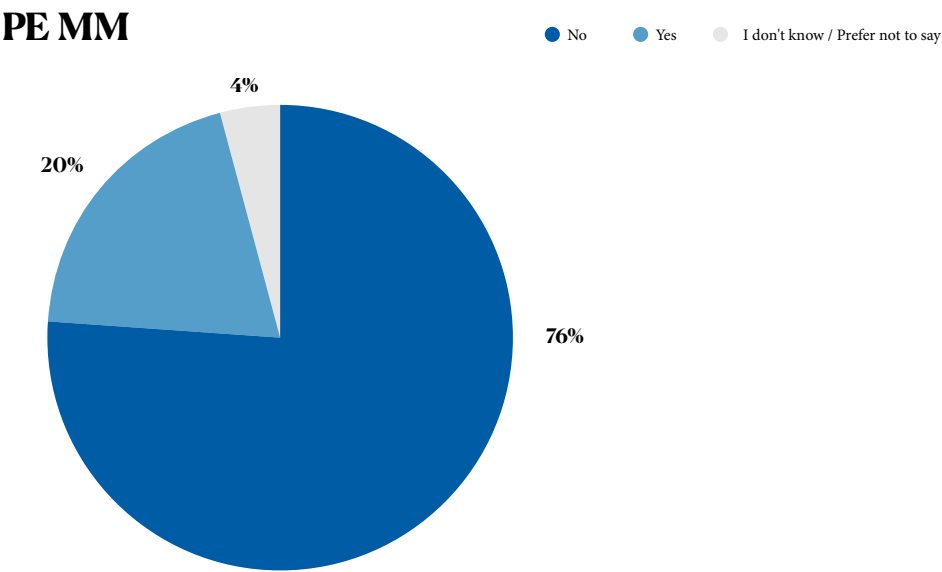
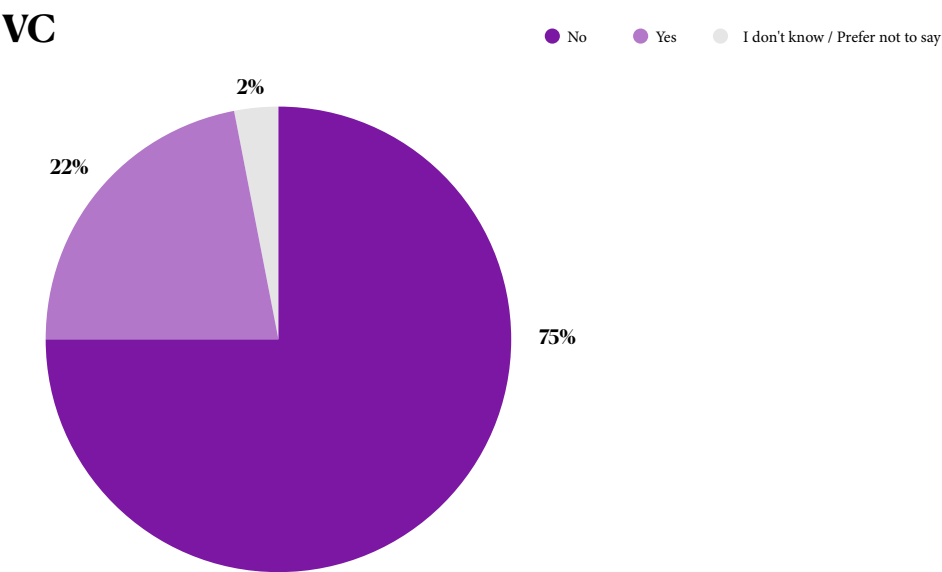
Q: In what year was your firm established?

The average PE firm was established in 2008/09, making it on average 14.4 years old.

Overall, PE firms are older than VC firms. 65% of the respondents' VC firms were established in the last 14 years, compared to 51% of PE firms.

24% of the respondents' PE firms are more than 22 years old, against 14% of VC firms.

Team experience in raising funds



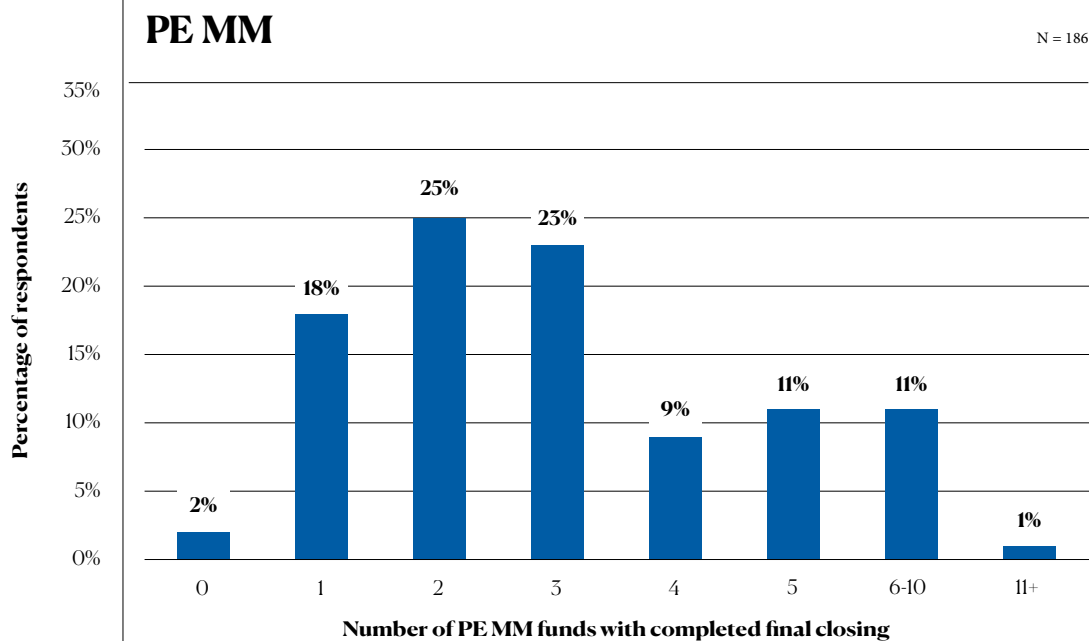
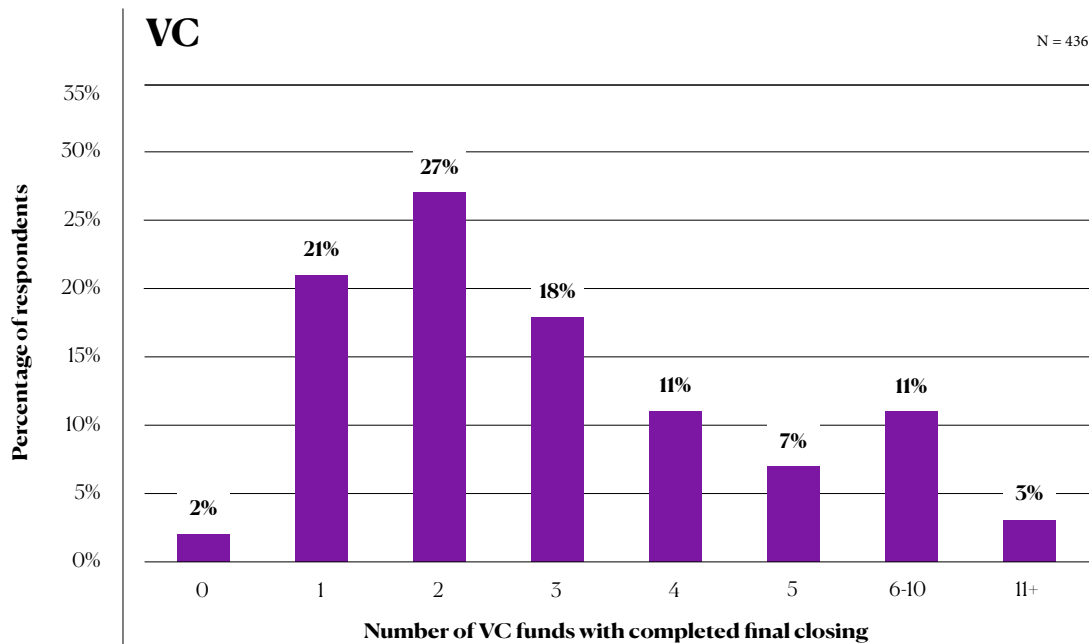
Q: Was the latest fund your VC/PE firm raised also the first fund that your firm raised?

Approximately 1 in 4 VC fund managers and 1 in 5 PE MM fund managers stated that their most recent fund was also the only one raised.

Overall, both VC and PE MM respondents have a long-standing experience in raising funds.

This experience is also reflected in the number of funds raised to date, which for almost half of VC and PE MM respondents lies between two and three.

Number of funds raised

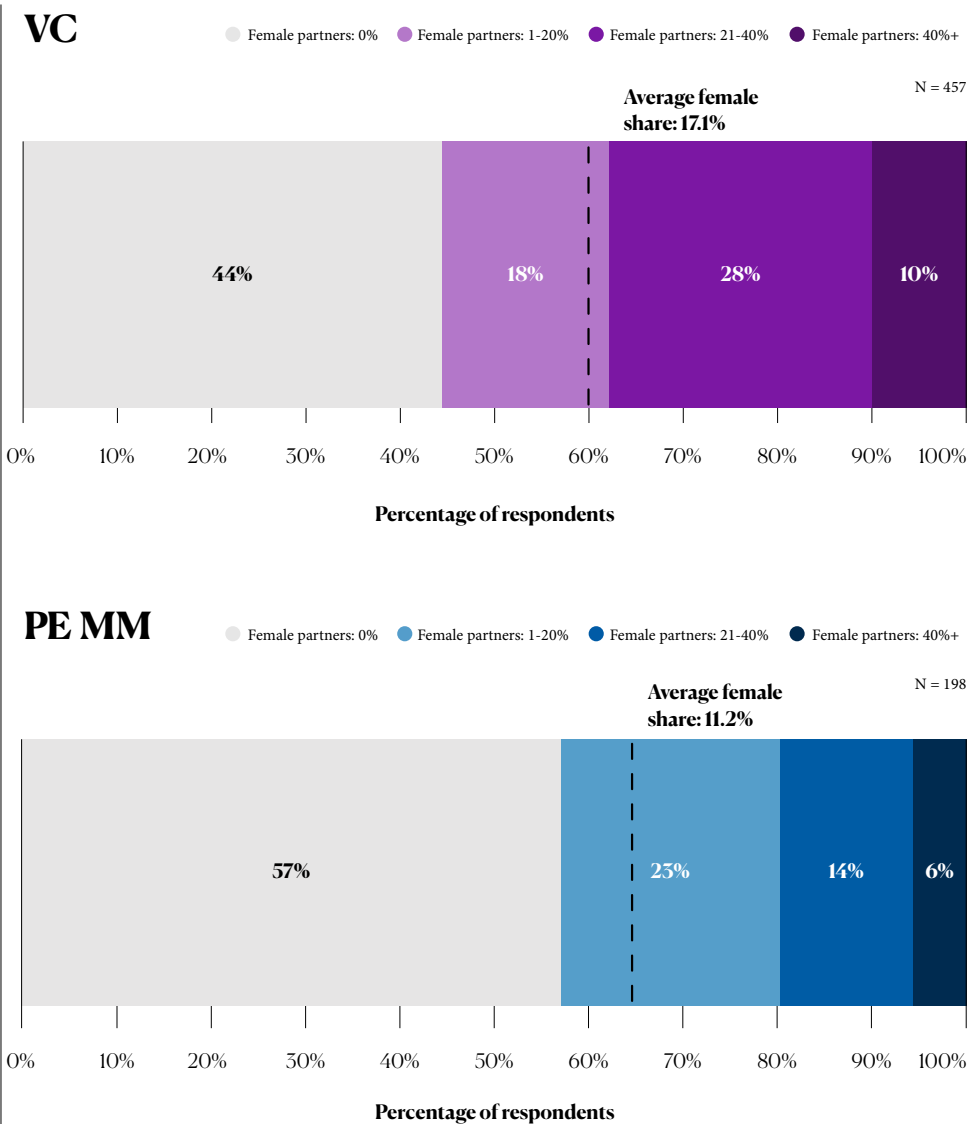


Q: In total, for how many VC/PE MM funds has your firm completed a final closing to date?

Almost half of VC and PE MM respondents stated that their respective firms have completed a final closing for between two and three funds to date.

21% of VC fund managers have raised more than 5 funds. This percentage is similar for PE MM fund managers (23%).

Gender diversity: at partner level



Q: How many partners (all types) are there in your firm?

Q: How many female partners (all types) are there in your firm?

The majority (62%) of the VC teams are male-dominated, with 20% or less females as partners. The same is true for an even higher percentage (80%) of PE MM teams.

Almost half (44%) of the VCs report no female partners at all in their VC firm; with the percentage increasing to 57% in the case of PE MM.

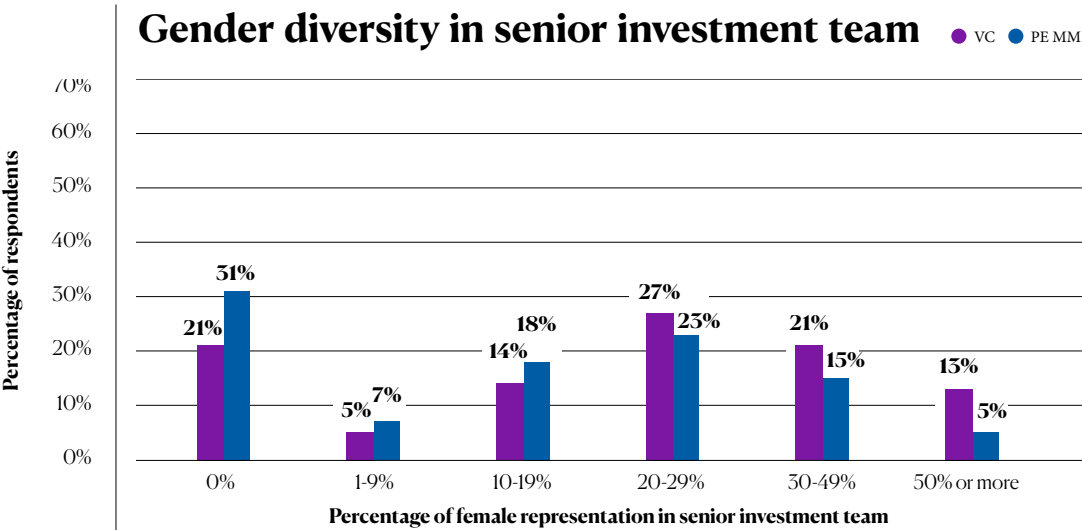
About 1 in 4 (28%) VCs and 14% of PE MM fund managers report female representation at partner level between 20% and 40%.

Only 1 in 10 VCs and 1 in 20 PE MM fund managers report having a female partner share exceeding 40%.

In light of the above, the average female representation at partner level of the surveyed VC firms is 17.1%; and much lower, at only 11.2% in the case of the surveyed PE firms.

Gender diversity: in investment decision bodies

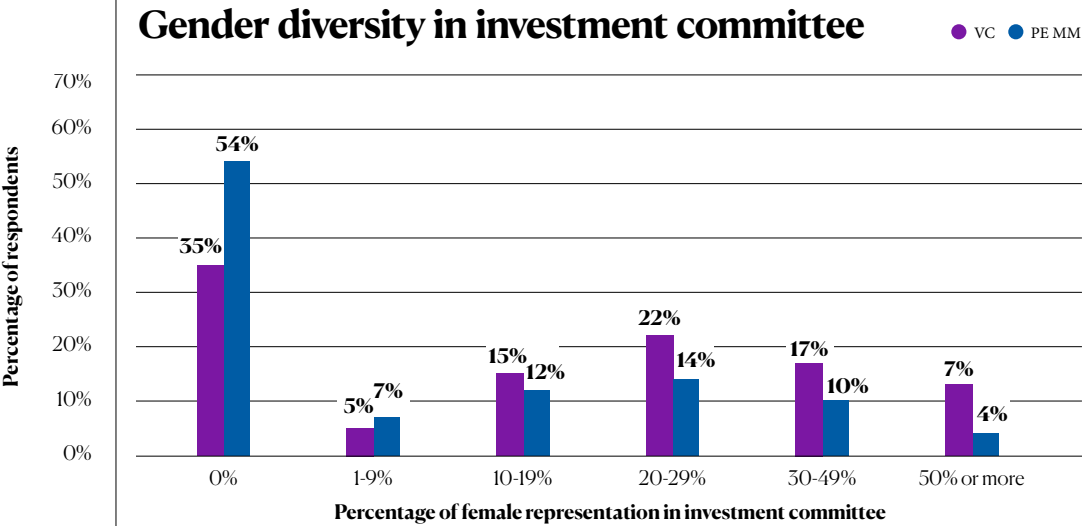
Q: Please indicate the percentage of female representation in your firm's senior investment team.



For almost 5 in 10 VCs, female representation in the senior investment team of their firm is between 20% and 49%; one-fifth report no female representation at all; while for another one-fifth of VCs, the share is below 20%.

Almost one-third of PE MM fund managers report no female representation in the senior investment team of their respective PE firms; while for almost 4 in 10 PE firms, female representation in the senior investment team is between 20% and 49%.

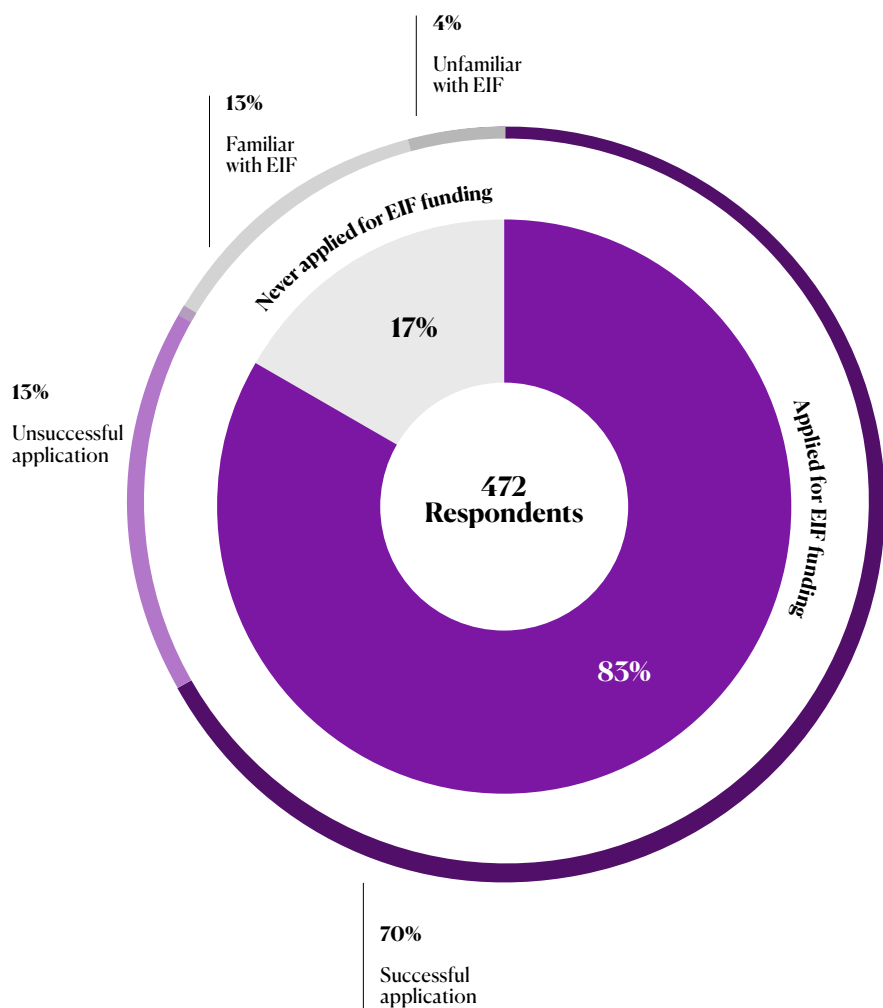
Q: Please indicate the percentage of female representation in your firm's investment committee.



For 4 in 10 VCs, female representation in the investment committee of their firm is between 20% and 49%. However, more than one-third of VCs report no female representation at all.

The latter is the case for more than half of PE MM respondents. In only about 1 in 4 PE firms, female representation in the investment committee is between 20% and 49%.

EIF relationship - VC



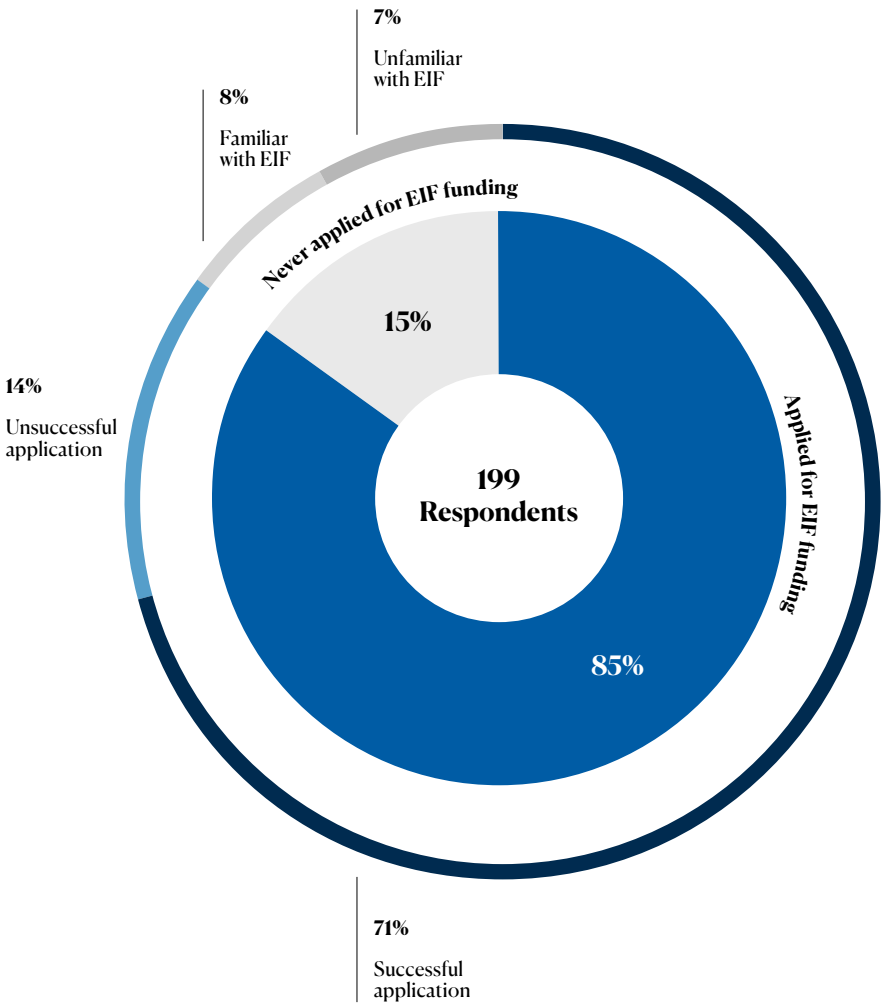
Q: Has your investment firm ever applied to the EIF for funding for one of your venture capital funds?

Q: Are you familiar with the EIF and its activities?

Q: Did any of these applications result in EIF funding?

Among VC respondents, 70% are EIF-supported, while 17% have never applied for EIF funding.

EIF relationship - PE MM



Q: Has your firm ever applied to the EIF for funding for one of your PE mid-market funds?

Q: Are you familiar with the EIF and its activities?

Q: Did any of these applications result in EIF funding?

Among PE MM respondents, 71% are EIF-supported, while 15% have never applied for EIF funding.

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All errors are attributable to the authors.

List of acronyms

- AUM: Assets Under Management
- BA(s): Business Angel(s)
- CEO: Chief Executive Officer
- EIB: European Investment Bank
- EIF: European Investment Fund
- ESG: Environmental, Social, Governance
- EU: European Union
- EUR: Euro
- GP(s): General Partner(s)
- HQ: Headquarter
- ICT: Information and Communications Technologies
- LP(s): Limited Partner(s)
- m: million
- MBA: Master of Business Administration
- PE MM: Private Equity Mid-Market
- Q: Question
- PhD: Doctor of Philosophy
- SME: Small and Medium-sized Enterprise
- STEM: Science, technology, engineering and mathematics
- UK: United Kingdom
- USA: United States of America
- VC: Venture Capital
- VCs: Venture Capital fund managers

About the EIF equity surveys

Evidence-based policy intervention to address challenges and opportunities

The **EIF** concentrates on supporting the necessary private sector venture capital (VC) and private equity (PE) mid-market (MM) infrastructures to **address market gaps and challenges** as well as to **support opportunities** with the aim to further enhance the **attractiveness of the European VC and PE mid-market** as alternative asset classes.

In order to improve the availability of information for **evidence-based policy interventions**, the EIF performs, on a regular basis, the *EIF VC Survey* and the *EIF Private Equity Mid-Market Survey*. In addition, the *EIF Business Angels Survey* was performed in 2019, 2020 and 2021/22. An *EIF Private Debt Survey* was performed in 2021.

The already large outreach of the EIF surveys and the high relevance of the questionnaire topics for both market participants and policy makers have further increased through a **cooperation with Invest Europe**, in particular for the *EIF VC Survey*, from 2021 onwards.

The EIF surveys provide a unique source of information and insight

The *EIF VC Survey* and the *EIF Private Equity Mid-Market Survey* (*EIF PE MM Survey*) provide the opportunity to retrieve **unique market insight**. To the best of our knowledge, the combined *EIF VC Survey* and *EIF PE MM Survey* currently represent the **largest regular survey exercise among GPs in Europe**.

All EIF survey-based studies (across all survey waves and asset classes) are regularly published in the **EIF Working Paper series, available here:**
https://www.eif.org/news_centre/markets-and-impact/index

The European Investment Fund (EIF) focuses on access to finance for European startups, SMEs, and mid-caps by addressing market gaps and challenges. As part of its EU public policy objectives, the EIF offers dedicated financing support for education, skills, upskilling, and reskilling (among others).

Find out more about who we are and what we do: <https://www.eif.org>

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