

»»» The German venture capital market after the boom and bust: Returning to a sustained upward trend should be the goal

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The German venture capital (VC) market has developed positively over the past years and is now significantly more mature than a decade ago. Nonetheless, it still lags behind important international markets where more capital is available to start-ups. While the boom-and-bust phase that began in 2021 appears to have been overcome and much suggests that the market can continue on its growth path in the current year, targeted and long-term efforts are still required in critical areas of action in order for the market to develop on a sustainable basis. The present study shines a light on the most important areas of activity and provides data-based analyses at the current margin for evidence-based economic policy. The key areas of action are as follows:

- Relative to its economic output, the current volume of Germany's VC market is merely within the average of the EU 27 countries. The markets in the United Kingdom and the USA are even 2.9 and 3.4 times the size of the German market. That means additional financial resources generally need to be mobilised for the wider German VC market. Growth finance lags farthest behind the leading markets of comparison. For investments in this phase, the German VC market is particularly reliant on the participation of foreign VC investors. It is therefore particularly important to strengthen the market for growth finance.
- The necessary mobilisation of capital for venture capital investment should focus particularly on major private institutional investors such as insurers and pension funds as these are underrepresented in Germany compared with other European countries. The market environment currently offers good opportunities for attracting market players to the VC asset class again. The great market uncertainty created by the fast and systematic interest rate reversal aimed at combating inflation has abated again and distortions among investors between targeted and intended asset allocations have normalised again. Furthermore, the valuation environment is currently more favourable towards new investments than before 2022.
- The VC market in Germany and Europe needs more large-volume funds that have the capacity to co-finance large funding rounds or even act as their lead investor – particularly in order to improve the supply of VC in the growth segment. In the US, for example, 52% of funds newly

raised between 2021 and 2024 came from funds with a volume of EUR 500 million and more, while in Europe that figure was 18% and in Germany as low as 7%. Large institutional investors such as insurers or pension funds also require larger-volume VC funds in which they can participate with large enough ticket sizes.

- There is also unleveraged potential for balancing the hitherto uneven gender ratio in the VC ecosystem. Clearly, women are structurally underrepresented on both the capital supply side and the capital demand side. The result is that out of each euro of VC invested in Germany, 90 cents went to all-male founding teams, 9 cents to mixed-gender teams and only 1 cent to start-ups headed only by women. The low shares of female investors and entrepreneurs in Germany and other countries mean that many opportunities are being missed.
- Finally, the exit channels for VC investments, in other words the M&A market and the IPO market, must be strengthened as key elements of the VC funding cycle. Because of the larger and more liquid US capital market, the US VC market has a structural advantage for IPOs in particular, an exit channel that offers very high returns. Exits via an IPO are more than four times as common there than for start-ups domiciled in Germany. Receptive exit markets that enable high-return exits are a crucial element for revitalising the German VC market on a sustained basis.

In the past quarters, the German VC market has fought its way out of the doldrums and there are signs of further sentiment improvement in the first half of 2025. Business expectations in general and fundraising sentiment in particular are positive. These expectations are also underpinned by economic policy. Much of the German Future Fund can still be drawn down for investment and the WIN Initiative aims to initiate further measures designed to support the start-up and VC ecosystem.

The German venture capital market¹

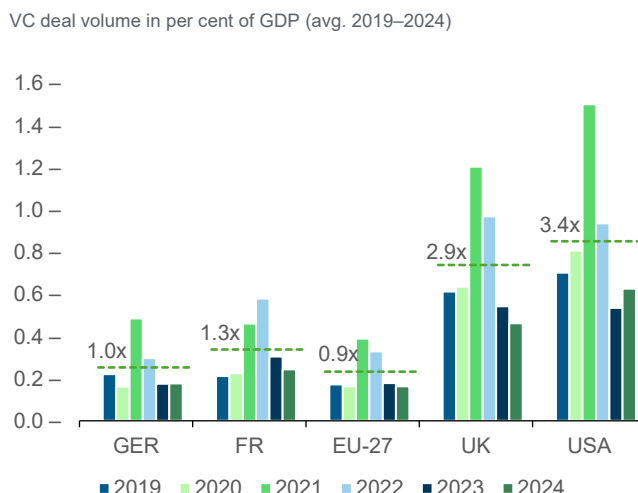
Start-ups help make new technologies marketable and acceptable to society, create new markets or at least break up ossified economic structures, thereby ultimately creating jobs of the future – very much in line with Schumpeter’s ‘creative destruction’. To do this, start-ups need proper funding. The more innovative and growth-driven start-ups are, the less suitable traditional debt finance is for them. Bank loans fit neither the cash flow profile nor the risk profile of typical start-ups.² Venture capital, on the other hand, fits very well. Investors participate in start-ups with venture capital. The high risk therefore can potentially offer opportunities for high returns if the value of the start-up grows when it is successful and investors withdraw from the business again by exiting from their investments, ideally in the form of an initial public offering (IPO). Thus, 40% of the more than 9,000 IPOs that took place in the USA during the 1980–2024 period were VC funded and as much a 60% of the more than 3,000 technology firms.³ All five enterprises deemed to be the world’s largest based on their current market valuation – Microsoft, Apple, NVIDIA, Alphabet (Google) and Amazon – were VC funded.⁴

At international level, the US leads the development of venture capital investment in young, high-growth technology firms. It is where the modern VC industry started in the 1950s. The basis for it were technology firms, which were able to establish themselves and develop through large-volume defence contracts for research, development and manufacturing. By comparison, Germany’s VC market is much younger, as is that of most European countries – owing to bank-based financing systems. The first German VC companies were founded in the early 1980s. In other words, the US is around 30 years ahead in the development of the industry. In Europe, the only country where the VC market is older and more mature than in continental Europe is the United Kingdom, where the capital market plays a much larger role for the economy.

VC market in Germany is still small in relation to GDP and in international comparison

The different development stages are reflected in the sizes of the VC markets in relation to gross domestic product (GDP). Thus, based on the transaction data provided by Dealroom.co, the annual volumes of VC deals made by investors with German start-ups in the past five years correspond to an average VC investment-to-GDP ratio of 0.25% (Figure 1). In other words, the German VC investment-to-GDP ratio is just slightly above the average of the EU-27 countries of 0.23%. France, which has mobilised public and private capital for the VC market under economic-policy initiatives particularly over the past three years, has an investment-to-GDP ratio of 0.34%, meaning its VC market is one third larger in relation to GDP. The UK and the US, in turn, are on a significantly higher level. Their VC markets are more than three times as large as Germany’s, with average investment-to-GDP ratios of 0.74 and 0.85%.

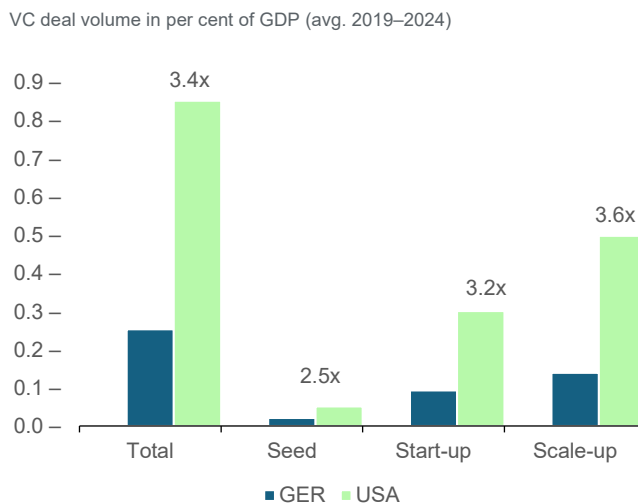
Figure 1: US and UK VC markets are around 3.4 and 2.9 times as large in relation to GDP



Source: KfW Venture Capital Dashboard Q4 2024 by KfW Research based on Dealroom.co.

The factor by which the US market in particular surpasses the size of the German market differs substantially by segment. Thus, around 2.5 times as much seed finance has been made available by investors in relation to GDP in the US in the past five years (Figure 2). The volume of start-up finance was 3.2 times as high and of scale up finance as much as 3.6 times as high.

Figure 2: VC market in the US is significantly higher, especially in the scale-up segment

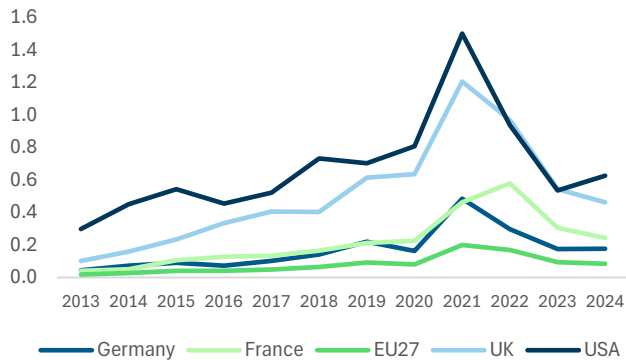


Source: KfW Research based on Dealroom.co.

While the lead of the VC markets in the US and the UK has grown over time, a gap to France has emerged only in the past three years (Figure 3). This was mainly due to an initiative launched by the French Government to strengthen the start-up ecosystem. With a view to improving capital availability, the ‘Plan Tibi’⁵ was the most important project, which led to visible growth in VC investment in 2022 – bucking the downturn in international markets. Germany’s lag in VC investment in domestic start-ups can be an economic disadvantage in the long term.

Figure 3: Germany lags behind international peers – including France for the past three years

VC deal volume in per cent of GDP



EU-27 includes Germany and France.

Source: KfW Research based on Dealroom.co.

Positive development of VC market in Germany

Even if it has further fallen behind some of the important comparison markets, the German VC market has become much larger and more mature. Over the past few years, the volume of VC deals in Germany has developed very positively. To be sure, the VC market has been in a cooling phase since the inflation-induced interest rate reversal of early 2022 but the completely unexpected exceptional year 2021 should not be used as a yardstick here. As the deal volume tripled to EUR 18.6 billion on the previous year (EUR 5.8 billion), warnings were already issued for the market to avoid excesses⁶ (Figure 4). German start-ups attracted approx. EUR 7.4 billion in VC funding overall in 2024. That was a clear increase on the previous year and was similar to the level of the year 2019. After the turbulent boom-and-bust phase, the market now appears to have settled again.

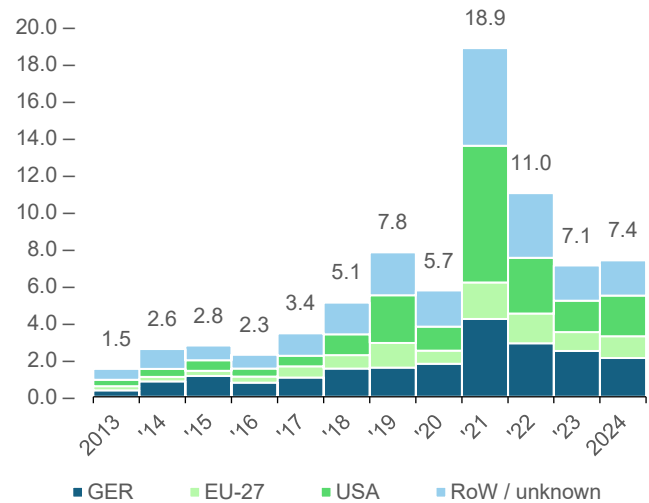
Growth segment is particularly reliant on US investors

The investment boom of 2021 was mainly driven by US investors, who became much more active in Europe than before. Standouts were crossover investors – those who typically do not tend to carry out any VC direct investments at all – such as private equity funds, hedge funds or institutional investors, and who were willing to invest large sums at high valuations. But these investors were just as quick to retreat from the German VC market after the interest rate reversal as they were to boost it. The reason is that these actors typically invest pro-cyclically. They become more active when the economic situation is good and capital is available. But they withdraw again when the pendulum swings back.⁷

The pendulum swung back with the interest rate reversal. Rising interest rates mean falling valuations. Because of the uncertainty around the extent of the decline in valuations, investors exercised restraint at first. The media painted an image of an investment downturn even though the market already stabilised again from mid-2022 and VC deals were consistently closed in the ensuing quarters in the same numbers and volumes as before 2021.

Figure 4: Volumes of VC deals in Germany grew significantly in the past ten years

Volumes of VC deals with German start-ups by investor origin in EUR billions



Source: KfW Research based on Dealroom.co.

The reasons why foreign investors invest in German start-ups are manifold. For US investors, they include the valuation level. They typically accept a higher valuation level for businesses in the US than in Germany and Europe. To be sure, the higher valuations there are partly due to better growth and exit prospects (Figure 13), with the regulatory but also cultural fragmentation of the European market being a fundamental problem for local start-ups, but the valuation level in Germany and Europe is generally perceived as more favourable. For start-ups that are nearing the exit-stage, i.e. have reached later funding rounds, a valuation arbitrage of sorts may possibly play a role as well. It means that a company invests in a German start-up at a more 'favourable' valuation level with the aim of then making an exit in the US when it has reached a higher valuation level.

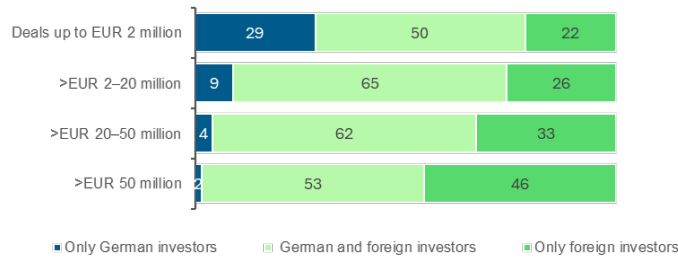
The fact that foreign investors are more often represented in larger (that is, typically later-stage) deals is indicative of this. Nearly half the VC deals over EUR 50 million in Germany are made by foreign investors alone (Figure 8). More recent studies indicate that the participation of foreign VC investors at least causally raises the risk of a foreign exit (i.e. a trade sale to foreign enterprises or IPO on stock exchanges outside Germany).⁸ The stronger presence of foreign investors in later financing rounds, however, also has to do with the fact that screening and due diligence in earlier funding rounds are more difficult for them because of their distance to the market. Information deficits are reduced in later rounds, which makes investing then easier – also and in particular because in the US a significantly higher funding volume is available in the scale-up segment, as already mentioned.

Within Europe, investors for years have regarded the German VC market as the most promising in terms of investment opportunities.⁹ Investors believe it has recently been able to score points with the following strengths, which can also play an important role for its further development:¹⁰

- Strength of deal flow, that is investment opportunities for VC investors, and size of market.
- State support, a first-class ecosystem and academic excellence in the field of technology.
- Leadership in clean tech innovations and climate technology solutions.

Figure 5: The larger the VC deals, the larger the share of foreign investors

Origin of investors of VC deals in Germany, in per cent (avg. 2021–2024)



Source: KfW Research based on Dealroom.co.

Another reason for the great importance of foreign investors in large growth finance transactions is that the German VC market can only sporadically raise the large amounts on its own. In the German (and European) VC ecosystem, there are not enough funds with a sufficiently large volume to regularly carry out large funding rounds on their own or jointly with other German investors. After all, diversification requirements mean that the fund volume determines the maximum amount (and, hence, the maximum deal volume) which a fund can invest in a single start-up.¹¹ In this respect, the US market has a clear advantage.

Fundraising and funds

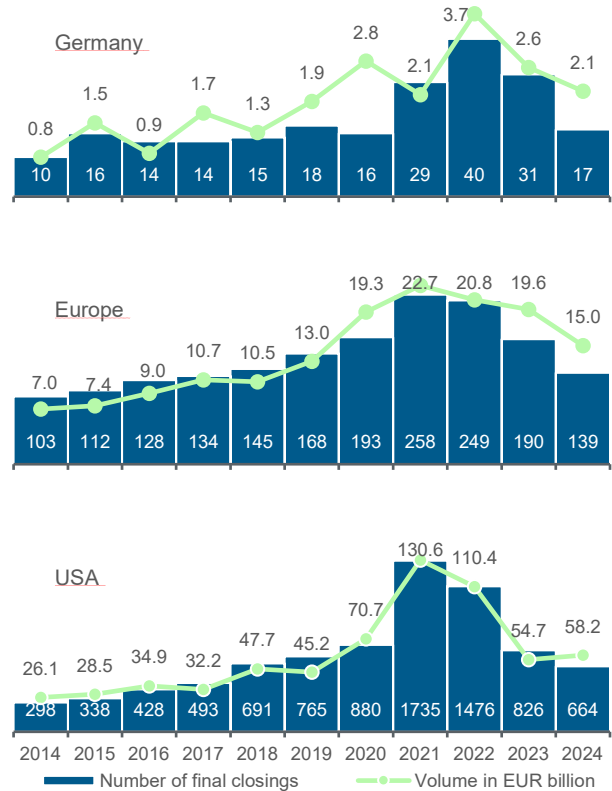
Before VC funds can invest in start-ups, the fund initiators must first raise the financial resources from capital investors. This fundraising usually takes one to one and a half years, sometimes even much longer depending on the fund strategy and economic environment. The supply of VC for start-ups essentially depends on how much investment capital can be raised. In the process, the asset class of VC competes with other asset classes such as shares, bonds or real estate.

In the low-interest environment of the past decade, alternative assets such as venture capital experienced significant capital inflows because of their potential for high returns. In both Europe and the US, the number of VC funds with successfully completed fundraising and the amounts they raised trended upward up to the year 2021 (Figure 6). The interest rate reversal that began in early 2022 was a turning point for the VC market. After the interest rate reversal, central banks around the world lifted key interest rates sharply and systematically to combat inflation. After the years-long low-interest phase, rising interest rates made asset classes such as bonds much more attractive again for capital investors while creating a situation in which the weightings of asset classes in the investment portfolios shifted suddenly. The value of liquid investments such as shares fell sharply, as a result of which the intended allocation of illiquid and hence less volatile assets (such as VC) in the investment portfolios was exceeded (known as denominator effect).

Capital investors were reluctant to make new VC investment because of increasingly attractive alternatives and the denominator effect. As a result, fundraising became much more difficult and time-consuming for fund initiators (i.e. reaching milestones such as the first closing or target volume). In such an environment, it is easier for well-connected and experienced fund initiators who can already present a good track record to raise capital for a new fund than it is for newcomers. The latter therefore suffer particularly under these market conditions.

Figure 6: Final closings reflect the growth of the VC asset class – adverse market conditions were recently apparent

Final closings of VC funds, number and volume



Note: Final closings of funds of the venture capital asset class, geographical definition of Europe.

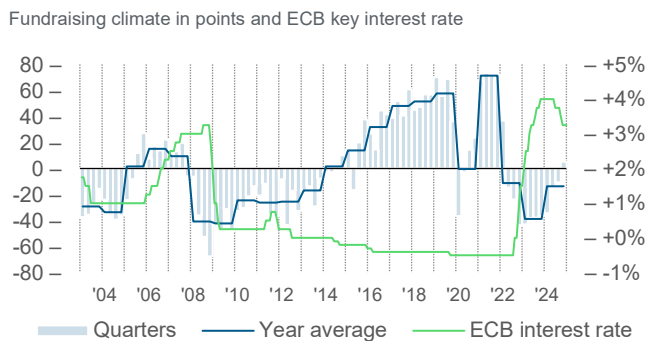
Source: KfW Research based on Preqin. As at 4 February 2025.

Accordingly, with the interest rate reversal the fundraising climate, i.e. VC investors' assessment of the situation and expectations regarding the fundraising environment in Germany, directly deteriorated very sharply and dropped to the low recorded during the financial crisis of 2008/2009 (Figure 7). Given the duration of the fundraising process, it took some time for the more difficult market environment to be reflected in the observable number and volume of newly established funds. Thus, fundraising in Europe and the US as measured by final closings did not decrease noticeably until 2023. Besides, a look at fundraising shows that the boom in the year 2021 and the subsequent cooling of the market in the US was significantly more pronounced than in Europe (Figure 6).

In difference to the temporary slump in fundraising sentiment in the pandemic year 2020, which essentially reflected the pandemic-induced uncertainty, the interest rate reversal

altered the real economic environment. Since autumn of 2022, however, share prices on the stock markets have recovered again and, in the meantime, climbed to new record highs. This has defused the problem of the denominator effect again. Furthermore, the fight against inflation has been successful. Central banks around the world therefore returned to a pathway of interest rate reductions in 2024. The ECB has lowered the key interest rate for the euro area several times already since June 2024. Since then, fundraising sentiment has recovered again substantially. The activities of KfW Capital have likely lifted fundraising sentiment. With support of the ERP Special Fund and the Future Fund, KfW Capital committed some EUR 425 million to VC funds in the year 2024 (2023: EUR 471 billion).¹² Since KfW's 100% subsidiary was founded in 2018, KfW Capital made investment commitments totalling around EUR 2.5 billion to VC funds up until 2024.

Figure 7: VC fundraising sentiment at end of 2023 as weak as during the financial crisis

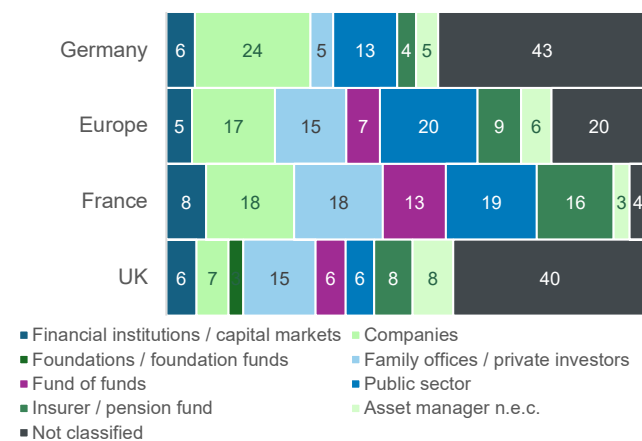


Source: German Venture Capital Barometer.

In the 2021–2024 period, VC funds domiciled in Germany raised to some EUR 10.5 billion (Figure 6). In recent years, the private sector was the most important source for German VC funds with a share of 24% (Figure 8). The next largest source was the public sector with a share of 13%.

Figure 8: Institutional investors have only a small share in fundraising for German VC funds

Fundraising sources in per cent (avg. 2021–2023)



Source: KfW Research based on Invest Europe.

Comparing the source of funds for VC investments in different countries can provide important indications as to which

sources can be more strongly activated. The share of private sector capital in the financial resources raised by VC funds in the years 2021–2023 was an above-average 24% in Germany. Other private sources such as family offices, insurers/pension funds or funds of funds, on the other hand, contributed only little to the investments in German VC funds. For example, insurers and pension funds represented a mere 4% of the funds raised by German funds. In the UK and Europe, it was around twice as much on a prorated basis and in France even four times as much during the same period. Thus, mobilising private capital, particularly from large institutional investors such as insurers and pension funds, remains a rich source of development potential for the German VC market.

The data presented must be interpreted carefully, however, because quite a high share of funds is of unknown origin. Across Europe, this was true of 20% of the capital raised in the years 2021–2023, and in the UK and in Germany it was even 40 and 43%. Interpreting the comparison between countries is difficult because data is lacking to varying degrees. The share of public sources in fundraising, however, is more likely to accurately reflect their contribution than the shares of private sources, which are presumably higher. The reason for this assumption is that private sources are more likely to be unknown than public sources of funds, which tend to have greater transparency.

Scale-up gap in the supply of VC in Germany and Europe

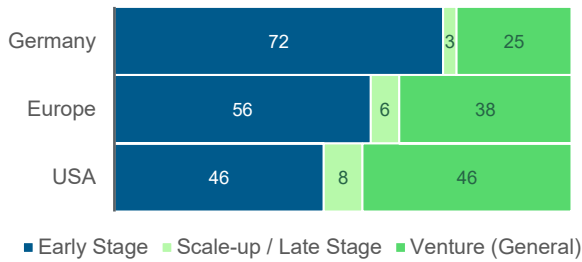
For a long time, a deficit has been observed in the supply of capital for large-volume rounds in the growth segment in the German and European VC ecosystem.¹³ For this reason, when the German Government initiated the German ‘Future Fund’ in the year 2021¹⁴, it designed various building blocks to improve the supply of finance for start-ups in the growth segment.

The fact that the focus of venture capital in the US continues to be more strongly geared to scale-ups than in Germany and Europe suggests, among other things, that the capital raised for new funds is distributed in alignment with their investment strategy (Figure 9). Thus, from 2021 to 2024 in Germany, 72% of the capital was raised by funds specialising in investments in early financing stages. In Europe it was 56% and in the US 46%, less than half of the capital raised by funds. Only 3% of the funds under management in Germany went to funds that had an investment strategy specifically dedicated to the scale-up segment. In the US it was 8% – more than twice as much on a prorated basis.

As scale-ups have a comparatively large need for capital, it is important for a suitable supply of VC in the growth segment that investors be able to establish funds of a sufficient size (investors with ‘deep pockets’)¹⁵ because individual investments must not take up an excessive share of the portfolio of the funds so that the fund portfolio is appropriately diversified. From the viewpoint of start-ups, too, participation by many small investors leads to an excessively diverse and cumbersome investment structure that is difficult to manage. Moreover, larger investors are in a better position to make necessary additional funds available to provide follow-on financing to enterprises in their existing portfolio.

Figure 9: In the US, funds with an investment focus on the growth segment have more capital

Investment strategies of newly established funds as a percentage of total fundraising volume (2021–2024)

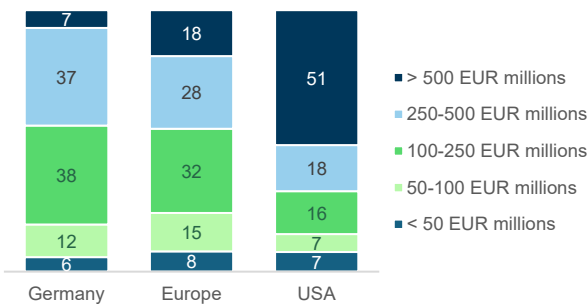


Source: KfW Research based on Preqin. As at: 4 February 2025.

There is a wide gap between Germany and Europe and the US in the capital managed by large VC funds. In the 2021–2024 period in the US, 70% of all capital raised by newly established VC funds was mobilised by funds that reached a fund volume of EUR 250 million and more in each case (Figure 10). For comparison: in Germany and Europe it was 44 and 46% – significantly less. The difference is even more noticeable in ‘very large’ funds with a volume of EUR 500 million and more. In the US, such funds manage just over half of all capital raised. In Europe it is just under one fifth of all capital overall and in Germany less than one tenth. Against this background, promoting market conditions that encourage the emergence of large funds on this side of the Atlantic as well continues to be an important area of economic policy action.

Figure 10: In the US, large funds have more capital on a prorated basis than Germany and Europe

Percentage share of total volume of newly established funds by fund size classes (2021–2024)



Source: KfW Research based on Preqin. As at 4 February 2025.

Venture debt is an increasingly important part of the financing mix of start-ups

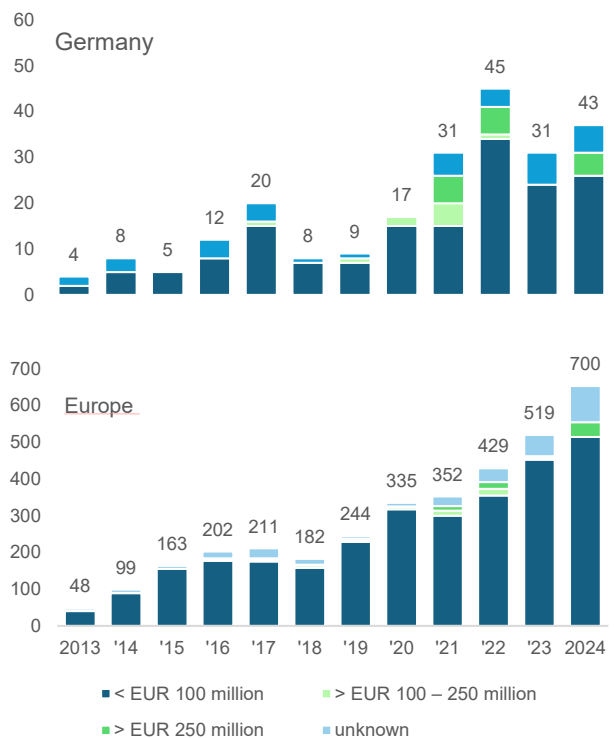
Over the past years, a market for debt capital for start-ups known as venture debt (VD) has emerged in Germany (originating from the US) as a complement to equity finance via VC.¹⁶ In contrast with venture capital, the idea behind venture debt is for the capital loaned to be fully repaid as scheduled with interest within a predefined period. Unlike conventional bank finance, which is based on existing cash flow or existing physical assets for collateral, VD providers base their financing decision on how likely it is for a start-up to generate growth in the future and, hence, successfully raise

new equity or become profitable. VD is therefore suitable primarily for start-ups in later growth stages and acts as a complement to traditional finance with VC in the financing mix. From the viewpoint of start-ups, the main advantage of VD finance is that no company shares need to be surrendered, or only to a limited extent (through warrants), and that as a result, there is no dilution of the shares of founders and existing investors. By raising venture debt, start-ups can implement milestones and add value before the next funding round and valuation or avoid a revaluation at unfavourable market conditions.

Venture debt is a form of finance that is still rather new in Germany. Accordingly, the market for VD in Germany and Europe is small. However, significant growth has occurred over the past ten years (Figure 11). Particularly during the cooling of the VC market after 2021 and the associated tighter conditions for equity finance, VD acquired a growing role as a supplementary form of funding for start-ups. In this market situation, VD was more frequently used by start-ups to secure additional liquidity and activity in the VD market in Germany and Europe picked up yet again.

Figure 11: Venture debt deals still uncommon but on the rise in Germany and Europe

Number of venture debt deals by size of individual finance transaction



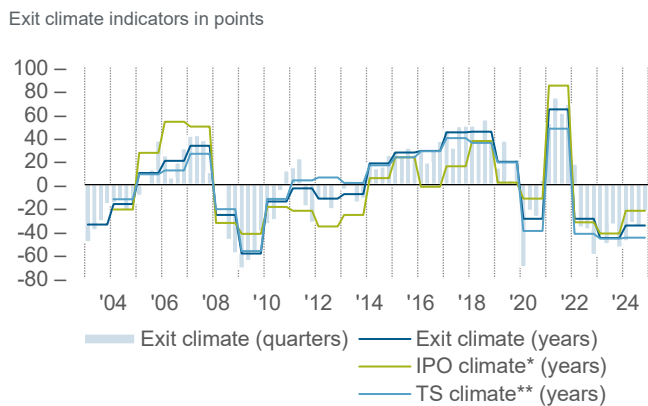
Source: KfW Research based on Dealroom.co.

Overall, VD helps close the gap between participations via venture capital and traditional bank and capital market finance for more mature businesses. As funding needs in the German and European start-up ecosystem are increasingly dominated by businesses in the later growth stages, the importance of the supply of VD can be expected to continue growing in the future as well.

Exits

VC funds invest with the aim of financing the further development of their portfolio companies, participating in the resulting growth in company value and generating returns for their investors with the exit proceeds realised from the sale of the investment. These returns are often reinvested by capital investors in the VC asset class. That is why the current exit environment is a further cause of the weak fundraising sentiment. After all, in the past two years it has become much more difficult to realise high exit proceeds around the world and return flows to fund investors have thus decreased. Thus, the return rate of US VC funds dropped to a 15-year low on average from the beginning of 2022 to the end of 2024.¹⁷ The exit sentiment, that is, VC investors' assessment of the situation and expectations around the exit environment, fell significantly in Germany as well (Figure 12).

Figure 12: VC fundraising sentiment as weak as during the financial crisis



* IPO: Initial Public Offerings ** TS: Trade Sales

Source: German Venture Capital Barometer.

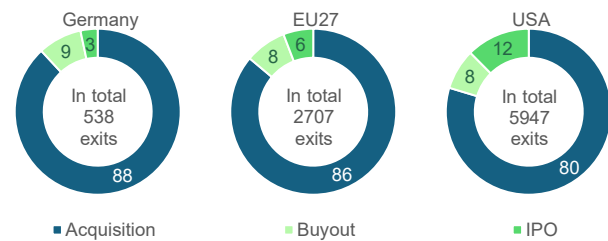
One reason for the low exit returns is the reduced company valuations resulting from the interest rate reversal. But another reason is that IPOs, the exit form typically offering the highest returns and proceeds, were significantly less common. Thus, the only time in the recent past that the number of IPOs of VC-funded companies in the USA was lower than in the past three years was during the financial crisis of 2008/2009.¹⁸ With the interest rate reversal, share prices at the NASDAQ, the world's most important stock-market for technology firms, took a nosedive up to the end of 2022. IPOs are typically avoided in falling markets. Up to the end of 2023, share prices almost recovered the losses suffered there but the number of IPOs still increased only minimally. Even in 2024, when new record highs were reached, IPO activity remained rather muted. There was possibly not enough faith that the share price recovery would be sustained. The TecDax, the most important index for technology shares in Germany, recovered only just under 90% of its losses after the interest rate reversal up to the end of 2024. Despite the rebound, the IPO climate continued to fall further in 2023 after the slump of 2022 before recovering slightly in 2024, although it remains on a low level by historic comparison (Figure 12).

Although IPOs typically promise highest returns and proceeds, exits are most often done via trade sales – the sale of the interests in the company to strategic investors who in this way incorporate new technologies or business models into the

company. This has to do with the higher demands which IPOs place on companies regarding, for example, size, development stage and predictability of future cash flow. In 2022, sentiment around trade sales had declined somewhat more sharply than overall exit sentiment. It has since remained on this low level. In the past three years, however, the number of trade sales has risen further and is thus slightly above the already high level of the year 2021.¹⁹ The discrepancy between exit activity and sentiment is likely due to the valuation pressure mentioned at the outset, which led to falling exit proceeds despite the high number of trade sales. In the 2021–2024 period, there were 538 exit deals with German start-ups. Of these, 88% were acquisitions/trade sales and only 3% were IPOs. In the US, IPOs of VC-funded start-ups were almost four times as likely owing to the greater absorption capacity of the US capital markets (Figure 13). But even in an EU comparison, the share of IPOs in exits from German start-ups was only half as high.

Figure 13: Trade sales dominate exits, IPOs of VC-funded German start-ups are rare

Exits in per cent (2021–2024)



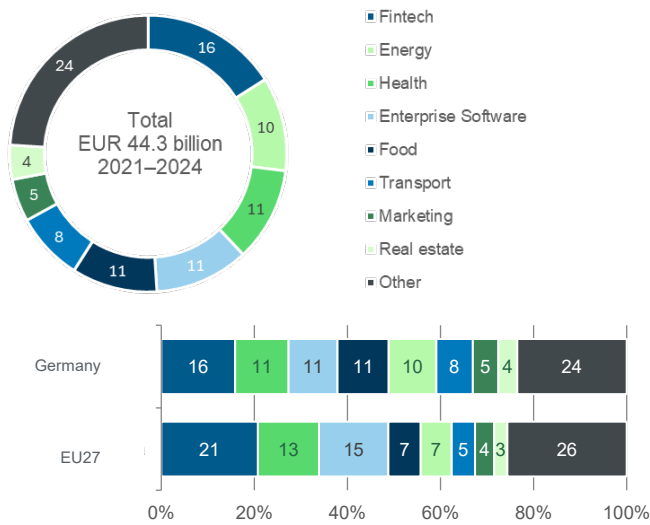
Source: KfW Research based on Dealroom.co.

Technological domains

In the 2021–2024 period, VC investments in Germany focused on the fintech sector. Approx. 16% of the EUR 44.3 billion in deal volume during those years was invested in fintech start-ups (Figure 17). In total, three quarters of the deal volume went to the eight sectors fintech (16%), energy (11%), health (11%), enterprise software (11%), food (10%), transport (8%), marketing (5%) and real estate (4%). The remaining quarter was distributed across sectors such as security, media, education, travel and robotics. It must be noted here that classifications into technological domains and industries are always fraught with ambiguities. Some businesses can operate in different areas at the same time. Besides, digital applications, for example, are often cross-cutting technologies that can be attributed to various domains. In these cases, the focus of business activity is not always unambiguous.

Figure 14: Fintech start-ups were able to raise the most VC

Sector shares in per cent (2021–2024)



Source: KfW Research based on Dealroom.co.

The sectoral distribution in Germany differs little from the overall European VC market during the 2021–2024 period. In the overall European VC market, the focus on the fintech sector is even more pronounced, at 21%, presumably because of the investment activity in the UK, which has a very large fintech sector (Figure 14). Higher shares of VC investments also went to the energy and health sectors. By contrast, the food, enterprise software and transport sectors received less investment.

Sustainability

Transitioning to a sustainable society is the key challenge of our time. Ecological, social and governance (ESG) criteria provide guidance to achieve the targets.

ESG criteria in general

In the area of sustainability, the EU has set the formal regulatory framework for VC funds with the European Sustainable Finance Disclosure Regulation (SFDR) and the Taxonomy Regulation. Whereas the SFDR makes transparency requirements, the Taxonomy Regulation defines mainly what is meant by ecological sustainability. In the SFDR, three articles authoritatively define how funds can be classified:

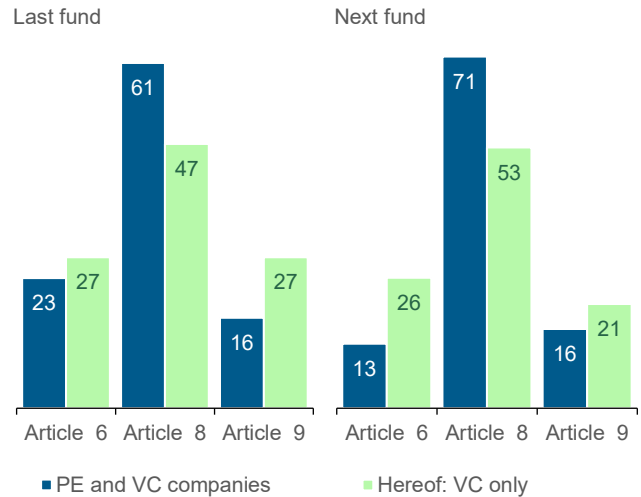
- Funds according to Article 6, i.e. that do not explicitly include ecologically and/or social aspects.
- Funds according to Article 8, i.e. that include and promote ecologically and/or social aspects.
- Funds according to Article 9, i.e. that carry out only sustainable investments.

According to the most recent monitoring of ESG strategies of German private equity investors²⁰ by the German Private Equity and Venture Capital Association (BVK), 79% of German VC companies have an own formalised ESG policy or strategy. Two thirds (66%) have a person in charge of ESG matters. This shows that there is broad awareness of sustainability in the VC market. ESG criteria are therefore also taken into account by the majority in the investment process (82%) and are even relevant for decisions in nearly half the due

diligence (49%). Of the funds most recently established by the private equity and venture capital companies participating in monitoring for which an SFDR classification was made, 23% have been classified under Article 6, 61% under Article 8 and 16% under Article 9 (Figure 15).

Figure 155: SFDR Articles 8 and 9 play an important role for investment companies

SFDR classifications in per cent



Source: BVK and PwC.

For a good three quarters of funds, sustainability thus explicitly plays a role and one that will become even more important in the future. After all, 13% aim for a classification under Article 6, 71% under Article 8 and 16% under Article 9 for the next funds. A special analysis conducted only for VC companies revealed a distribution in which Article 8 funds had a moderately lower weight while Article 6 and Article 9 funds equally had a slightly higher weight.

Gender diversity in particular²¹

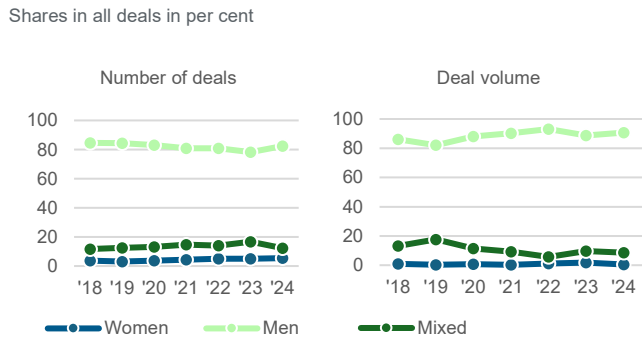
In order to harness even more of the potential of start-ups in Germany, the aspect of gender distribution plays an important role as well. In Germany, women have so far been under-represented at structural level in newly founded businesses in general and in start-ups in particular. Mobilising more female entrepreneurs is therefore an important area of economic-policy action. In 2024, all-male start-up teams accounted for 82% of VC deals in Germany (Figure 19).²² All-female start-up teams were present in only around 5% of deals and mixed-gender start-up teams in 12% of deals. Furthermore, the dominance of all-male start-up teams in the number of financing transactions was very persistent in the past years.

It is true that a gender disparity in financed deals is already due to the lower share of women who launch a business start-up and to the fact that fewer women want to use VC to grow their business.²³ International studies, however, show that female founders are likely to receive VC less often and in lower amounts even when they are interested.²⁴

The gender disparity thus becomes even more pronounced in terms of deal volume. Of each euro of VC invested in Germany in 2024, 90 cents went to all-male founding teams, 9 cents to mixed-gender teams and only 1 cent to all-female

start-ups (Figure 16). Such a pronounced gender gap in VC finance is not a German phenomenon, however, but is common both across the EU-wide average and in important individual comparison countries.²⁵

Figure 166: Entrenched gender funding gap in German VC market

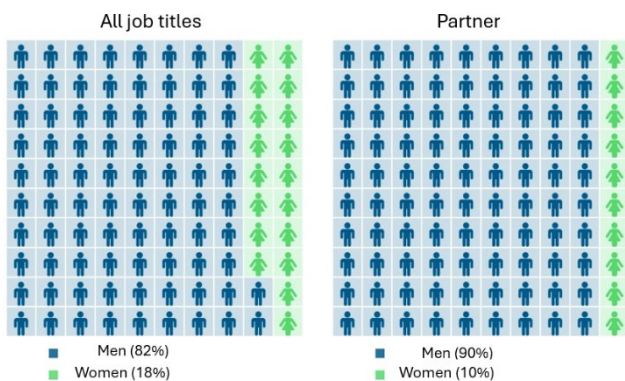


Source: KfW Research based on Dealroom.co.

Female start-up entrepreneurs have more difficulty accessing VC because investment proposals by female entrepreneurs often fall by the wayside in the investment process.²⁶ This has to do with their sector priorities, which are not so much in the focus of VC investors but also with the limited diversity in the VC ecosystem. In Germany, the share of women among the persons working in VC companies is a mere 18% (Figure 17). The male dominance becomes even more apparent when we look at the decision-making level. Here, the share of women among partners in German VC companies is only 10%. Furthermore, studies for Europe show that female general partners tend to manage smaller funds, which gives them less 'firepower' for their investments.²⁷

Figure 17: The (German) VC industry is very male-dominated

Gender distribution in German VC funds



Source: KfW Research based on Dealroom.co.

The established structures have led to a situation in which all-male teams are regarded as standard and female entrepreneurs as atypical and therefore riskier.²⁸ One indication of this is that investors respond with greater reluctance to behaviour perceived as typically feminine in pitches and are more likely to ask female entrepreneurs risk-related questions, while asking men more opportunity-related questions. However, the actual performance of start-ups does not confirm any of the widespread gender stereotypes. Start-ups headed by men and

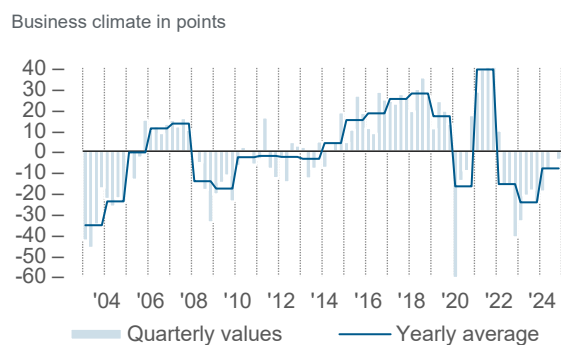
women both take the same risks and have a similar growth orientation.²⁹

Furthermore, the established structures enable business founders to draw on their own network much more often in their interaction with investors. Female founders, on the other hand, are more likely to interact with investors without previous contact or endorsement (cold contact), which is much less likely to lead to funding commitments.³⁰ In a male-dominated investor landscape it is currently easier for men to make use of networks of VC investors to their benefit even when they have access to them.³¹

**Good starting position for 2025
Market sentiment marked by optimism³²**

Sentiment in the German VC market plummeted up until the end of 2022 after the announcement of the interest rate reversal to combat inflation. It has trended upward again since then, to be sure, but the sentiment indicator did not return to its long-term average until autumn of 2024. Thus, after the slump in sentiment appeared to have been largely overcome, VC sentiment slumped again in the final quarter of 2024 (Figure 18). However, it was primarily an expression of the setback in the assessments of current business conditions, while half-year expectations continued to improve. This gives reason to be optimistic that the business climate will soon gain new momentum.

Figure 17: VC sentiment has gradually climbed out of the doldrums



Source: German Venture Capital Barometer.

The fundraising environment is providing encouragement. Buoyed by the ECB key interest rate reductions, it rebounded to positive territory in the final quarter of 2024 for the first time again since early 2022. Upcoming further key interest rate cuts, especially in the euro area, could further boost fundraising sentiment. The exit climate, however, remains subdued. Stuck deep in the red over eleven consecutive quarters, sentiment around exit options has never been this bleak for so long. Still, it is encouraging that the exit climate reached its highest level at the end of 2024 since the first quarter of 2022. After all, the VC funds that were launched in the strong fundraising years from 2020 are approaching their de-investment phase. The opportunities for exits that yield returns, with which VC funds generate return flows to their investors, are therefore gaining growing importance for the funding cycle in the VC market.³³

Optimism has also returned with a view to portfolio disposals due to possible losses. In the past years, a growing number of start-ups became insolvent at the end of their runway for lack

of follow-up funding. The return to slightly above-average sentiment with regard to default-induced depreciations and write-downs in follow-on rounds suggests that follow-up funding is much easier to realise again. Sentiment around new investments is also slightly above average. This bodes well for investment activity in the first half of 2025, also against the backdrop of diminished concern over defaults. The willingness to make new investments is bolstered by a continuing high level of investor satisfaction with entry valuations for new commitments.

Momentum around technology trends continues³⁴

Investors' short-term outlook on the business climate suggests that the VC market will continue to play an important role in the financing of innovation at the business location Germany in 2025 as well. Investment activity and sentiment among German investors around growth opportunities in various technological domains show that besides technological potential, the economic and social policy environment is also important for funding trends in the German VC market. Current expectations around growth opportunities in the various technological areas are currently drifting apart. Some trends are particularly noticeable:

- As a result of rapid technological progress, artificial intelligence has received a strong inflow of investment in recent years that is likely to continue in 2025 as well.
- Investors also see major growth opportunities in cybersecurity and dual use technologies due to the current geopolitical market environment.
- In the course of the green transformation, climate tech evolved into the technological area with the highest volume in the German venture capital market in 2024, but growth expectations for 2025 are more muted than three years ago.
- Low growth opportunities are expected for 2025 in the areas of mobility/logistics, foodtech/agech and e-commerce, although the latter was the largest market in 2019 and is now showing signs of market saturation.

Consistent supply of capital from the Future Fund

Beyond the short-term outlook, the promotional activity of the Federal Government's Future Fund is also relevant for the medium-term market development. The Future Fund is a comprehensive package of measures that has been in place since March 2021 with the aim of strengthening the German venture capital market. With a total volume of up to EUR 16 billion, the Future Fund offers various target-specific financing instruments aimed at closing funding gaps for start-ups in various growth phases and mobilising private capital. Coordination of the Future Fund is under the responsibility of KfW Capital. One focus area of its activities is growth finance. The

building blocks of the Future Fund will be able to continue to make the bulk of their funds available in the years up to 2030 and, thus, remain invested in growth enterprises even beyond 2030.

Further impetus from the WIN Initiative³⁵

A further important contribution to the sustainable development of the German VC market comes from the WIN Initiative (Growth and Innovation Capital for Germany), which was adopted by representatives of the political and business arena in September 2024.³⁶ The WIN Initiative aims to improve the tax-related, legal and financial conditions in Germany in a way that makes it easier for young innovative enterprises to access private capital. To this end, a ten-point plan of measures was developed containing direct investments, formal financial support going beyond these investments and structural measures. Under this plan, the participating actors intended to invest around EUR 12 billion in the promotion of young enterprises up to 2030. The ten-point plan of measures specifically comprises:

1. Expand cooperation arrangements between universities, investors and enterprises
2. Establish growth and innovation capital as an asset class for wealthy and other suitable private individuals
3. Strengthen fund-of-funds structures
4. Improve financing for cleantech scale-ups
5. Introduce investors to growth and innovation capital through the transfer of expertise
6. Increase WIN investments by public institutional investors
7. Improve IPO/exit framework conditions
8. Strengthen the secondary market for venture capital fund shares
9. Improve the tax framework for investments in growth and innovation capital
10. Modify the Investment Ordinance

The successful implementation of these measures is expected to provide important additional impetus.

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¹ This analysis is a moderately revised and updated excerpt from the chapter 'The German venture capital market' of the Future Fund Status Report 2024 which KfW Research prepared on behalf of the Federal Ministry for Economic Affairs and Climate Action, see Metzger and Viète (2024), [Future Fund – Status Report 2024](#), Papers and Proceedings on Economics, KfW Research.

² Hall (2002), Start-ups and their financing in Europe, EU Monitor Global Financial Markets, Deutsche Bank Research.

³ Ritter, 2025, [Initial Public Offerings: VC-backed IPO Statistics Through 2024](#), retrieved on 10 February 2025.

⁴ Market valuations as at 2 July 2024: Microsoft USD 3.39 billion, Apple USD 3.32 billion, NVIDIA USD 3.06 billion, Alphabet (Google) USD 2.27 billion and Amazon USD 2.05 billion.

⁵ The Tibi Initiative mobilised private capital from French institutional investors for the VC market.

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- ¹³ E.g. Ambrosio, Brasili and Niakaros (2021). *European Scale-Up Gap: Too few good companies or too few good investors*. European Commission, Directorate-General for Research and Innovation.
- ¹⁴ Joint press release by the Federal Ministry for Economic Affairs and Climate Action, Federal Ministry of Finance and KfW, Zukunftsfonds startet – Bundesregierung stärkt die Start-up-Finanzierung in Deutschland (*Future Fund launched – Federal Government strengthens start-up finance in Germany – our title translation, in German*) of 24 March 2021.
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- ¹⁶ Viète (2023), Venture Debt in Deutschland und Europa: eine Bestandsaufnahme (*Venture debt in Germany and Europe: taking stock – in German*), KfW Research, Focus on Economics No. 441.
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- ¹⁹ Viète, S. and Metzger, G. (2024), KfW Venture Capital Dashboard Q1 2024, KfW Research.
- ²⁰ Dahmann et al. (2024), Gekommen, um zu bleiben: ESG-Strategien deutscher Beteiligungsgesellschaften (*Here and here to stay: ESG strategies of German equity companies – our title translation, in German*), BVK und PwC.
- ²¹ Lo, Metzger and Viète (2022), Female Entrepreneurship – Mobilisierung von Gründerinnen ist wirtschaftliche Chance und gesellschaftliche Aufgabe (*Female entrepreneurship – Mobilising female entrepreneurship is a societal task and an economic opportunity – in German*), KfW Research.
- ²² The analyses are based on a subsample from the deal database Dealroom.co which contains all transactions with information on the gender of the founders. For Germany, that was 2,385 deals during the observation period. The raw data lack information on gender distribution for some 40% of deals.
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- ²⁴ Hellmann et al (2021), Gender in Start-up Financing: Evidence from Equity Crowdfunding; Veer and Bringmann (2021), *Not Negotiable? The Gender Gap in Startup Valuation and its Remedies*.
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- ³⁴ Viète (2025), Venture capital – market trends in 2025, Focus on Economics No. 486, KfW Research.
- ³⁵ See WIN Initiative – Growth and Innovation Capital for Germany | KfW.
- ³⁶ See also Joint commitment on the WIN Initiative: joint press release of the German Federal Government and KfW dated 17 September 2024.