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Scale-Up Financing and IPOs: Evidence From Three Surveys

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Executive summary[1]

Based on the 2020 waves of the EIF Venture Capital (VC), Private Equity Mid-Market (PE MM) and Business Angels (BA) surveys, this report provides unique insights from venture capital general partners (GPs)/management companies, Mid-Market private equity managers and independent or syndicated business angels headquartered in the EU27, the UK and some other European countries. The surveyed populations include both entities in which the EIF has invested as well as entities in which the EIF has not (or not yet) invested. Specifically, in light of recent EU policy initiatives such as the Capital Markets Union (CMU) action plan, the report focuses on generating insights around three main topics of SME financing:

- Scale-up financing (see page 8 for a definition),
- Exit environment and initial public offerings (IPOs) and,
- Policy-related implications of the above.

The study attempts to piece together evidence from the three surveys and provide market insights from respondents in light of recent policy initiatives, as an informative instrument to policy-makers and practitioners. The overall survey insights can be summarised as follows:

Scale-up financing

- The perceived **opportunities for scale-up financing** differ considerably across respondent groups. While a majority of VC and BA respondents report insufficient financing opportunities for scaling up companies in Europe, a majority of PE MM respondents report sufficient financing opportunities.
- Considerable differences also exist across geographic regions. VC and PE MM respondents **based in the DACH region are most negative** about their scale-up financing opportunities. PE MM respondents from France, South and Nordics are most positive compared to PE MM respondents from other regions, while VC respondents from France and South are among the most negative compared to VC respondents from other regions. These results suggest that there are still market gaps, even in core markets.
- The low scale-up focus of funds in Europe is one of the biggest challenges for all three investor groups, but especially for BA respondents.

Investor challenges and Exit environment

- Numerous challenges emerge for investors, where the **number of high quality entrepreneurs** appears to be a top challenge for VCs and BAs and **high investee valuations** is ranked highest by PE MMs.
- **The exit environment** is also considered a top challenge across the three respondent groups.
- In terms of **exit routes**, sales to strategic buyers continue to be the main exit option for PE MM funds, closely followed by sales to financial investors. Sales to strategic buyers are also the

[1] We would like to thank the respondents to the EIF surveys. Without their support and valuable replies, this project would not have been possible. This paper benefited from comments and inputs by many EIF colleagues, for which we are very grateful; we would like to express particular thanks to Julien Brault, Cindy Daniel, Oscar Farres, Bernardo Ghilardi, Tomasz Kozlowski, Helmut Krämer-Eis, Maud Marcinkowski, Barry McGrath, Antonino Stefanucci, Wouter Torfs and Ivan Yakimov. We would also like to thank colleagues from the Trier University for their support. All errors are of the authors.

main exit route for VCs while sales to financial investors are considerably less frequent for this respondent group. IPOs are used more often as an exit route by VCs than by PE MM respondents.

IPO involvement and holding periods

- PE MM and VC respondents mostly report **no IPO involvement** or plan of IPO in the near future, moreover, many of them report **not having IPO involvement as part of the fund strategy**.
- Notably, those VC and PE MM managers that did participate in IPOs indicate that they were **most often primary listings in the EU**, although a significant percentage of VC respondents still choose to list outside the EU, primarily in the US.
- IPO involvement is most commonly reported from respondents in France, DACH and UK & Ireland.
- Among those respondents that invest around IPOs, both **PE MM and VC managers mainly report participating in pre-IPO investments** (investments in companies where at the time of investment the company anticipates listing in the next 12 months).
- Holding periods of **2-3 years** are most common for **pre-IPO investments**, with VC respondents on average reporting longer holding periods than PE MM respondents. Post-IPO holding periods resemble those of the IPO and pre-IPO, with holding periods of 2-3 years most common, although holding periods of 3-5 years are also more common for post-IPO investments. The typical holding period of 3 years is consistent with findings in the literature.

Our survey results suggest that there remains scope for improving scale-up financing opportunities in Europe, which is largely consistent with the existing literature which identifies a scale-up gap in Europe. Among our survey respondents overall, there exists broad agreement for a number of actions which can be implemented in order to address this gap, including improving the possibility for European scale-ups to execute an IPO and providing public support for funds focusing on the scale-up stage and for funds investing around IPOs.

Our survey results show that sales to strategic and financial investors continue to be by far the main exit routes and that IPOs remain relatively rare, especially for PE MM and BA investors. We also find that a substantial percentage of respondents across our survey target groups have never been involved in an IPO. In light of these findings, we explore the public-private equity divide which has developed in recent years and decades. We discuss the consequences of this divide and the advantages and disadvantages this has created. We then consider the potential role of crossover funds in bridging this divide, in improving performance for both investors and portfolio companies by strengthening the IPO market and ultimately in addressing the scale-up gap.

We present a number of existing policy proposals and show that the proposed instruments have some characteristics in common with crossover funds and therefore have the possibility of enhancing scale-up financing opportunities in Europe by strengthening the IPO market.

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1 Introduction

This EIF Working Paper presents evidence based on primary market data gathered from three distinct surveys targeting Private Equity Mid-Market (PE MM) and Venture Capital (VC) fund managers as well as Business Angels (BA), all headquartered in the EU27, the UK and some other European countries. A detailed overview of these surveys and the respondents is provided in section 2. The analysis conducted in this working paper focusses on scale-up financing considerations, investee exit routes and IPOs. It is motivated by considerations related to EU policy initiatives and further builds on existing findings in the relevant literature, which are discussed extensively in section 4. The literature in section 4 is analysed in light of our survey results from section 3.

This paper is unique in that it combines scale-up financing considerations and IPOs and does so from the perspective of financial equity investors in SMEs from the early start-up phase to the later scale-up stage. Existing studies generally focus on either scale-up financing or IPOs and do so from the perspective of SMEs. For example, the "scale-up report 2019" and the "Tech Scaleup Europe 2019" reports both focus on scale-up financing from the perspective of SMEs (Scale-Ups.EU, 2020; Startup Europe Partnership, 2019a). The "Tech Scaleup IPOs report 2019" combines an analysis of scale-up financing with IPOs but also does so from the perspective of SMEs (Startup Europe Partnership, 2019b) while Duruflé et al. (2017) examine the challenges entrepreneurial companies face in scaling up. Our unique approach enables us to identify existing weaknesses of the European IPO market, ways in which these can be addressed, and the extent to which these methods could assist in enhancing scale-up financing opportunities in Europe.

The importance of scale-up financing and IPOs for the growth perspectives of enterprises and for exploiting the innovation potential in the EU is highlighted by numerous policies addressing these areas. Several policy initiatives have sought to address the scale-up gap in Europe over the past years, notably the Capital Markets Union (CMU) Initiative launched in 2015 and explained extensively in section 4.5. The EIF also launched the European Scale-up Action for Risk capital (ESCALAR) pilot programme in April 2020 in order to address the financing gap of scale-ups in Europe (EIF, 2020). The European Commission (EC) is exploring how to support IPOs of SMEs with investments, which may include an initiative under the InvestEU programme starting 2021 under the CMU (EC, 2020).

In the following, we introduce the concepts of scale-up financing, exit routes and IPOs before going into more detail in sections 3 and 4.

Scale-up financing

The definition of "scale-ups" is quite broad and includes a heterogeneous universe of companies. A commonly used definition of a scale-up is the OECD-Eurostat definition relating to High Growth Firms: "All enterprises with average annualised growth greater than 20% per annum, over a three-year period, whereby growth can be measured by the number of employees or by turnover." Other definitions instead focus on the stage in the company's lifecycle. Duruflé et al. (2017) define scale-ups as "entrepreneurial companies that are past their initial exploratory phase, have found their initial product/service offering and market segment and are entering a growth phase where they seek significant market penetration". The Startup Europe Partnership defines a scale-up as a "development-stage business, specific to high-technology markets, that is looking to grow in terms of market access, revenues, and number of employees, adding value by identifying and realizing win-win opportunities for collaboration with established companies" (Onetti, 2014). In another definition, they also view scale-ups as firms which raised between USD 1m and 100m (Startup Partnership Europe, 2019b). Reypens et al. (2019) define scale-up businesses as those that are past the start-up/search phase, but are in the execution phase of their business model, with significant growth in terms of revenues and number of employees.

While scale-ups represent only a small percentage of all businesses in Europe, they contribute disproportionately to economic and social welfare. Reypens et al. (2019) demonstrate this using a number of metrics. They find that compared to the average UK firm, scale-ups are at least 10% more productive in terms of turnover per employee in the majority of sectors and that 6% of UK businesses – those with the highest growth rates – created half of the new jobs in existing businesses between 2002 and 2008. Flachenecker et al. (2020) find that High Growth Enterprises are responsible for the majority of net employment growth in the EU (87% of total employment growth in 2014-2015 and 53% of total employment growth in 2015-2016), despite only representing 11% of firms.

A key challenge in Europe remains a relative shortage of successful scale-ups and there is a significant gap compared with the US, which has three times as many scale-ups as Europe (Scale-Ups.EU, 2020). Only 0.5% of European start-ups are estimated to scale (Reypens et al., 2020). The extent of the scale-up gap in Europe is discussed more extensively in section 4.1.

Our survey results in section 3 identify a number of policy proposals which financial equity investors believe could assist in reducing this scale-up gap and consider extensively the potential role of a more developed IPO market. While previous publications by EIF authors have focused on the role of VC funding in addressing the scale-up gap in Europe (see Kraemer-Eis et al., 2019; Kraemer-Eis & Lang, 2017), this working paper focuses on the role of IPOs. With this background, section 4.4 looks at the potential role of crossover funds in supporting a smooth transition from private to public equity markets and thereby assisting in reducing the scale-up gap.

Exit environment and IPOs

The opportunity to exit an investment is a key part of the private capital cycle and allows for a quantitative assessment of investors' performance (Schwienbacher, 2005). If financial investors find it difficult to successfully exit their existing investments, investors in existing funds will be reluctant to invest in follow-on funds. Exit routes are therefore critical to the success of financial investors. According to McKinsey, PE firms have reported that exits have become more challenging in recent years, even prior to the current economic downturn and regardless of exit strategy. Buyers are increasingly sophisticated and demanding. Rapid technological change makes it challenging for buyers and sellers to reach a mutual understanding of risks as well as potential sources of value (McKinsey, 2018). Moreover, comparatively low volumes of venture funding in Europe have been repeatedly ascribed to a lack of attractive and liquid markets for VC exits (Hege et al., 2009; Tykvová et al., 2012). The exit environment has become even more challenging amid the ongoing COVID-19 crisis. The resulting market uncertainty has made both buyers and sellers reluctant and exits in the European private equity market have plummeted in Q2/2020. In total, 155 exits were completed, with an aggregate value of EUR 8.45bn in Q2/2020, compared with 274 exits with an aggregate value of EUR 50.2bn in Q2/2019 (Matthews, 2020). This market environment is also challenging for LPs that invest in private equity: many LPs use the money returned to them by older funds that are in the distribution phase to meet capital calls from new funds in the investment phase. While buyers expect significant price reductions in the current environment, sellers prefer to wait, meaning that LPs are seeing fewer exits in their fund portfolio. As such, evidence on exit dynamics in the European context becomes important for policy-makers in designing public intervention in the European ecosystem. Given the coverage of VC, PE MM and BA investors, this paper aims to identify emergent exit considerations facing investors across private markets.

In their framework for the analysis of exit options, Duruflé et al. (2017) distinguish between three fundamental paths which start-ups intending to scale up can take: staying private, going public and getting acquired. The first two paths allow the company to scale up as an independent entity. While publicly-listed companies should have better access to capital, many SMEs consider the initial and ongoing costs of listing to outweigh the benefits. In addition to the costs of going public, SMEs are concerned about higher disclosure requirements and losing control (Kraemer-Eis & Lang, 2017). The framework also distinguishes between strategic and financial buyers, with sales to the latter categorized as staying private since companies continue to be run as a private independent entity. While an acquisition by a strategic buyer and to a slightly lesser extent an IPO are considered a final exit decision, the decision to stay private is a temporary one since it merely delays a future final exit. This is particularly noteworthy given the increased sales to financial investors among PE MM exits, which we discuss in section 3.2.

Capital markets are an important source of funding for SMEs growing into mid-caps and ultimately large companies. Europe continues to lag behind the US in terms of capital market development, with European SMEs receiving five times less funding from capital markets than US SMEs (EC, 2015), partly due to a highly fragmented market. The number of European SME IPOs declined sharply in the aftermath of the 2007-2009 global financial crisis and has not recovered since. In 2019, the value and number of European IPOs continued to fall, by 40% and 47%, respectively, relative to 2018 (EC, 2020). A stock market listing is most often considered as the optimal exit route for VC-backed firms, as it allows them to tap deeper pools of capital. However, since the 2008 crisis, European venture capital experienced difficulties, and stock markets saw a downward trend of investment share relative to private markets. The number of listed firms in Europe has decreased by 10% since 2012 (AFME, 2019). In this context, a new EU fund dedicated to SME IPOs has been proposed as part of the CMU agenda to facilitate SMEs' access to finance (Lehmann, 2019). In its original proposition, it would make the success of a stock exchange listing more likely, and possibly resolve the illiquidity problem that may have discouraged IPO preparation in the first place. It must be stressed that such a fund should be solely targeted at a well-defined failure in financial markets, such as the funding gap affecting growing SMEs with risky projects. As such, a new initiative should crowd in private capital, rather than displace it. This initiative has been positively received from various actors in the market (Lehmann, 2019; FESE, 2020). Lehmann (2019) highlights that the initiative should not be targeted to markets that are inherently illiquid, as issuers would have been better served by a cross-border listing elsewhere in Europe.

The remainder of this working paper is divided into four main parts. Section 2 provides a brief overview of the surveys and highlights some general characteristics of respondents. Section 3 digs deeper into the data and the analysis of the results with the aim to uncover in detail some of the most interesting results. Section 4 covers the discussion of these results in light of relevant literature while considering policy implications. The final section concludes.

2 Survey overview

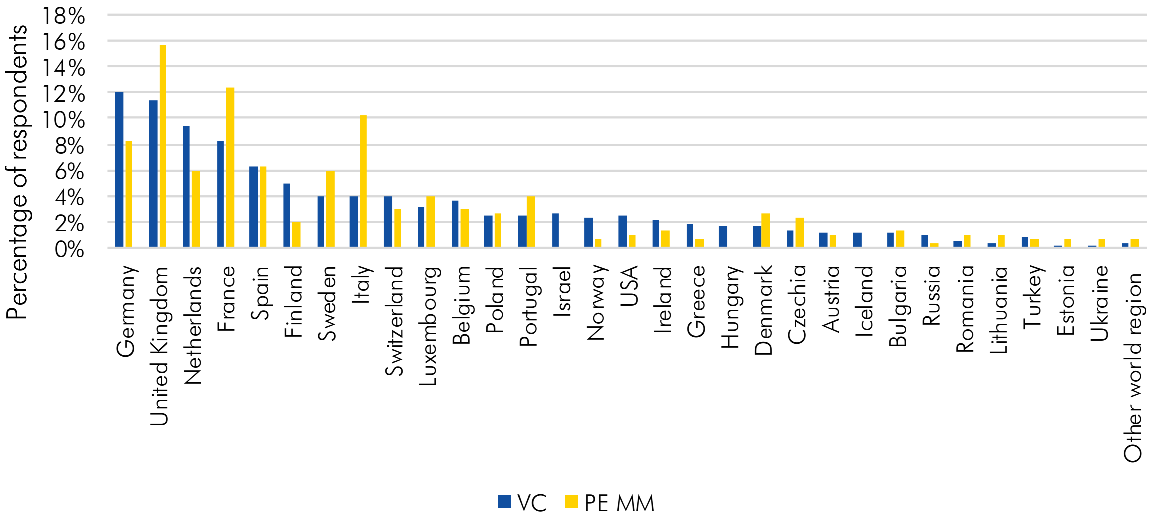
This paper presents evidence based on primary market data gathered from the latest waves of three distinct EIF surveys targeting Private Equity Mid-Market (PE MM) and Venture Capital (VC) fund managers as well as Business Angels (BA), all headquartered in the EU27, the UK and some other European countries. All surveys target both equity investors that are EIF-supported as well as other VC/PE MM/BA investors. 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. The EIF BA Survey is unique in its pan-European coverage and multi-country approach.

In the first-ever EIF PE MM Survey wave, 301 responses from PE MM fund managers (from 249 PE firms) were received between 13 February and 26 March 2020. In parallel, 608 VC fund managers (from 493 VC firms) responded to the third wave of the EIF VC Survey between 29 January and 10 March 2020 and 139 responses from BAs were received between 05 February and 16 March 2020. The vast majority of respondents in all surveys hold the position of CEO or Managing/General Partner, suggesting that their responses reflect the views of the decision-makers.

The questionnaires of the most recent waves of these surveys mainly covered the following topics: general characteristics of the respondents' equity investment activities/market sentiment, valuations, scale-up financing in Europe, IPOs, environmental, social and governance (ESG) considerations and impact investing. The analysis conducted in this EIF Working Paper focusses on scale-up financing considerations, investee exit routes and IPOs. A previous EIF Working Paper covered the market sentiment topic from the three survey questionnaires (Kraemer-Eis et al., 2020). It aimed at identifying respondents' perception of the current market situation and their outlook for the months ahead.

Some general features of the surveyed investors are provided below. Approximately 4 in 10 VCs come from VC firms headquartered in Germany, the UK, the Netherlands or France (Figure 1). In the case of PE MM fund managers, it is the UK, France, Italy and Germany that feature more prominently. In unreported results, the UK and Germany are the two European countries most frequently mentioned by BA survey participants as the main target countries for BA investments.

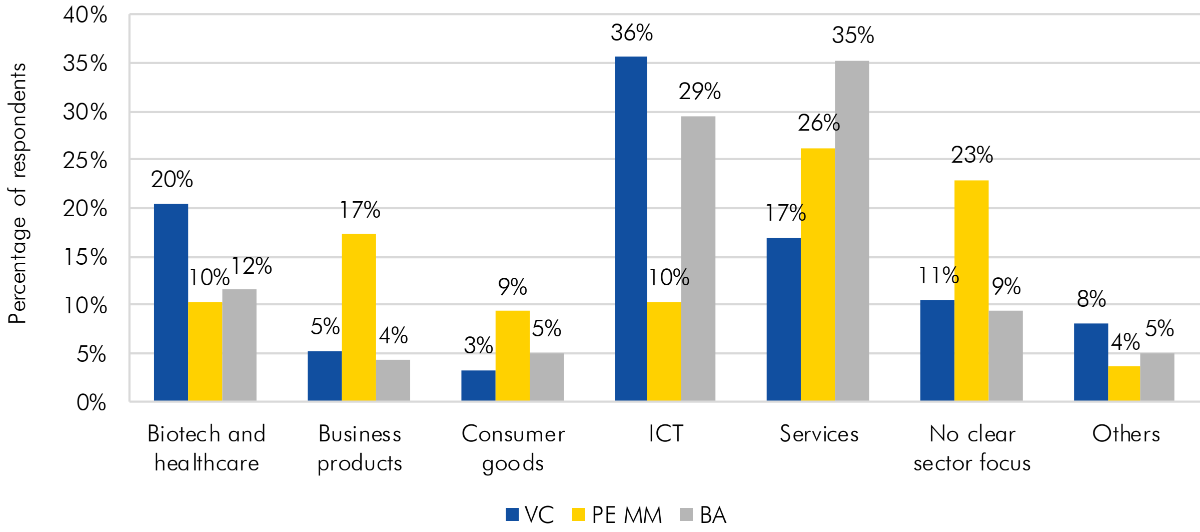
Figure 1: Distribution of respondents by firm headquarter country



Q. In which country is your firm headquartered?

When asked about the most important target industries, VC GPs target companies mainly in the ICT (36%) and the Biotech and healthcare (20%) sectors (Figure 2). By contrast, PE MM fund managers mainly invest in Services (26%) while 23% have no clear sector focus. For BAs, Services (35%) and ICT (29%) constitute the two main sectors for investments.

Figure 2: Most important target industry for investments



Q. Please select the most important industries in which you/your firm invest/s.

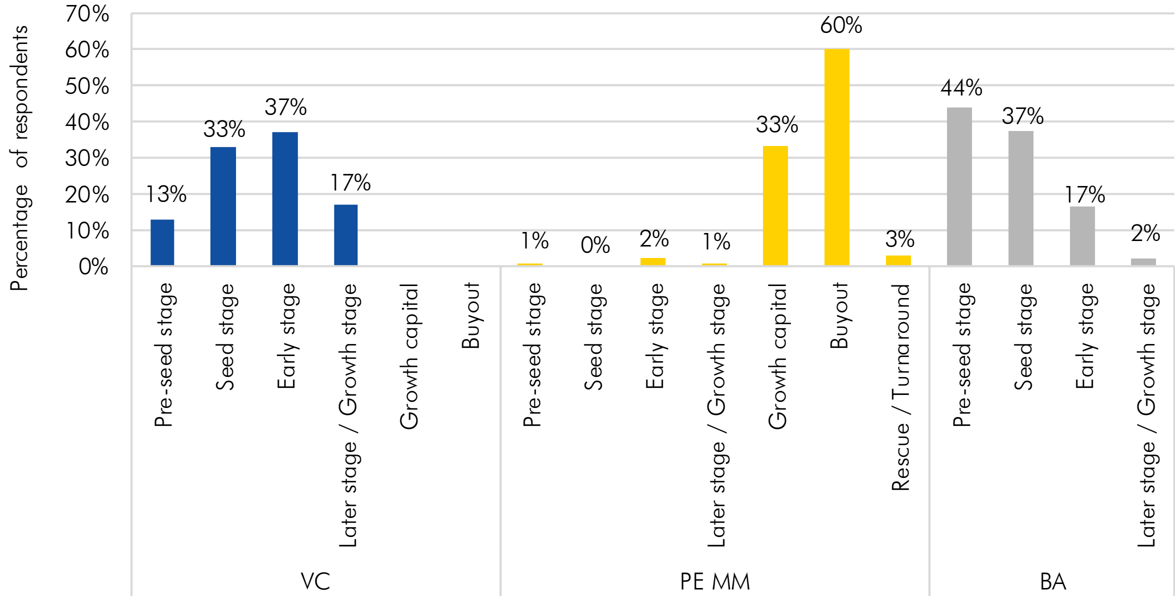
Note: The sector "Services" includes "Business services", "Consumer services" and "Financial and insurance services". The sector "Others" includes "Energy and environment" and "Chemicals and materials". As the question allowed for multiple selection in the responses, the Figure reflects the percentage of respondents who have indicated the respective industry as their first most important target industry for investments.

Considering the most important investment stage, the results echo prior research findings that BAs tend to invest in younger companies compared to VC or PE MM fund managers – almost half of the surveyed BAs invest in the pre-seed stage, while 37% invest in the seed stage (Figure 3). VCs mainly invest in early stage (37%) or seed stage (33%) companies, while for PE MM fund managers, the buyout stage (60%) takes clear precedence.

In this respect, it is also worth noting that the VC firms represented in the survey are relatively younger compared to the PE MM firms (the majority of the VC firms have been founded in the last decade) and relatively smaller in terms of assets under management (for the majority of the VC firms, assets under management do not exceed EUR 100m, while most PE MM firms fall in the EUR 100-500m range).

During the start-up stage, the most common external investors are BAs, early-stage VCs and corporate investors. During the scale-up stage, the main investors are later-stage VCs, corporate investors, growth equity funds, PE funds, hedge funds, crossover funds, family offices, sovereign wealth funds and institutional investors investing directly. Figure 3 shows that our surveys investigate both enterprise development stages by evaluating the exit options from the perspective of BAs, early- and late-stage VCs and PE funds.

Figure 3: Most important investment stage



Q. What is (are) the most important stage(s) in which you/your firm invest/s?

Note: As the question allowed for multiple selection in the responses, the Figure reflects the percentage of respondents who have indicated the respective stage as their first most important investment stage.

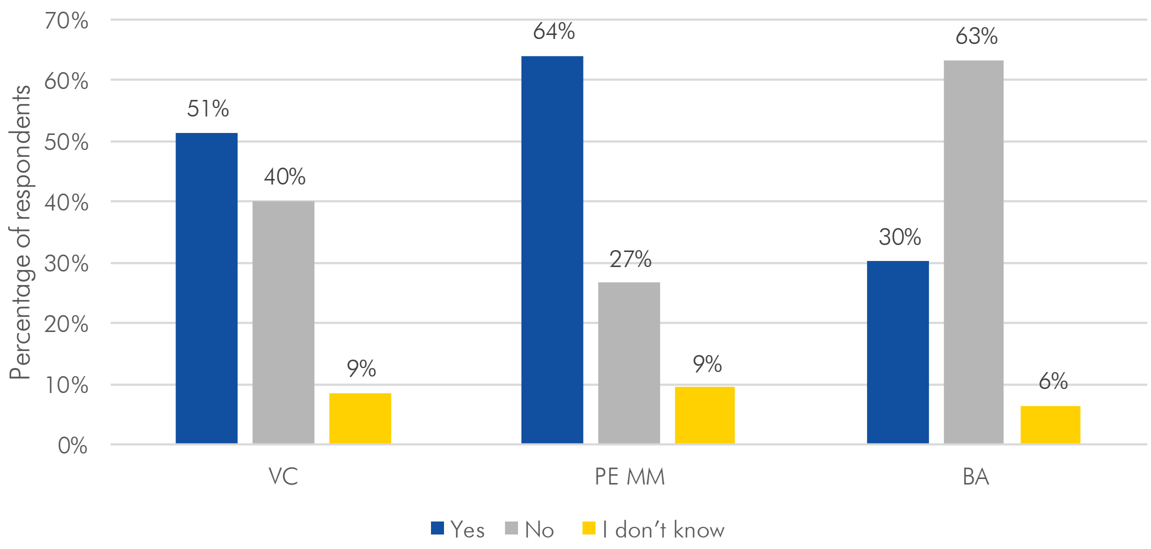
3 EIF Survey results

3.1 Scale-up financing and IPOs

When asked whether there are sufficient financing opportunities for companies to scale up in Europe, PE MM managers are most positive, followed by VCs and then BAs. This may be partly due to the later stage and therefore less risky nature of investments undertaken by PE MM respondents, resulting in them facing fewer difficulties in attracting sufficient financing. They are also more focused on "traditional" industries or business models, resulting in a lower risk profile of the portfolio companies. In unreported results, we find that 26% of VC respondents stated that they have had a scale-up deal for their funds which failed due to insufficient funding availabilities. Overall, early stage investors are more likely to perceive the financing opportunities for scaling up in Europe as insufficient, although there remains scope for improvement across all three investor groups.

Figure 4: Perceived financing opportunities for scale-ups

PE MM respondents are most positive on the perceived opportunities for scale up financing while BA respondents are most negative

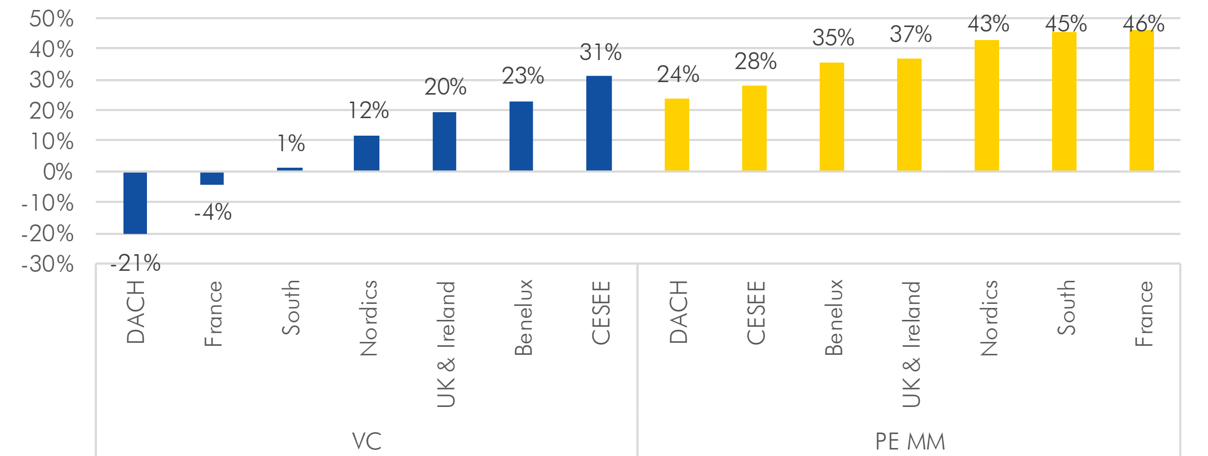


Q. Do you think that there are sufficient financing opportunities for companies to scale up in Europe?

Considerable differences in how respondents perceive scale-up financing opportunities also exist across geographic regions (depending on the location of their firm headquarter). Figure 5 shows that VC and PE MM respondents based in the DACH region are most negative, i.e. they perceive financing opportunities for companies to scale up in Europe as less sufficient than respondents from other European regions. PE MM respondents from France, South and Nordics are most positive compared to PE MM respondents from other regions, while VC respondents from France and South are among the most negative compared to VC respondents from other regions. These results suggest that there are still market gaps, even in core markets.

Figure 5: Scale-up financing opportunities (net balance) - by region

DACH emerges as the region with the most negative perception of scale-up financing opportunities across VC and PE MM



Q. Do you think that there are sufficient financing opportunities for companies to scale up in Europe?

Note: "Net balance" reflects the percentage of respondents rating the financing opportunities for companies in Europe to scale up as sufficient minus the percentage of respondents rating the financing opportunities for companies in Europe to scale up as insufficient. A positive (negative) value suggests that, on balance, respondents consider the financing opportunities for companies in Europe to scale up to be sufficient (insufficient).

Figure 6 shows the percentage of respondents (strongly) agreeing to a series of statements regarding scale-up challenges. This question was asked only to those survey participants who had stated that there are insufficient financing opportunities for companies to scale up in Europe. Compared with both VC and BA respondents, the percentage of PE MM managers who (strongly) agree that there are too few funds focusing on financing for scale-ups in Europe is considerably lower (57% compared with 73% and 83%, respectively). As with the results shown in Figure 4, this may again be due to the later stage which PE MM funds invest in compared with VC and BA firms. However, the share of respondents who agree with this statement is still very high among all respondent groups. When comparing the results by region, we observe that, among those respondents who were asked this question, this statement is confirmed by a majority of VC fund managers in all our country groups. VCs headquartered in the Benelux countries (78%) and the South (77%) show the highest level of agreement. Among PE MM fund managers, the level of agreement is the highest in the South (74%) and the DACH region (63%).

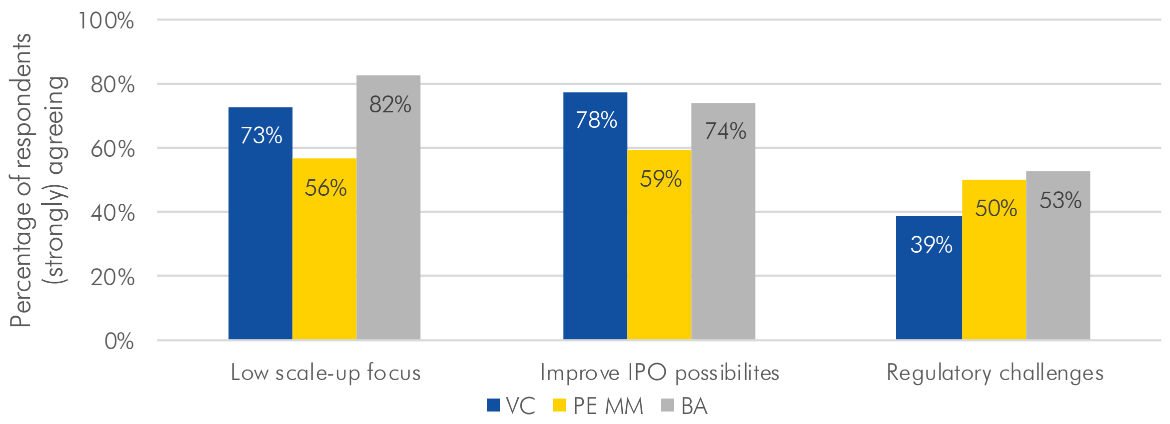
Similar results emerge when respondents are asked whether improving the possibility for European scale-ups to execute an IPO would enhance their growth ambitions. Of the PE MM respondents, 59% (strongly) agree with this statement compared with 78% and 74% of VC and BA respondents, respectively. This result is consistent with the results in Figure 4 above and may also be related to the finding in section 3.2 further below that IPOs are considered far less important as a challenge for PE MM managers than for VC managers. When comparing results by region, the statement that improving IPO possibilities would enhance the growth ambitions of scale-ups is confirmed by a majority of VC fund managers to whom this statement was shown in all country groups, with Benelux (88%) and the South (86%) displaying again the highest shares. Among PE MM fund managers, the statement is particularly confirmed in the South (89%) and the CESEE (71%) region.

Regulatory challenges are more likely to be seen as impediments for scale-up financing for PE MM and BA respondents (50% and 53%, respectively) than for VC respondents (39%). A significant percentage of respondents from all three surveys remained "undecided" on this question (between 33% and 44%), suggesting respondents are rather unclear on how regulation affects scale-up financing. When comparing results by region, the only respondent groups among which we observe a majority of responses expressing agreement with the statement are PE MM fund managers in the regions DACH (63%), South (63%), CESEE (53%), and UK & Ireland (50%).

Despite these differences across respondent groups, overall there is broad agreement that the scale-up financing gap in Europe could be addressed by increasing the number of funds active in this area, improving the IPO market, and, to some extent, addressing a number of regulatory challenges.

Figure 6: Scale-up challenges across respondent groups

There are too few VC/PE firms/funds focusing on scale-up financing; improved IPO possibilities would enhance the growth ambitions of scale-ups, particularly for BA respondents



Please indicate to what extent you agree or disagree with the following statements.
a. There are too few VC firms/PE funds focusing on financing for scale-ups in Europe
b. Improving the possibility for European scale-ups to execute an IPO would enhance their growth ambitions
c. Regulatory challenges impede the financing of scale-ups in Europe

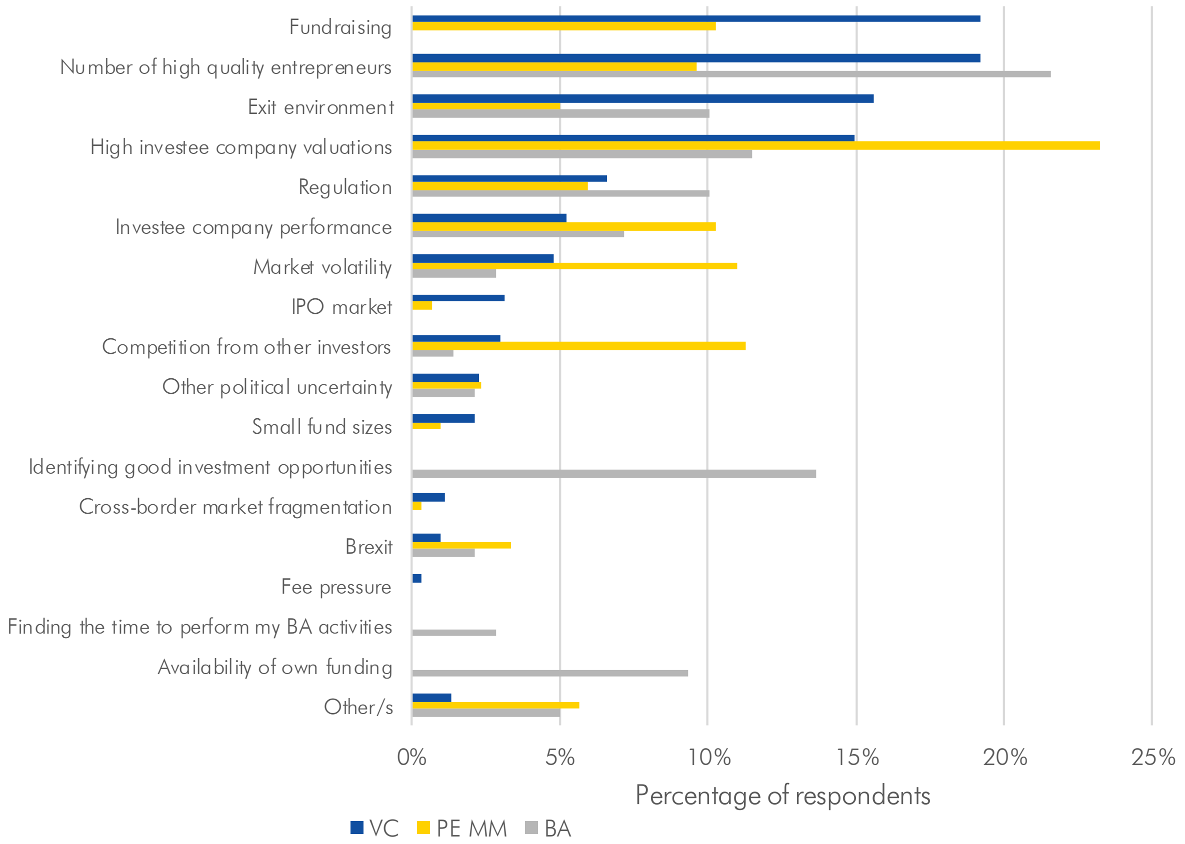
Note: Question was asked only to those survey participants who had stated that there are insufficient financing opportunities for companies to scale up in Europe.

3.2 Exit routes: challenges and importance

When asked about the biggest challenge facing investors, both the exit environment (5%) and the IPO market (1%) are perceived as less of a challenge for PE MM respondents than for VC respondents, where 16% and 3%, respectively, ranked them as most important (see Figure 7). The responses to our surveys were largely gathered before/at the beginning of the COVID-19 crisis. We already see an immediate increase in the frequency by which the exit environment was stated as an important challenge in the later weeks of our survey response gathering period, especially for PE MM and BA respondents (Kraemer-Eis et al., 2020). More recent data covering the period thereafter shows that European PE exits declined substantially (by 43% YoY in Q2 2020), reaching a decade low (Unquote, 2020), suggesting that the importance of the exit environment as a challenge may continue to increase.

Figure 7: Most important investor challenges

Both the exit environment and the IPO market are perceived as considerably more important as a challenge by VC respondents than PE MM



Q. Please select the biggest challenges you currently see in your business.

Note:

- *There were slight variations in the response options provided for the question in each of the three surveys, in particular between the VC and PE MM on the one hand and the BA on the other. The following options were only provided to BA respondents: "Identifying good investment opportunities"; "Availability of own funding"; "Finding the time to perform my BA activities". The following options were only provided to VC and PE MM respondents: "IPO market"; "Fee pressure"; "Fundraising"; "Small fund sizes".*
- *The ranking of the challenges is based on the percentage of respondents who indicated the respective challenge as their first most important one.*

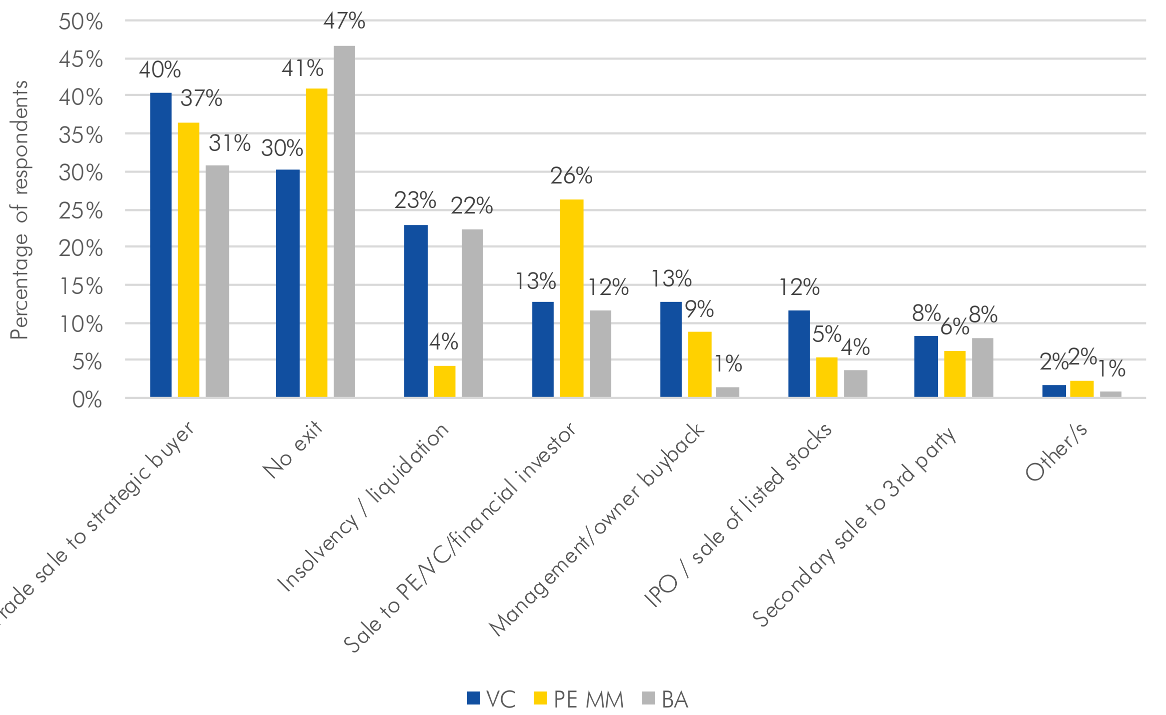
For VC respondents, 19% rank fundraising and the number of high quality entrepreneurs as the most important challenge, while 16% rank the exit environment as the most important challenge. This largely echoes the sentiment reported in the 2019 EIF VC Survey wave (see Botsari, Crisanti & Lang, 2019). One reason why IPOs are not considered among the greatest challenges very frequently may simply be that it is only one out of many exit options for VCs, although a primary one (Giot & Schwienbacher, 2006).

Fundraising is considered far less of a challenge for PE MM respondents (10%, compared with 19% of VC firms), perhaps due to record high levels of dry powder and LP commitments. Among PE MM respondents, fundraising is considered the most important as a challenge among respondents from the regions CESEE, South, and UK & Ireland. Among VC respondents, fundraising is considered the most important among respondents from the South region, followed by UK & Ireland, CESEE, DACH, and the Nordics. While dry powder is indeed at record levels in Europe, having almost doubled from 2007 to 2019, it should be noted that the relative share of dry powder was actually lower in 2019 than in previous years (Kraemer-Eis et al., 2020). For PE MM respondents, investment entry is perceived as a considerably greater challenge than exit, in particular due to high valuations. The record levels of funding raised by PE funds may explain both the high valuations and the lower importance of the exit environment in general and the IPO market in particular, as there are sufficient exit opportunities via trade sales to other PE funds. This is shown more clearly in Figure 8 and described in the related text below.

Our survey results find that only 5% of PE MM respondents exited one or more portfolio companies via an IPO in the 12 months preceding the survey (see Figure 8). The percentage is considerably higher for VC respondents (12%). Sales to strategic buyers continue to be the main exit option for PE MM funds (37%), closely followed by sales to financial investors (26%). A significant number of those exiting via sales to a strategic or financial investor also had two or more exits, while only 2 (of 301) respondents had more than one IPO. Sales to strategic buyers are also the main exit option for VC respondents (40% have exited one or more portfolio companies via this exit route in the past 12 months), while sales to financial investors play a less significant role for this group (13%). The number of insolvencies is considerably lower for PE MM respondents than for VC and BA respondents due to the later stage of their investments. However, these have begun to increase in recent months with PE-backed assets going into receivership or administration accounting for 10% of all European PE exits in Q2 2020 (Unquote, 2020).

Figure 8: Exit routes in the last 12 months, as a percentage of total

PE MMs and BAs most often held onto investments, while VCs sold to a strategic buyer. IPOs play a less significant role for all three, but especially for PE MMs and BAs



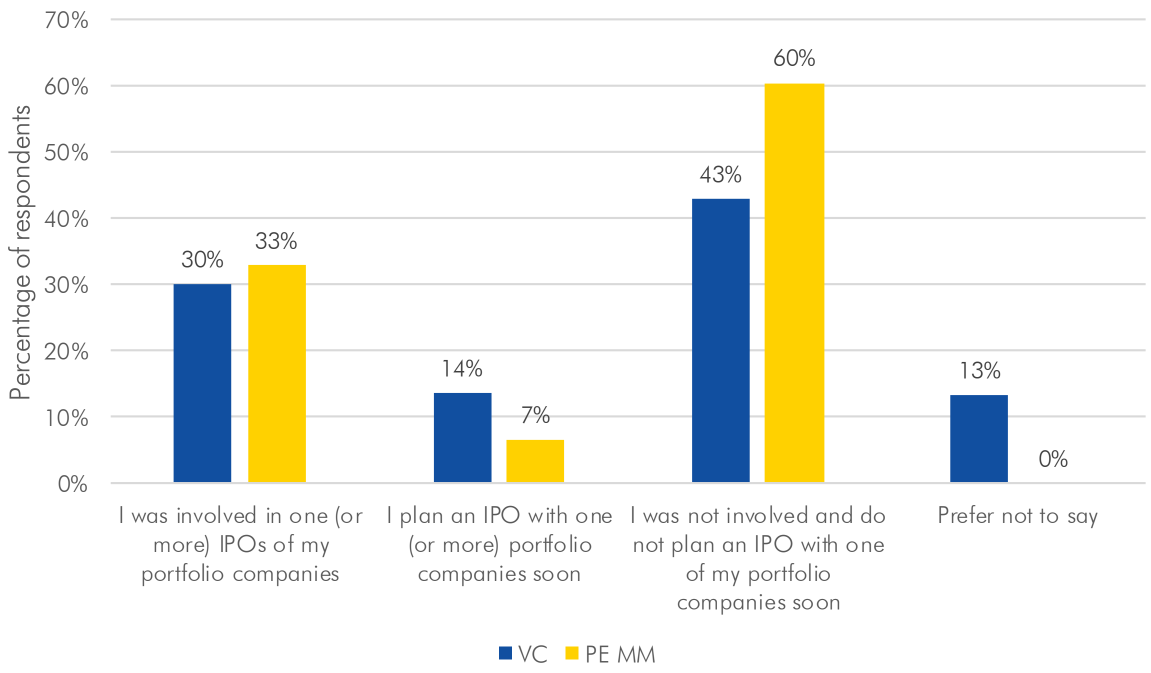
Q. During the last 12 months, how many of your portfolio companies exited via the following exit routes?

3.3 IPOs as an exit route for VC and PE MM fund managers

A large part of our survey respondents indicate that they have not been involved in an IPO (see Figure 9). While 43% of VC respondents have no experience in IPOs with any of their portfolio companies, the share is even higher for PE MM respondents (60%), which is consistent with the lesser importance of IPOs as a challenge for PE MM respondents and the less frequent use of IPOs as an exit option, which was shown in Figure 8.

Figure 9: Portfolio company IPO experience, VC & PE MM[2]

Across VC and PE MM respondents, most report no IPO involvement or planning of an IPO in the near future



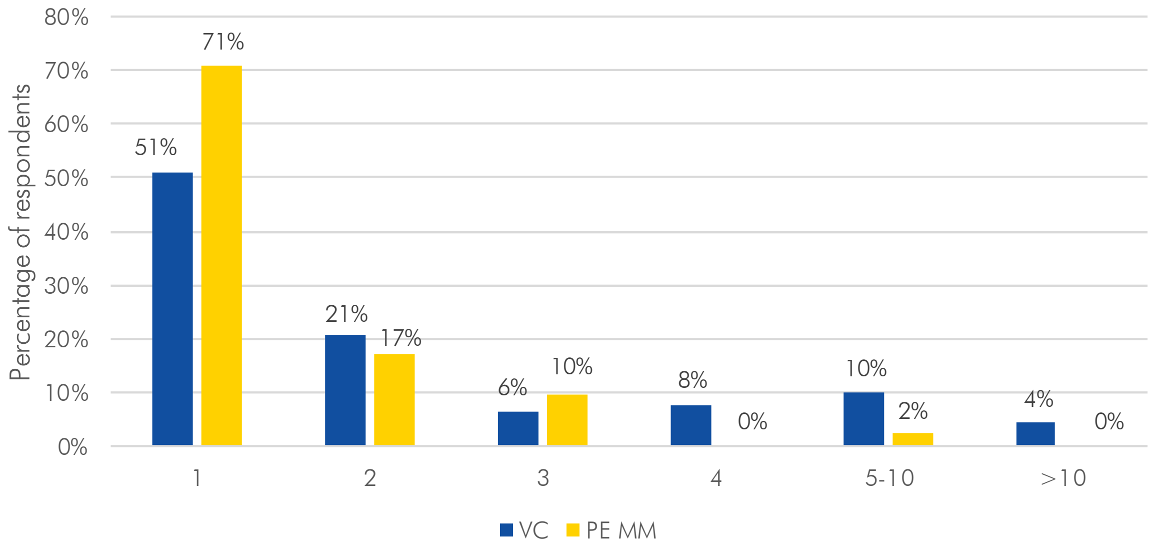
Q. What is your experience in IPOs with your portfolio companies?

Figure 10 shows the number of currently listed portfolio companies by percentage of respondents, where respondents that stated that they have no listed companies are excluded. It further underscores the observation made previously, that IPOs play a considerably more important role for VC firms than for PE MM funds. With the exception of one outlier, no PE MM fund has more than 3 portfolio companies currently listed while several VC managers have 4 or more. The percentage of PE MM respondents who stated that they have no portfolio companies currently listed is also considerably higher than it is for VC respondents (84% and 70%, respectively).

[2] The response option "prefer not to say" was not provided to PE MM respondents.

Figure 10: Number of listed portfolio companies, VC & PE MM

Excluding those respondents that have no listed companies, most VC and PE MM respondents currently have only one listed portfolio company



Q. How many of your portfolio companies are currently listed?

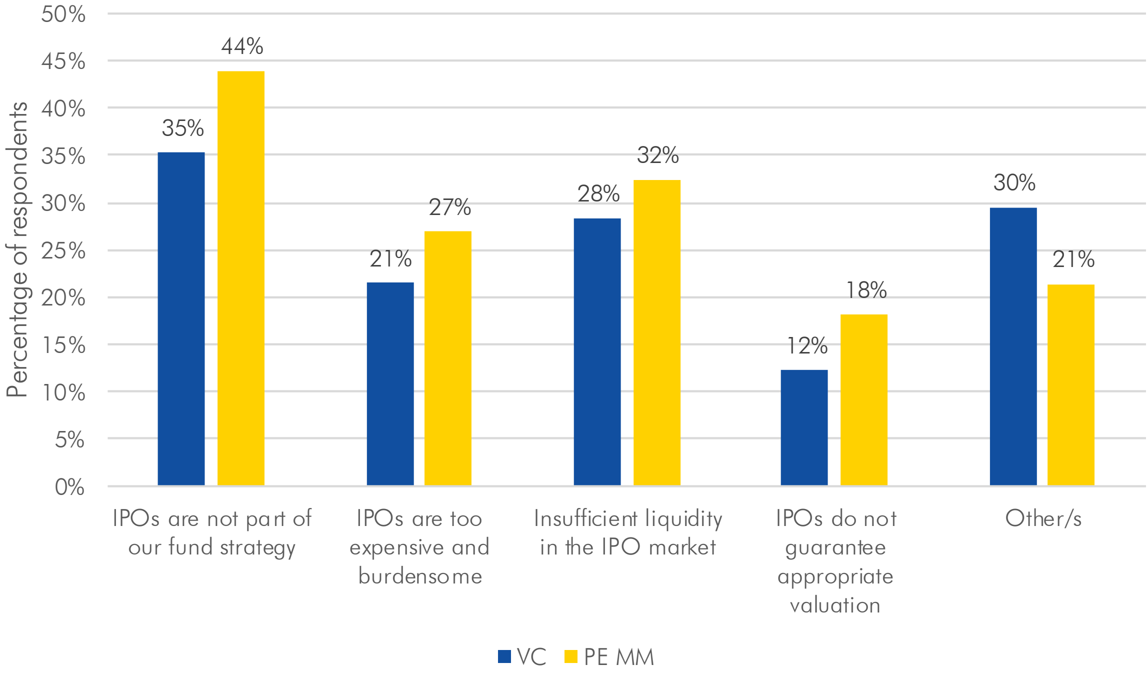
Note: respondents that stated that they have no listed companies are excluded from the Figure.

Surveyed PE MM and VC respondents were asked to state the main reasons for choosing to exit an investment via IPO, with the opportunity to provide a free text response. The most frequently stated response for both groups is that IPOs enable them to achieve higher valuations/multiples and greater liquidity. Numerous PE MM respondents also mention the option for existing shareholders to remain invested and gradually sell shares, allowing PE MM funds to exit or obtain liquidity while allowing entrepreneurs to retain shares, which may not always be possible for a sale to a strategic or financial investor. Several mentioned that access to public equity and the visibility provided through a listing can enable investees to access considerably larger pools of scale-up financing.

Despite the numerous perceived advantages of IPOs for European PE and VC firms and their portfolio companies, major barriers remain. In order to identify the main barriers preventing a more widespread use of IPOs, respondents who have not been involved in IPOs were asked to provide reasons for this (see Figure 11). The highest percentage of both PE MM and VC respondents stated that IPOs are not part of their fund strategy (44% and 35%, respectively). A significant percentage of respondents also stated that there is insufficient liquidity in the IPO market (32% and 28%, respectively). A further 27% and 22%, respectively, stated that IPOs are too expensive and burdensome. Other reasons provided by PE MM respondents include that their portfolio companies are too small to consider IPOs as an effective strategy, which may be due to the large fixed-cost component of IPOs disproportionately affecting SMEs. Others mentioned that the IPO market in their home country is not sufficiently developed for small companies while others yet mentioned that they wish to exit from their entire investment stake immediately, which is not possible in an IPO. Similar results were retrieved from VC respondents, although in addition to mentioning that their portfolio companies are not yet ready for an IPO, they also mention that as a seed investor (where applicable) they do not invest long enough for an IPO.

Figure 11: Reasons for no IPO involvement, VC & PE MM

Most VCs and PE MMs do not have IPO involvement as part of their fund strategy. Insufficient liquidity in IPO markets and costs of IPOs are also frequently mentioned factors



Q. Which of the following items play a role in your decision of not getting involved in an IPO?

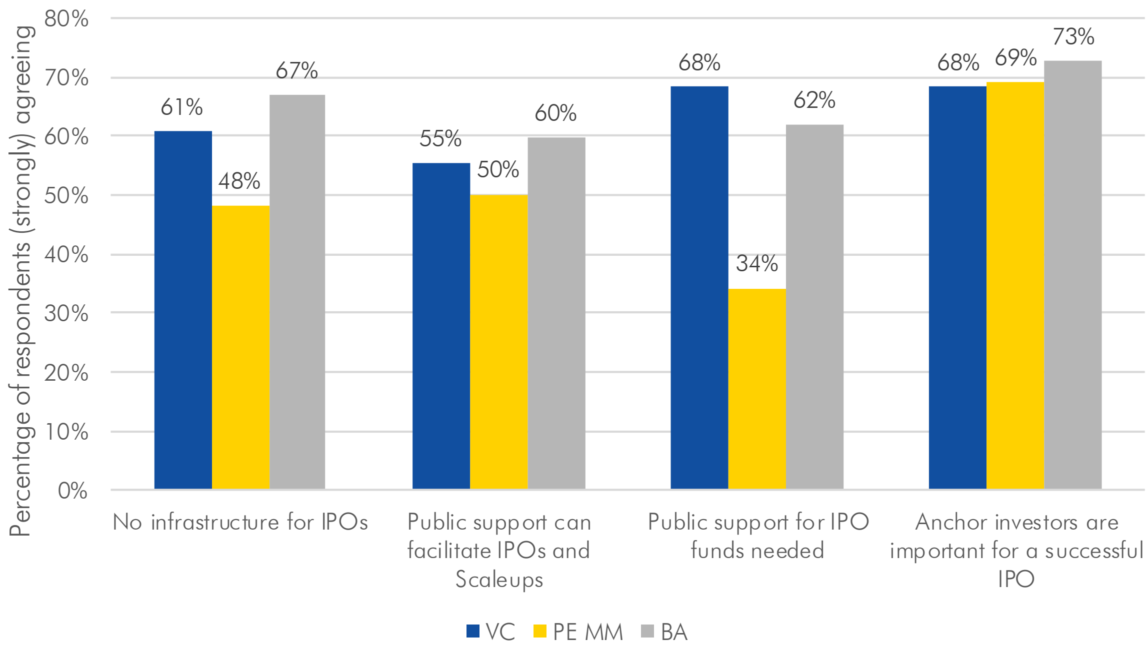
Note: question was only asked to respondents who have not been involved in IPOs.

Respondents were asked which actions could be taken to improve SMEs' access to the European IPO market, with the opportunity to provide a free text response. The most frequently stated actions mentioned by both VC and PE MM respondents include simplifying and harmonizing regulation, providing public support for pre-IPO funds, lowering the cost of listing and introducing tax benefits. These results are largely consistent with proposals made in the existing literature on the topic.

Figure 12 shows the percentage of respondents (strongly) agreeing to a series of statements regarding IPOs. While the vast majority of respondents in the three surveys (strongly) agree that an anchor investor is important for a successful IPO (68%-73%), the role of public support for funds specialising in investments pre/at/post IPO in facilitating the possibilities for companies to scale-up is considered important by a lower percentage of PE MM managers (34%, compared with 68% and 62% for VC and BA respondents, respectively). This sentiment may, however, be partly due to the less frequent involvement in IPOs of this respondent group. Overall, there is clear support among a majority of respondents for the notion that the scale-up gap could be reduced by providing public support to the IPO market, including by further developing the market infrastructure for IPOs and by providing support to IPO funds specialising in investments pre/at/post IPO. The role of IPO funds is considered extensively in sections 3.5 and 4.4. When looking at the results in Figure 12 by geographic region, we find that among PE MM respondents the level of agreement with each of the statements is consistently the lowest among respondents from the Nordic region, while the South, CESEE and DACH regions frequently show the highest level of agreement.

Figure 12: Determinants of successful IPOs

The strongest consensus across investor groups is that an anchor investor is important for a successful IPO



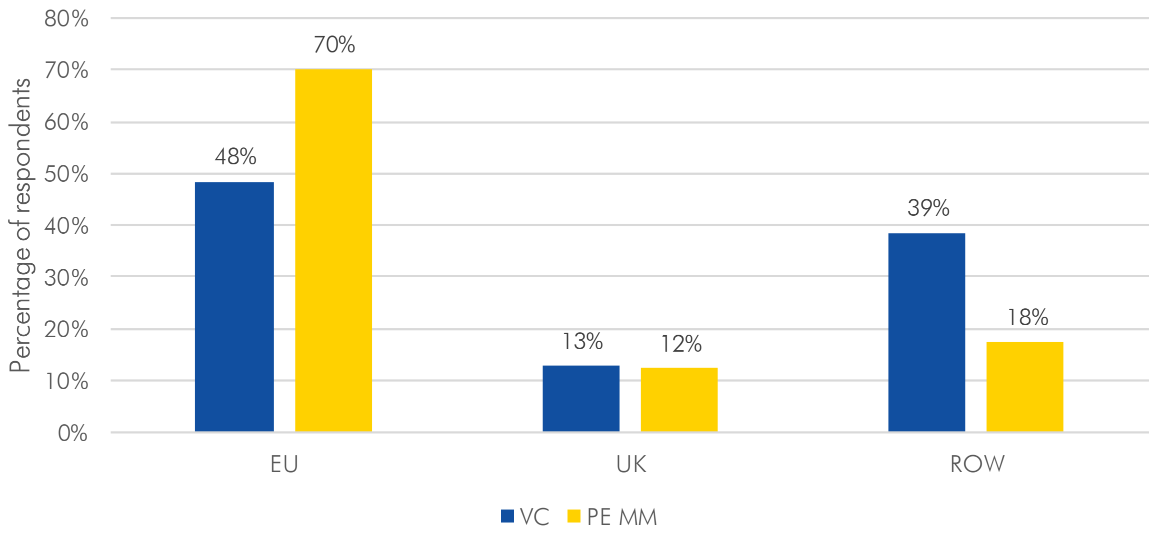
Please indicate to what extent you agree or disagree with the following statements.
a. The market infrastructure for IPOs is not sufficiently developed in the EU
b. Additional public support could facilitate IPOs to finance the scaling up of companies
c. Public support for funds specialising in investments pre/at/post IPO of SMEs in Europe would facilitate the possibilities for companies to scale-up
d. An anchor investor is important for a successful IPO

3.4 IPOs by region

Brault (2020) emphasizes the major risk of a weakening European IPO market, with an increasing percentage of European scale-ups deciding to list in the US. The survey results explore this issue further by comparing IPO listings for European PE MM and VC respondents by geographic region. Figure 13 shows the percentage of respondents who have had one or more listings in the EU, the UK and the rest of the world. Clearly, the category "rest of the world" is quite important for VC firms, while considerably less so for PE MM firms. Many of the VC respondents mention higher liquidity and trading volume, size of the market and greater analyst coverage as reasons for choosing to list outside the EU. While not all respondents that listed outside the EU indicated which country they chose to list in, of those that did, the vast majority chose the US. The large percentage of VC firms listing outside the EU is concerning since these tend to be the highest growth companies. In addition to those factors mentioned above, reasons for listing in the US provided by VC respondents include advantages of the NASDAQ stock exchange, especially for companies in the technology, biotech and similar sectors. The higher proportion of investments in technology by VC firms compared with PE MM funds and the lack of an EU wide stock exchange comparable with the US NASDAQ likely explains why VC firms are more likely to list outside the EU than PE MM firms.

Figure 13: Location of primary listed IPOs, VC & PE MM

Most of the sampled VC's and PE MM's IPOs were with primary listings in the EU

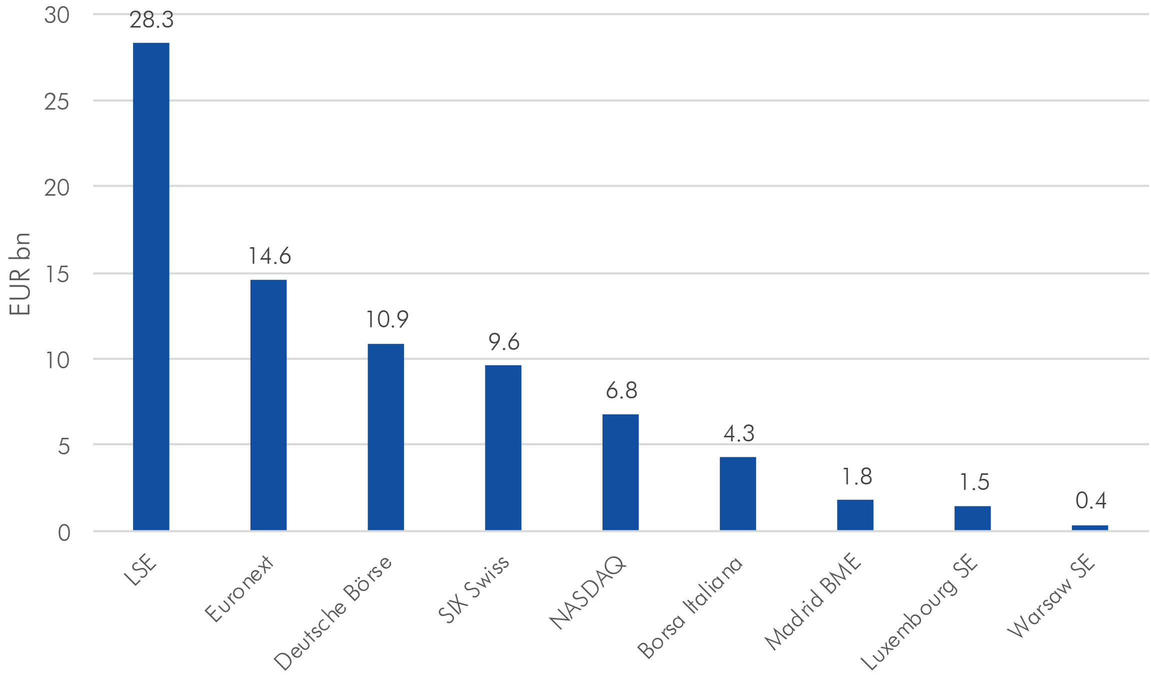


Q. How many of your IPOs were with primary listings in the following regions?

Note: the figure shows the percentage of respondents with one or more listings in the three regions.

The percentage of respondents choosing to list in the UK is quite low for both respondent groups (12-13%), considering the fact that the LSE exchanges (main market and AIM) lead the European market in terms of total equity underwriting (see Figure 14).

Figure 14: Equity underwriting on main European exchanges in H1 2020

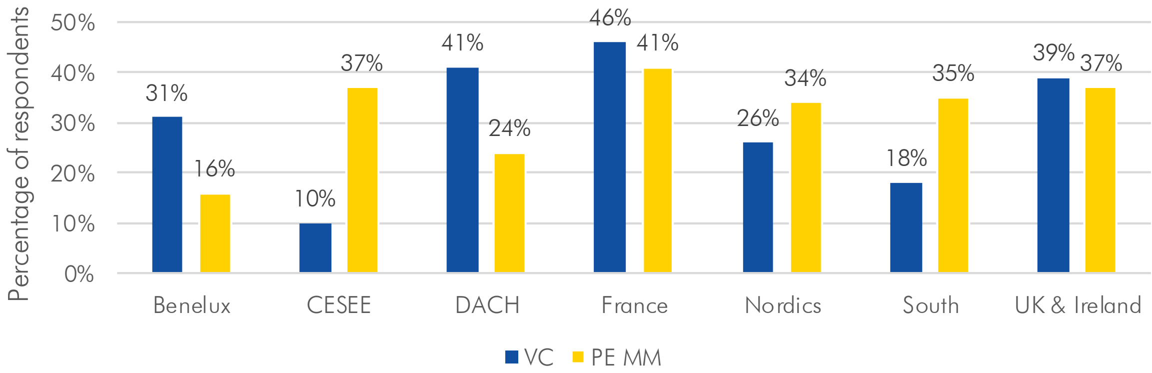


Source: AFME (2020)

Kaserer and Rapp (2014) highlight the macroeconomic impact linked to the role of SMEs that pursue an IPO. In terms of GDP, there is a strong relationship between capital market development and economic growth. In mature markets such as France, Germany and the UK, SMEs that went on to IPO produced the equivalent of a tenth of global GDP in 2015 (European IPO task force, 2015). Figure 15, perhaps expectedly, indicates that more respondents with headquarters based in such mature markets answer positively when asked about previous involvement in one or more IPOs in their portfolio.

Figure 15: Share of respondents with IPO experience, by location of the VC/PE firm headquarter

IPO involvement is most commonly reported from respondents in France, DACH and UK & Ireland



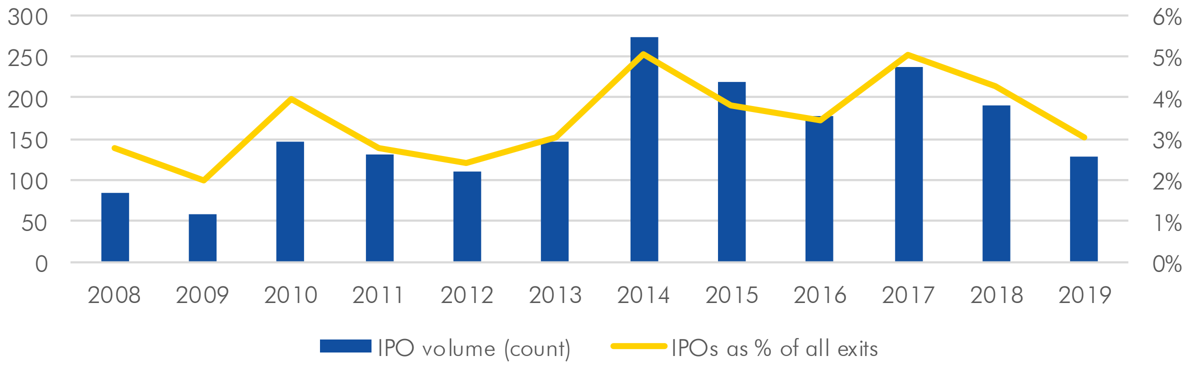
Q. What is your experience in IPOs with your portfolio companies?

I was involved in one or more IPOs...

3.5 Pre/at/post IPO investments

There is a growing role of private equity and, as Figure 16 indicates, a recent decline in European IPO volumes, in terms of total IPO count and IPO volumes as a percentage of total exits. This raises the question of how the gap between public and private equity can be bridged. We discuss these dynamics in greater detail in section 4.

Figure 16: Volume of European IPOs 2008-2019

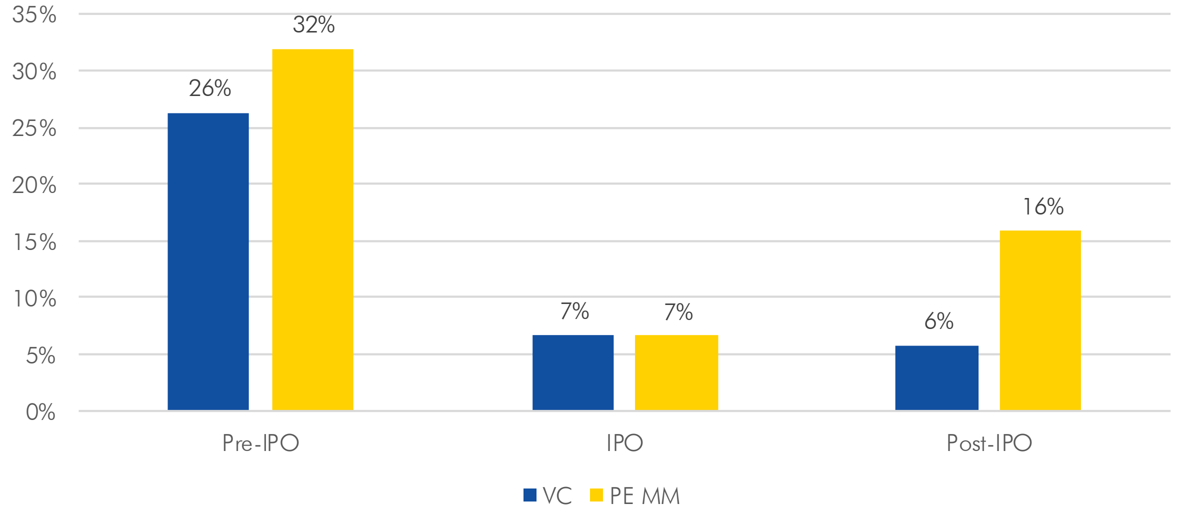


Source: Authors, based on Pitchbook data

Figure 17 provides some indication of this public-private equity gap by showing the percentage of VC and PE MM respondents able to invest pre/at/post IPO. Only 32% of PE MM respondents are able to target new investments where the company is targeting to list within 12 months as part of their investment strategy, compared with 26% for VC managers. Even fewer PE MM respondents invest post-IPO (16%), compared with less than 6% of VC respondents. Only around 7% of both PE MM and VC respondents are able to target investments at IPO. We estimate that roughly 50% of those respondents that are able to target investments at these different stages do indeed invest in these stages as this is the percentage which subsequently provided information on their typical holding period and participation rate, while the other respondents stated "Don't know / prefer not to say". Clearly, very few equity investors currently invest around IPOs, which, combined with a continued significant increase in private equity funding, results in a further widening of the public-private equity gap.

Figure 17: Investment pre/at/post IPO

Of those respondents that invest around IPOs, both PE MM and VC managers mainly target Pre-IPO investments



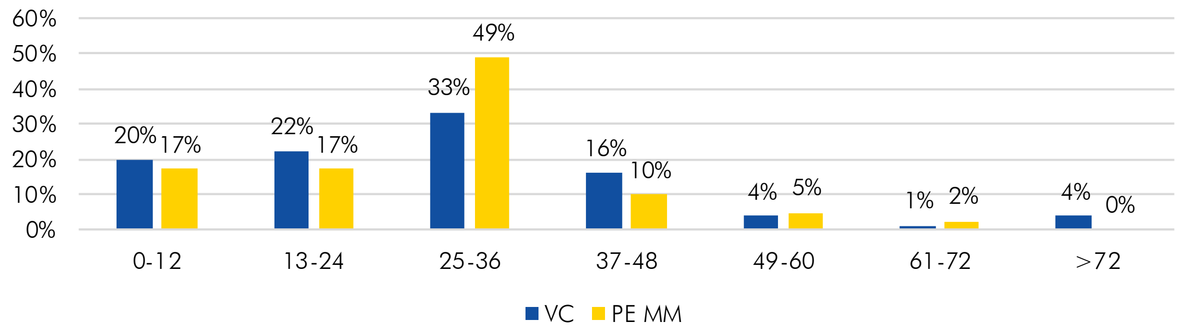
Q. As part of your investment strategy, do you/can you target…

a. New investments where the company is targeting to list within 12 months?
b. New investments in IPOs?
c. New investments in already listed companies (post IPO)?

The three following graphs show the typical holding periods of respondents that invest pre/at/post IPO. Figure 18 shows the typical holding periods for respondents able to invest pre-IPO (new investments where the company is targeting to list within 12 months). The vast majority have a holding period of 2-3 years while many have an even shorter period.

Figure 18: Pre IPO holding periods (in months), percentage of total

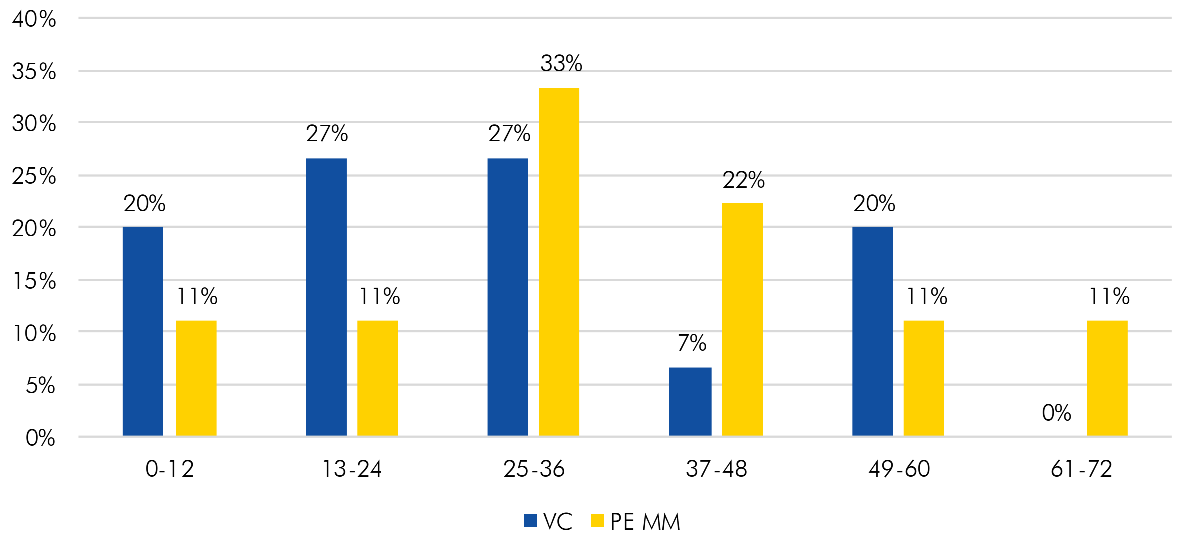
Holding periods of 2-3 years are most common for pre-IPO investments, with VC respondents reporting longer holding periods than PE MM respondents



Q. Typically, what is your holding period for new investments where the company is targeting to list within 12 months?

Figure 19 shows the typical holding periods for respondents able to invest at IPO. The majority have a holding period of 2-3 years. Among VC respondents, a significant percentage also have a holding period of 0-2 years and of 4-5 years.

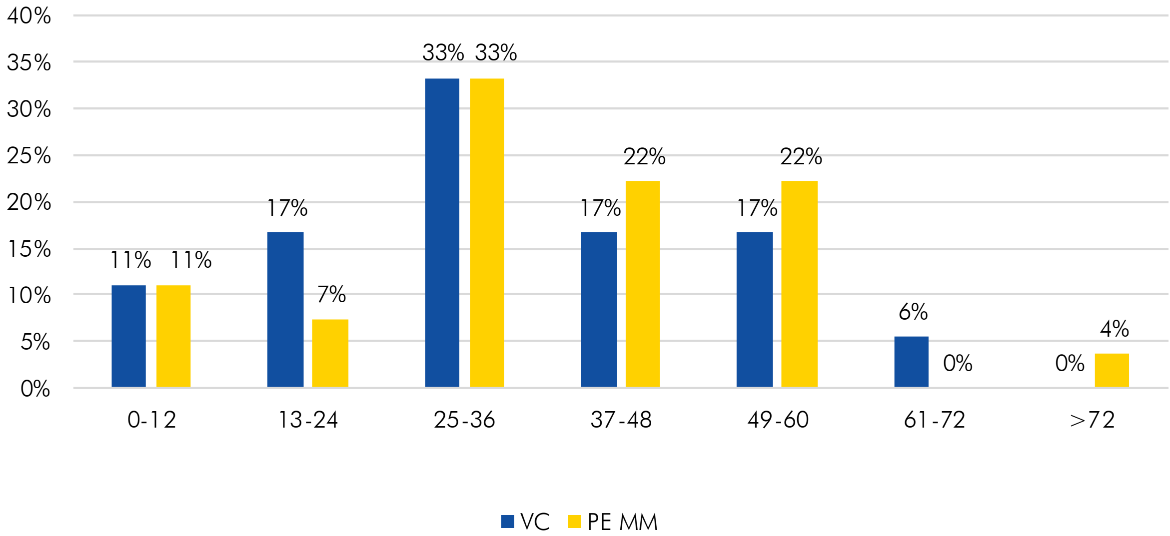
Figure 19: IPO holding periods (in months), percentage of total



Q. In your new investments in IPOs, what is your typical holding period?

Figure 20 shows the typical holding periods for respondents able to invest post-IPO (new investments in already listed companies). Durations broadly resemble those of the IPO and Pre-IPO, with holding periods of 2-3 years most common. In line with our survey results, Jenkinson et al. (2020), who analysed how PE funds finance their stakes in investments that have undergone an IPO, found that the average duration of post-IPO investments was around 3 years. As with those investing at IPO, a significant percentage of VC and PE MM respondents also invest for longer than 3 years post-IPO.

Figure 20: Post IPO holding periods (in months), percentage of total



Q. In your new investments in already listed companies (post IPO), what is your typical holding period for such transactions?

4 EIF Survey results in light of related studies

4.1 Scale-up challenges

A scale-up gap in Europe has been identified in several research papers. Limited financing opportunities are prevalent in Europe not only at the seed and start-up stage of a company's lifecycle but also during later-stage financing for scale-ups (Aernoudt, 2017; Kraemer-Eis & Lang, 2017). Only 0.5% of European start-ups are estimated to scale (Reypens et al., 2020). Duruflé et al. (2017) find that in the US about two-thirds of all venture capital goes to scale-ups, compared with less than half in Europe. They also find that when looking at average investment sizes across rounds, while there is little difference between the EU and the US at the start-up stage, at the scale-up stage US companies receive larger funding rounds. Similarly, Kraemer-Eis & Lang (2017) find that while the gap between the EU and the US is visible in all development stages, it is particularly significant at the later stage. They also find that US companies are funded by significantly larger VC funds at the scale-up stage and the average VC-backed US company received five times higher amounts than its EU counterpart. As a result of this, Europe is unable to reap the benefits of its most promising young companies during the crucial expansion stage and loses entrepreneurship, technological know-how and jobs.

Reypens et al. (2019) show that while Europe has many start-ups, it struggles to scale them. Of the 2.4m businesses created in Europe in 2011, by 2016 only 42% had survived and these surviving businesses grew only slightly, increasing average employee numbers from 1.67 in 2011 to 2.94 in 2016. Similarly, Duruflé et al. (2017) suggest that while Europe has experienced a "start-up" revolution over the last two decades, with comparable numbers of tech start-up companies as the US, the main challenge for Europe has become the scaling up of companies. A number of differences between Europe and the US, which may help explain the scale-up gap in Europe, are identified: the US has more later-stage equity investors that have access to deeper pools of money; the US has developed a market for venture debt, which remains in its infancy elsewhere; and the stock market environment remains stronger in the US. Our survey results show that early stage investors (VC and BA) are more likely than later stage investors to perceive the financing opportunities for scaling up in Europe as insufficient, although there remains scope for improvement across all three investor groups. They also show that there is broad agreement among financial investors that the scale-up financing gap in Europe could be addressed by increasing the number of funds active in this area and improving the IPO market. Among PE MM respondents, the highest level of agreement with the statement that public support for funds specialising in investments pre/at/post IPO of SMEs in Europe would facilitate the possibilities for companies to scale-up exists in the DACH region (68%), compared with only 37% in the Nordics. The highest level of agreement with the statement that additional public support could facilitate IPOs to finance the scaling up of companies exists in the South region (67%), compared with only 26% in the Nordics.

A large-scale study was conducted by Vlerick Business School on behalf of Scale-Ups.EU and used information about more than 80,000 scale-ups in 8 European countries (Scale-Ups.EU, 2020). The findings, which are presented in the European Scale-up Report 2019, show that scale-ups with external investors on board are more professionally managed and have made greater progress in terms of internationalisation, innovation and talent management. This highlights the positive role of external financing for scale-ups compared to relying only on internal resources. At the same time, raising external financing is also identified as one of the biggest challenges for scale-ups. The study finds that for almost one-third of scale-ups, finding sufficient financing is the main challenge while it is primarily scale-ups that have already raised external equity financing that identify financing as their main challenge. The latter points to the existence of a scale-up gap in Europe: scale-ups manage to find smaller, early-stage amounts, but struggle to obtain financing in larger follow-on rounds. This scale-up gap is particularly problematic as scale-ups represent a key enterprise development stage since they have a demonstrated, high-growth business model with the potential to become a leading company. Insufficient financing in the EU could lead to lower growth rates or seeking financing outside the EU. Our survey results found that among VC and PE MM respondents, 52% and 30%, respectively, of their total number of IPOs were listings outside the EU. EIF data also shows that during the period 2003 to 2015, on average, 44% of the companies backed by EIF investee VC funds which were sold were acquired by non-European buyers, in particular from the US (Prencipe, 2017). Further findings of the European Scale-up Report 2019 are as follows: almost 40% of the scale-ups only use their own resources to finance their growth, meaning that they are either not open to external financing or cannot raise it; 62% rely on at least one external source of financing, with the bank being the most popular, followed by grants; only 30% of the scale-ups in the survey had already raised money from external equity investors (Scale-Ups.EU, 2020).

A number of efforts have been made to address the scale-up challenge. The Startup Europe Partnership was launched in January 2014 at the World Economic Forum and is led by the "Mind The Bridge Foundation" based on a mandate from the European Commission (Onetti, 2014). Efforts to support the start-up ecosystems in Europe have shown some positive results in recent years. The number of new European scale-ups grew by an average of 20% YoY between 2010 and 2018, with 1,386 new scale-ups added in 2018 (Startup Europe Partnership, 2019a). The capital invested into European scale-ups reached USD 41bn in 2018, compared with USD 22bn in 2017. Of the growth in capital invested, USD 4bn comes from venture capital while over USD 13bn comes from stock markets, highlighting the importance of public markets and IPOs in addressing the scale-up gap. A further initiative is ESCALAR, which is a pilot programme of EIF and the European Commission which seeks to strengthen the financing ecosystem for scale-ups in the EU by investing in funds that focus on investments in EU scale-ups. In March 2020 the European Commission (EC) communicated the intention of launching a new political initiative, an EU Start-up Nations Standard, with the ambition of making Europe the most attractive Start-up and Scale-up continent (EC, 2020). The initiative will among other things focus on increasing access to finance for scaling-up and the Commission will assess the need for additional company law measures to facilitate cross-border expansion and scale-up by SMEs.

4.2 Exit routes

Our survey results demonstrate that exit via sales to financial investors is considerably more important for PE MM funds than for VC firms and BAs. This may be due to VCs and BAs focusing on earlier stages of the company lifecycle and therefore making a sale to similar investors less likely. Additionally, VC investors generally take minority equity stakes, so that an investment by a VC in a VC-backed firm would not be considered as an exit for existing VC investors. The high proportion of exits via sales to financial investors for PE MM funds is consistent with market trends which show that a growing number of PE funds are selling to other PE funds amid record levels of fundraising and dry powder. Bain & Company (2020) estimates that global private uncalled capital (dry powder) reached USD 2.5bn in 2019, a growth of 67% from the 2015 level, with particularly strong growth in the Buyout, Growth and Venture capital fund types.

Our survey results find that IPOs are considerably more important for VC firms than they are for PE MM funds, although even for VC respondents trade sales to strategic buyers remain the most important exit option. This difference between PE and VC is consistent with findings that increased PE activity has delayed IPO activity both due to PE funds wanting to exit investments entirely and the use of debt financing making IPOs less important for raising funding as well as many opportunities to sell to other PE funds (European IPO report, 2020). Giot and Schwienbacher (2006) also find that VC firms primarily aim for an IPO exit and choose trade sales only when forced to do so as a second choice. This may also be extended to BAs, which generally precede VC investment. Furthermore, Prencipe (2017) finds that among all exit routes, IPOs generate the highest average and median return for VCs. Post-IPO firms also undergo significant employment growth, where studies report employment figures increasing by an average of 60% 10 years after going public (Ritter, 2013).

The share of IPOs among exit routes has been highly volatile over the past decade and has differed considerably for PE and VC funds. When considered in divestment volumes, the share of IPOs in the divestment routes of all PE-backed firms (including VC) reached an all-time low of 4% in 2008, rose up to 22% in 2015, before decreasing to 10% in 2018. The percentage for VC funds on the other hand increased from 8% in 2015 to 22% in 2018 (Brault, 2020).

Bain & Company (2020) find that over the past two decades, private equity capital has grown four times as much as public capital globally. The literature shows a clear and steady decline of SME IPOs in advanced economies (European IPO report, 2020; Brault, 2020; Bruegel, 2020). This is part of a structural decline in IPOs over the past 20 years, although the decline for SMEs is particularly steep and is greater for European IPO volumes than for competitors in the US, China and Japan. In terms of IPO volumes, Europe went from second to last place from 2014 to 2018 when ranking these four regions. This is problematic as fewer listings further increase illiquidity, making it even less attractive for SMEs to list. This decreases investment opportunities as it also restricts access to these higher growth companies for European investors and indirectly the public, adversely affecting the wealth created for society. Oxera Consulting (2020) also finds that European PE IPO values in 2019 were the lowest since 2012, and that this decline was offset by an increase in PE sales to corporates.

The European IPO report (2020) provides numerous explanations for the decline in IPOs. Previously, VC investments were followed by IPOs, but with increased funding for private equity, this process is being delayed and repeated trade sales are becoming more common. PE firms are more interested in exiting from their investment entirely, rather than keeping a stake and being subject to public market fluctuations following an IPO. It is extremely rare for private equity funds to achieve total exit in an IPO, as public market investors are wary of buying shares from shareholders selling out completely. Furthermore, as they usually hold controlling stakes, PE funds are subject to lock-up periods – typically of six months – following an IPO (Jenkinson et al., 2020).

In addition, the exit type which PE firms choose is also closely related to the economic outlook and their perception of it. PE firms prefer strategic exits or sales to financial investors to IPOs during periods of market uncertainty, because they can sell their entire stake immediately. There is also a considerable fixed-cost element involved in an IPO, both on the sell and buy side, with the latter due to less information/experience with the newly public company. The effect of the current market uncertainty on IPOs provides a good example of this. AFME (2020) finds that in the first half of 2020 (H1 2020) IPO proceeds in Europe decreased 59% YoY, with the lowest H1 number of IPOs since 2009, although interestingly during the same period follow-on offerings increased 50% YoY. Similar drops were last seen in the IPO market during the Global Financial Crisis, where the number of IPOs in Europe decreased by 85% in the years 2007 to 2009 (Kraemer-Eis et al., 2020). These findings are consistent across main and junior stock exchanges. While M&A proceeds of European companies also fell significantly, declining by 24% between H1 2019 and H1 2020, mainly due to declines in cross-border deals, the decline is considerably lower than for IPOs. The regions which did not see a YoY decline in M&A proceeds were Benelux, CEE and Germany. PE-backed IPO proceeds declined to EUR 0.6bn, the lowest level since 2003, while PE-backed M&A activity declined by 12% to EUR 105bn.

Mason (2020) identifies other considerations for the exit environment associated with the ongoing COVID-19 crisis: financial investors who are financially constrained may become unable to fund their portfolio companies and may decide to sell some of their investees in order to generate cash to support other businesses in their portfolio. This increases the likelihood that emerging scale-ups will be bought by opportunistic, well-capitalised corporates and financial investors (e.g. hedge funds) located outside the EU, as foreign buyers, in particular from the US, are often larger than European ones in terms of assets and revenues. While both acquisitions and foreign buyers are not per se negative, their joint existence may be a signal for a structural problem, namely that European start-ups lack the growth capital necessary to expand and strengthen their position and thereby driving a scale-up gap (Prencipe, 2017). Many investors may also delay exits due to falling valuations. Fewer exits and downward pressure on the valuation of those exits that do occur would negatively impact fund performance, making it harder to raise new funding in the future.

4.3 IPO market developments

IPOs remain rare in Europe, with only 1% of European tech scale-ups having gone public between 2010 and 2017 (Nesta, 2019). Our survey results similarly show that among all equity investor categories, IPOs remain far less significant as an exit option compared with sales to strategic or financial investors. Of those IPOs of European companies which do occur, a significant concern includes firms listing outside of Europe. Our survey results find that a significant percentage of European VC firms choose to list their portfolio companies in the US, especially those in the technology sector. Existing literature provides an indication of the size of this problem. The Tech Scaleup IPOs report (2019) identifies 74 non-US tech scale-ups that went public on the US markets. Of these 47 were from China, 16 from Israel and 11 from Europe. In terms of funding, USD 23.8bn was raised in the US by these 74 scale-ups. The analysis shows that US stock markets accounted for 49% of overall IPO funding of European scale-ups between 2010 and 2018. This suggests that retaining more of the IPO activity by European companies in the EU would already provide a significant boost to the EU's stock markets.

By analysing the funding path of over 41,000 tech scale-ups across the US, Europe, China, and Israel, the "Tech Scaleup IPOs 2019 Report" investigates whether IPOs are merely an exit option for investors or whether they also provide an effective means of scaling up tech companies (Startup

Europe Partnership, 2019b). The report finds that less than 2% of these tech scale-ups went through an IPO, and only 10% of the overall capital fuelling tech scale-ups came from the stock markets (90% came from VC). It finds that listed scale-ups raise an amount of capital that is 5.5 times higher than the companies that follow an exclusive venture capital path and that one out of three of all Super Scalers (companies raising over USD 1bn) are public companies, demonstrating the advantages of a public listing for scale-ups. In Europe, the percentage of Super Scalers that are now public is 70%, compared with 23% in the US and 26% in China.

However, there has been a structural decline in the role of IPOs in the EU. In the EU27, the total number of listed companies (on both main markets and junior markets) declined from 5,414 in 2010 to 5,024 in 2018 (Oxera Consulting, 2020). The UK has seen a similar trend, and the decline of listed companies on the EU28 exchanges (i.e. including the UK) was from 7,392 to 6,538 over the same period. This gradual decline has occurred as new listings in EU27 markets have failed to keep pace with a steady flow of delistings since 2011. Most delistings were due to companies choosing to go private or due to an acquisition, the latter mainly in the form of M&A activity with another listed (51%) or unlisted (17%) company, while 26% were acquired by an investment vehicle, PE fund, holding company , or as part of an LBO. The number of European SME IPOs declined sharply in the aftermath of the 2007-2009 global financial crisis and has not recovered since. In 2019, the value and number of European IPOs continued to fall, by 40% and 47%, respectively, relative to 2018 (EC, 2020).

Several reports show that the path to an IPO has been delayed in recent years. Scale-ups that went public in 2018 took on average 8.4 years to go public since their establishment, compared with 6.5 years in 2010 (Startup Europe Partnership, 2019b). This is consistent with Gasaway (2020), who finds that many companies today are waiting longer to go public and have completed more (and larger) private financing rounds prior to their IPOs. In 1999, the average age of a newly public technology company reached a low of 4.5 years, which since has been steadily increasing. From 2017 through 2019, the median age of technology companies going public was more than 12 years. Oxera Consulting (2020) finds that the increasing investments by mutual funds in private companies have enabled them to stay private longer and that the median age of companies at IPO increased from 9 in 2000 to 13 in 2018 in EU27. While this appears highly problematic, it also has potential advantages. With an increasing number of companies staying private for longer, they are able to grow and mature beyond the venture capital stage and better prepare for an IPO, before becoming subjected to the regulatory demands, increased disclosure requirements, and pressure from institutional investors associated with being publicly traded. Companies can develop a track record with products, services and technology and show actual profitability and cash flow, or at least a specific path to deliver earnings to public investors.

Gasaway (2020) identifies some major differences between public and private equity financing, which may have contributed to the growing divide between public and private equity markets. In addition to far greater volatility in public markets, which results in a wide range of potential outcomes for different companies, from significant post-IPO stock declines to some great successes, public market investors typically demand a clear path to profitability while many private companies are able to successfully attract private capital based on factors such as innovation, brand recognition and rapid growth. In addition to the fragmented nature of the European IPO market and the regulatory challenges facing SME IPOs, which we identified in our survey results, the rapid growth of the private equity market in recent years and decades may also have had an impact on the recent decline of public equity financing and the delay of IPOs. In recent years, there has been a significant increase in mutual funds participating in private markets, making private equity more readily available for SMEs. The ratio of public equity to non-public equity held by euro area investment funds fell from almost 20:1 in 2015 to 6:1 in 2019 (Oxera Consulting, 2020). The IPO report by Oxera Consulting also shows that from 2013-2018 PE fundraising has exceeded investments for the European offices of PE firms in all years except 2015. A major benefit of public listing is the greater capital availability. However, Kwon et al. (2020) suggest that the dramatic increase in the availability of capital to private firms in the form of investments by mutual funds over the past 15 years has meant that demands for capital should motivate fewer companies to go public at any point in time. This may partly explain the increasing average age of companies going public and the declining number of IPOs. The growing divide between private and public equity highlights the importance of having successful investors which have experience in both public and private markets and are able to assist in a seamless transition from private to public equity markets. The potential role which crossover funds could play in this transition is discussed in section 4.4 below.

4.4 Crossover funds

An increasingly common financing strategy for companies expecting to conduct an IPO, particularly in the life sciences space, is to conduct a "crossover" financing shortly prior to the IPO (Marderosian & Mitteness, 2017). Crossover financings are capital raises by private companies that include investors that traditionally invest primarily in public companies, rather than with just VC funds and other more traditional private company investors. These can be conducted by crossover funds, i.e. funds that contain both private and public securities in their portfolio (Anson, 2001). Although they do not necessarily support IPOs, in practice such funds hold a significant percentage of pre- and post-IPO companies (Brault, 2020). The structure of crossover funds has been in use in the US, in particular in life sciences IPOs, for some time and has started to emerge in Europe and outside the life sciences sector more recently.

Crossover funds have shown a number of benefits in supporting the IPO process. In addition to fostering the number of IPO candidates through their positive influence on venture capital and firm creation, they also provide valuable post-IPO support, with a significant percentage of VC-backed newly listed firms raising capital post-IPO from the same crossover fund (Brault, 2020). Crossover financings benefit pre-IPO firms by expanding their shareholder base prior to the IPO to include institutional public company shareholders. These shareholders are often buyers in the subsequent IPO, and already having them in the company shareholder base allows the company to significantly increase the likelihood that these investors will purchase a meaningful portion of the IPO, providing a strong base to the deal and momentum for the roadshow. Additionally, having recognisable public company investors, who have conducted substantial diligence and decided to invest in the private company, is often viewed by other potential investors as a form of validation of the company, further increasing the chances for a successful IPO (Brault, 2020; Gilmartin Group, 2020). Crossover fund investors benefit from being able to obtain a stake in the private company at a lower valuation than the IPO price, better position themselves to receive their desired allocations in the IPO and conduct extensive due diligence (Marderosian & Mitteness, 2017; Kwon et al., 2020). Crossover funds can also apply their expertise gained from private investing to their investments in public companies, and vice versa. For example, PE funds, which often have significant sector expertise, can gain a distinct advantage by applying this expertise in public markets. Public investors on the other hand can assist companies with the transition from a private to a public company in areas such as financial reporting standards, corporate governance and shareholder communication and have a better understanding of the dynamics of public markets.

Quantitative research has also demonstrated a positive impact of crossover funds on IPO performance. In November 2014, Bruce Booth, a partner at Atlas Venture, ran a study comparing pre-money IPO valuations and post-IPO stock performance for 94 therapeutically-focused IPOs, of which 24 had crossover led financing rounds. He finds that the median pre-money valuation at IPO for the companies with a crossover led pre-IPO financing was over 128% higher than companies without. When adjusting for the additional capital from the crossover funding, the median pre-money valuation at IPO was still over 80% higher (Gilmartin Group, 2020). He also finds that for those companies with crossover financings, the median post-IPO stock appreciation was considerably higher than for those without, in addition to achieving a higher IPO valuation due to the crossover round. Kwon et al. (2020) find that investments by mutual funds in private companies have provided returns that are both higher than and virtually uncorrelated with returns on their public market investments.

Recently, a shift in the number and timing of crossover financings has been occurring. Traditionally, crossover investments occurred at least six months prior to an IPO and were generally initiated by an investment bank, giving private companies additional time to become more appealing to potential public investors. In recent years, mutual and hedge funds have increasingly invested in crossover financings as they look to increase their returns. In addition to the higher returns from more illiquid private investments and the diversification benefits which investments in private companies provides, they have an additional incentive which is related to the dynamic of the IPO process being delayed, as we discussed in section 4.3 previously. With companies waiting longer before going public, they are achieving significant revenue growth and expanding internationally as private companies. With more of the value being created pre-IPO, public investors risk missing out on significant upside. The growing involvement of mutual and hedge funds has begun to compress the time between a crossover round and the subsequent IPO as these investors, especially hedge funds, tend to have shorter time horizons (Gilmartin Group, 2020). While hedge funds are almost non-existent in continental Europe, with most hedge funds located in New York and London, there is an opportunity to encourage mutual funds in the EU to support crossover financings through public support. Public support could also be provided to PE funds which invest pre-IPO and remain invested post-IPO. Such support for mutual fund investments in pre-IPO companies could be particularly effective in addressing the scale-up gap in Europe which we identified previously, given that mutual fund investments are concentrated among companies at later stages of development. It is also likely to increase the percentage of European SMEs going public as Kwon et al. (2020) find that companies with mutual fund financing are more likely to go public but less likely to be acquired (43% of exits in their subsample). This is substantially higher than the European IPO volume as a share of exits (3% in 2019; see Figure 16) and the number of IPOs as a percentage of total exits of our VC survey respondents in the last 12 months (12%; see Figure 8).

The case study below provides a practical example of how an existing crossover fund operates and some of the potential advantages they have.

Box 1: Case study – crossover fund

US-based RA Capital Management manages a healthcare-focussed crossover fund which is offered to institutional investors and has over USD 1bn assets under management. The company finances private, IPO and follow-on financings for a portfolio of early-stage biotech companies. For private companies looking to go public, their role as a crossover fund is to bridge what has traditionally been considered a discontinuity, by investing in a private round and then leading the IPO. Of the private firms in their portfolios that have gone through an IPO, each of them did so at valuations higher than the prior private round. By getting involved before the IPO, RA Capital Management can help the company optimise its business plan for the public markets and later, assuming they aren't acquired first, receive substantive allocations in the IPO itself. Crossover funds could overcome the overly rigid focus which PE and VC funds are often accused of putting on their exit opportunities at the expense of a more long-term outlook. RA Capital do not see their IPOs as an exit point since a private company that IPOs simply shifts to the public portion of their portfolio. While some companies in their portfolio are sold rather quickly if they consider the valuation to be fair, others remain in the portfolio for several years following the IPO. Their views on private and public investments also provide insights into the ability of crossover funds to bridge the public-private equity gap. They invest in public and private companies in roughly equal proportions. While private companies have to have a more attractive risk-reward than a public one due to liquidity differences, they do not view them as discrete market segments but rather see a single continuum defined by a unified risk-reward-liquidity equation.

Source: FIN Alternatives (2015)

Fürth & Rauch (2015) analyse how buyout fund investors exit their portfolio companies following IPOs using a data set comprised of 222 buyout investments that went public in the US from 1999 to 2008. They find that buyout funds dispose of their portfolio companies gradually and steadily over time, instead of selling the majority of their shareholdings at or shortly after the IPO. The fund investors deliberately choose to stay invested for an average of three years following the IPO, which is largely consistent with our survey results and with findings in Jenkinson et al. (2020). This result is particularly surprising since buyout funds generally seek to dispose of their investments as quickly and swiftly as possible in order to maximize IRR returns. The study also finds that while the length of the period from the initial investment to the IPO is primarily driven by portfolio company-specific reasons, such as the restructuring process or profitability, the post-IPO divestment strategy largely depends upon buyout fund-specific factors. The dominant factors include the size of the buyout firm, its overall profitability, and, most importantly, the financial success of the deal in question.

Jenkinson et al. (2020) highlight important considerations for any public support initiative of crossover funds by investigating the impact of post-IPO sell-down policies of GPs on LPs. Analysing the case of crossover funds in the US PE sector, they show that fund managers were subject to behavioural biases associated with not selling "losers" during the average 3-year post-IPO periods. Post-IPO sell-down decisions by GPs may be coloured by behavioural biases, either their own, or those which they impute to potential investors in follow-on funds. GPs may also be motivated by their own option-like compensation structure. While Jenkinson et al. (2020) find that the performance of PE-backed IPOs is broadly in line with the market and better than the market during the lock-up period, LPs would have been better off in terms of gross returns if GPs had adopted a quick-sale approach following expiry of the lock-up period. By adopting a quick-sale approach, GPs could have saved LPs about 20% of the combined management fees and carried interest payments for the post-IPO period. Thus, it was suggested that LPs should put pressure on GPs to have fast sell-down policies following the lock-up expiry, rather than keeping shares of companies over years.

Amid the current market environment there are concerns that crossover funds may shift away from investments in riskier, pre-IPO private firms and towards public stocks which are currently cheaper due to the market downturn (Bell, 2020). Recent data from Q1 2020 seems to confirm this. Globally, the number of deals with crossover investor participation declined 25% in Q1 2020 compared with the previous quarter and declined 16% compared to the same quarter a year before (CB Insights, 2020). This comes after the number of global deals with crossover investor participation reached an all-time high of 755 in Q2 2019. This suggests that crossover funds are less effective in supporting the IPO market during periods of market uncertainty. These factors should be taken into account when designing policy measures, which are discussed in the next section.

4.5 Capital Markets Union and the proposal of an SME IPO Fund

Several policies have sought to address the scale-up gap in Europe over the past years, notably the Capital Markets Union (CMU) Initiative launched in 2015 and recently updated with the new action plan (see Box 2 below). The CMU Initiative aims at developing and integrating the EU financial markets to address financial market fragmentation across Member States (Kraemer-Eis & Lang, 2017). A key objective, in addition to strengthening bank lending and improving the framework conditions for SME financing, is to provide SMEs with more diversified sources of funding, in order to increase their ability to withstand economic shocks. The urgency of decreasing the reliance of SMEs on bank debt has been further underscored by the COVID-19 crisis. European SMEs rely heavily on self-financing and debt finance in the form of bank overdrafts, bank loans or leasing and many institutional investors do not engage sufficiently in SME financing. To address this, the EC suggests that public funding could support an anchor investment to attract more private investors in high-growth, innovative SMEs at the stage of public listing (EC, 2020).

Box 2: A Capital Markets Union (CMU) for people and businesses: new action plan

The aim of capital markets union (CMU) is to get money – investments and savings – flowing across the EU so that it can benefit consumers, investors and companies, regardless of where they are located. Market-based financing is essential to sustain the recovery and the return to long-term growth and to finance the green and digital transitions of our economy. In addition, by helping to increase pension adequacy, CMU can help meet the challenges posed by an ageing population and so contribute to a more inclusive and resilient society. Lastly, integrated capital markets are crucial for the EU's global competitiveness and its autonomy.

The CMU action plan proposes **16 legislative and non-legislative actions** with **3 key objectives**

1. support a green, digital, inclusive and resilient economic recovery by making financing more accessible to European companies;
2. make the EU an even safer place for individuals to save and invest long-term;
3. integrate national capital markets into a genuine single market.

Out of 16 new actions, 6 are focused on facilitating SME access to finance:

1. *Simplify the listing rules for public markets in order to help small and innovative companies have easier access to funding*. Under this objective the Action plan notes that the Commission will continue its work on **creating an SME IPO fund** to make it easier for small and high-growth companies, in particular in sectors of strategic importance to the EU, to raise capital and finance their growth. The document further notes that "the COVID-19 crisis severely altered the EU's economic landscape and there is therefore a need for renewed ambition to support the financing of smaller companies and innovative scale-ups. This makes the case for the urgent creation of an ambitious SME IPO fund even more compelling".
2. *Channel more long-term financing to companies and infrastructure projects, in particular those contributing to the objective of smart, sustainable and inclusive growth.*
3. *Encourage insurers and banks to invest in equity and other long-term assets.*
4. *Support the provision of credit to European companies and in particular SMEs, through an improved securitization market.*
5. *Assess the merits of a requirement to direct companies to alternative finance providers when rejecting their credit application.*
6. *Establish an EU-wide platform (European Single Access Point) that provides investors with seamless access to financial and sustainability related company information.*

Source: CMU Action Plan (EC, 2015)

The creation of an EU SME IPO fund proposed by the EC is particularly relevant for the discussion in this working paper since it could reduce the scale-up gap in Europe by promoting the IPO market and since it has many similarities with crossover funds.

An SME IPO Fund would support SMEs through and beyond the listing process. The Commission will support IPOs of SMEs with investments channelled through a new private-public fund, to be developed under the InvestEU programme starting 2021 under the CMU (EC, 2020). The High Level Forum (2020) of the EC suggests that a Public-Private IPO Fund could support specialist financial intermediaries targeting pre-IPO and/or public equity market investments which can in turn support IPO fundraisings as well as subsequent secondary capital raisings, by acting as an "anchor investor" to take a material allocation of the shares issued, providing a strong signalling effect to other potential investors. Our survey results support this notion, with the vast majority of our survey respondents agreeing or strongly agreeing that an anchor investor is important for a successful IPO

(68-73%). Public support for pre-IPO funds was also identified by numerous survey respondents as an effective means of promoting more IPOs. Furthermore, a significant percentage of our survey respondents, especially among VC and BA respondents, agreed that public support for funds specialising in investments pre/at/post IPO of SMEs in Europe would facilitate the possibilities for companies to scale-up. Such public support could address the scale-up gap which we identified in section 4.1, address the public private equity gap and limit the risk of foreign acquisitions. On the latter point, FESE (2020) suggests that crossover funds could help incentivise start-ups and SMEs to remain in the EU: an earlier entrance to capital markets would provide SMEs with the required growth capital while remaining independent and able to remain based in Europe, rather than looking for capital from PE and VC firms abroad.

In addition to the EU SME IPO Fund, public policy measures being implemented by Member States in response to the COVID-19 crisis also have some crossover fund characteristics. Measures currently being implemented in Germany (Wirtschaftsstabilisierungsfonds) are expected to have some crossover fund characteristics as they shall be allowed to invest in both private as well as public companies (FESE, 2020). Similarly, in the Netherlands there are ongoing discussions around the creation of an Alternative Investment Fund to support the listing of local SMEs. This fund would allow for domestic institutional investors to invest in SMEs pre-IPO with the fund participating as cornerstone investors post-IPO.

5 Conclusion

Based on the combined results of the 2020 version of EIF VC, PE MM and BA survey waves, this EIF Working Paper was designed to provide specific insights into the European Scale-up and IPO financing topic - covering the status, main challenges and investor activity across the respondent groups. The project provides an informative instrument to policy-makers and practitioners.

Existing literature on the topic of scale-up financing compares Europe with the US and identifies a significant gap. If this scale-up gap remains unaddressed, it risks leaving high-potential European companies unable to realise their scalable business models. Ultimately, this can further widen the division between Europe and the US in terms of capital market development and innovation output. Our survey results provide unique insights into this topic. Overall, we find that early stage investors are more likely than later stage investors to perceive the financing opportunities for scaling up in Europe as insufficient, although there remains scope for improvement across all three investor groups. We also find considerable differences in how respondents perceive scale-up financing opportunities across geographic regions. VC and PE MM respondents based in the DACH region are most negative, i.e. they perceive financing opportunities for companies to scale up in Europe as less sufficient than respondents from other European regions. PE MM respondents from France, South and Nordics are most positive compared to other regions, while VC respondents from France and South are among the most negative compared to other regions. These results suggest that there are still considerable market gaps, even in core markets. Our literature review identifies a number of differences between Europe and the US, which may help explain the scale-up gap in Europe: the US has more later-stage equity investors that have access to deeper pools of money; the US has developed a market for venture debt, which remains in its infancy elsewhere; and the stock market environment remains stronger in the US.

Overall, there is broad agreement among the surveyed financial investors that the scale-up financing gap in Europe could be addressed by increasing the number of funds active in this area and improving the IPO market. While the level of agreement is significant across all respondent groups, it is higher among VC and BA respondents.

With respect to the biggest overall challenges faced by respondents, the results unsurprisingly vary somewhat depending on the investor type. However, the exit environment emerges as a top challenge for all three investor types, although more so for VC and BA than for PE MM. For PE MM respondents, investment entry is perceived as a considerably greater challenge than exit, in particular due to current high valuations. Existing literature provides some potential explanations for these results: record levels of funding raised by PE funds may explain both the high valuations and the lower importance of the exit environment as a challenge, as there are sufficient exit opportunities via trade sales to other PE funds. However, we see an immediate increase in the frequency by which the exit environment was stated as an important challenge in the later weeks of our survey response gathering period (the weeks following March 1st 2020), especially for PE MM and BA respondents (Kraemer-Eis et al., 2020). More recent data covering the period thereafter shows that European PE exits declined substantially (by 43% YoY in Q2 2020), reaching a decade low (Unquote, 2020), suggesting that the importance of the exit environment as a challenge may continue to increase.

Sales to strategic buyers continue to be the main exit option for PE MM funds, closely followed by sales to financial investors. Sales to strategic buyers are also the main exit option for VC respondents, while sales to financial investors play a less significant role for this group. The number of insolvencies is considerably lower for PE MM respondents than for VC and BA respondents due to the later stage of their investments. However, these have begun to increase in recent months with PE-backed assets going into receivership or administration accounting for 10% of all European PE exits in Q2 2020 (Unquote, 2020). IPOs remain far less frequently used as an exit route for both VC and PE MM respondents than other exit routes, although the percentage is considerably higher for VC. We also find that a large part of our survey respondents indicate that they have not been involved in an IPO (43% of VC and 60% of PE MM).

The above findings on IPOs as an exit route are consistent with the broader literature on the topic. The literature also demonstrates the outperformance achieved by IPOs, highlighting the importance of further developing European capital markets. For example, the "Tech Scaleup IPOs 2019 Report" finds that listed scale-ups raise an amount of capital that is 5.5 times higher than the companies that follow an exclusive venture capital path and that one out of three of all Super Scalers (companies raising over USD 1bn) are public companies. Several VC and PE MM respondents also mention that access to public equity and the visibility provided through a listing enable investees to access considerably larger pools of scale-up financing.

We identify a number of factors which may explain the less frequent use of IPOs. The highest percentage of both PE MM and VC respondents stated that IPOs are not part of their fund strategy (44% and 35%, respectively). A significant percentage of respondents also stated that there is insufficient liquidity in the IPO market (32% and 28%, respectively). A further 27% and 22%, respectively, stated that IPOs are too expensive and burdensome. These factors further support some of the potential policy measures suggested previously: providing public support for funds investing around IPOs and further developing the market infrastructure for IPOs in the EU.

Our survey results also look at IPO listings by geographic region (EU, UK, rest of the world). We find that the category "rest of the world" is quite important for VC firms, while considerably less so for PE MM funds. Many of the VC respondents mention higher liquidity and trading volume, size of the market and greater analyst coverage as reasons for choosing to list outside the EU, especially in the US. The large percentage of VC firms listing outside the EU is concerning since these tend to be the highest growth companies. In addition to those factors mentioned above, reasons for listing in the US provided by VC respondents include advantages of the NASDAQ stock exchange, especially for companies in the technology, biotech and similar sectors. The higher proportion of investments in technology by VC firms compared with PE MM funds and the lack of an EU wide stock exchange comparable with the US NASDAQ likely explains why VC firms are more likely to list outside the EU than PE MM funds. The Tech Scaleup IPOs report (2019) shows that US stock markets accounted for 49% of overall IPO funding of European scale-ups between 2010 and 2018. This suggests that retaining more of the IPO activity by European companies in the EU would already provide a significant boost to the EU's stock markets.

We find that very few investors are currently able to invest pre/at/post IPO. Only 31.9% of PE MM respondents are able to target new investments where the company is targeting to list within 12 months as part of their investment strategy, compared with 26.3% for VC managers. Even fewer PE

MM respondents invest post-IPO (15.9%), compared with less than 6% of VC respondents. Only around 7% of both PE MM and VC respondents are able to target investments at IPO. We estimate that roughly 50% of those respondents that are able to target investments at these different stages do indeed invest in these stages as this is the percentage which subsequently provided information on their typical holding period and participation rate, while the other respondents stated "Don't know / prefer not to say". Clearly, very few equity investors currently invest around IPOs, which, combined with a continued significant increase in private equity funding, results in a further widening of the public private equity gap. We find that among those investing pre/at/post IPO, the vast majority have a holding period of 2-3 years, with some variations between pre-IPO, IPO and post-IPO phases. This finding is consistent with existing literature. For example, Jenkinson et al. (2020) find that the average duration of post-IPO investments was around 3 years.

Studies also show that the path to an IPO is being delayed due to structural changes (Gasaway, 2020). While this appears highly problematic, it also has potential advantages. With an increasing number of companies staying private for longer, they are able to grow and mature beyond the venture capital stage and better prepare for an IPO. Companies can develop a track record with products, services and technology and show actual profitability and cash flow, or at least a specific path to deliver earnings to public investors. The continued growth of private equity, the demonstrated outperformance of IPOs as an exit route and the differences between public and private equity markets, all highlight the important role which crossover funds could play in addressing the European scale-up gap. In section 4.4 of this EIF Working Paper we consider extensively the role of crossover funds, which could provide guidance for policy considerations. Our survey results also support increased public support for funds investing pre/at/post IPO. Overall, there is clear support among a majority of respondents for the notion that the scale-up gap could be reduced by providing public support to the IPO market, including by further developing the market infrastructure for IPOs and by providing support to IPO funds specialising in investments pre/at/post IPO.

We discuss the ways in which crossover funds play a role in bridging the gap between public and private equity and find that companies which receive crossover financing outperform those that do not, both pre-IPO and post-IPO. Finally, we show that a number of existing policies have some similarities with crossover funds.

Overall, we provide evidence that more financing opportunities for companies in Europe aiming to scale-up their growth is needed. Europe has developed a successful ecosystem for young and innovative start-ups. However, what is missing is an environment, and in particular the financing opportunities, that helps innovative enterprises to grow further beyond the start-up stage and to enable successful high-growth companies to stay in Europe. This would also allow the European economy and society to reap the benefits of providing successful public framework conditions and financing opportunities for its young and innovative generation of entrepreneurs. Our study shows that forceful policy actions to improve the possibilities for successful IPOs can indeed be an important way to enhance the scale-up financing in Europe.

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Annex

List of acronyms

- AIFMD: Alternative Investment Fund Managers Directive
- AUM : Assets Under Management
- BA: Business Angel
- bn: billion
- Benelux (countries): (countries of) Belgium, Netherlands and Luxembourg
- CEO: Chief Executive Officer
- CESEE (countries): (countries in) Central, Eastern and South-Eastern Europe
- CFO: Chief Financial Officer
- CMU: Capital Markets Union
- COO: Chief Operations Officer
- DACH (countries): (countries of) Germany, Austria and Switzerland
- EIB: European Investment Bank
- EIF: European Investment Fund
- ESG: Environmental, Social, Governance
- ESOP: Employee Stock Option Plan
- EU27: the 27 EU Member States
- EUR: Euro
- GP: General Partner
- ICT: Information and Communications Technologies
- IPO: Initial Public Offering
- LP: Limited Partner
- m: million
- Nordics: Denmark, Finland, Norway, Sweden
- PE: Private Equity
- RMA: Research & Market Analysis
- SME: Small and Medium-sized Enterprise
- South: (here) Italy, Portugal, Spain
- UK: United Kingdom
- VAT: Value Added Tax
- VC: Venture Capital

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