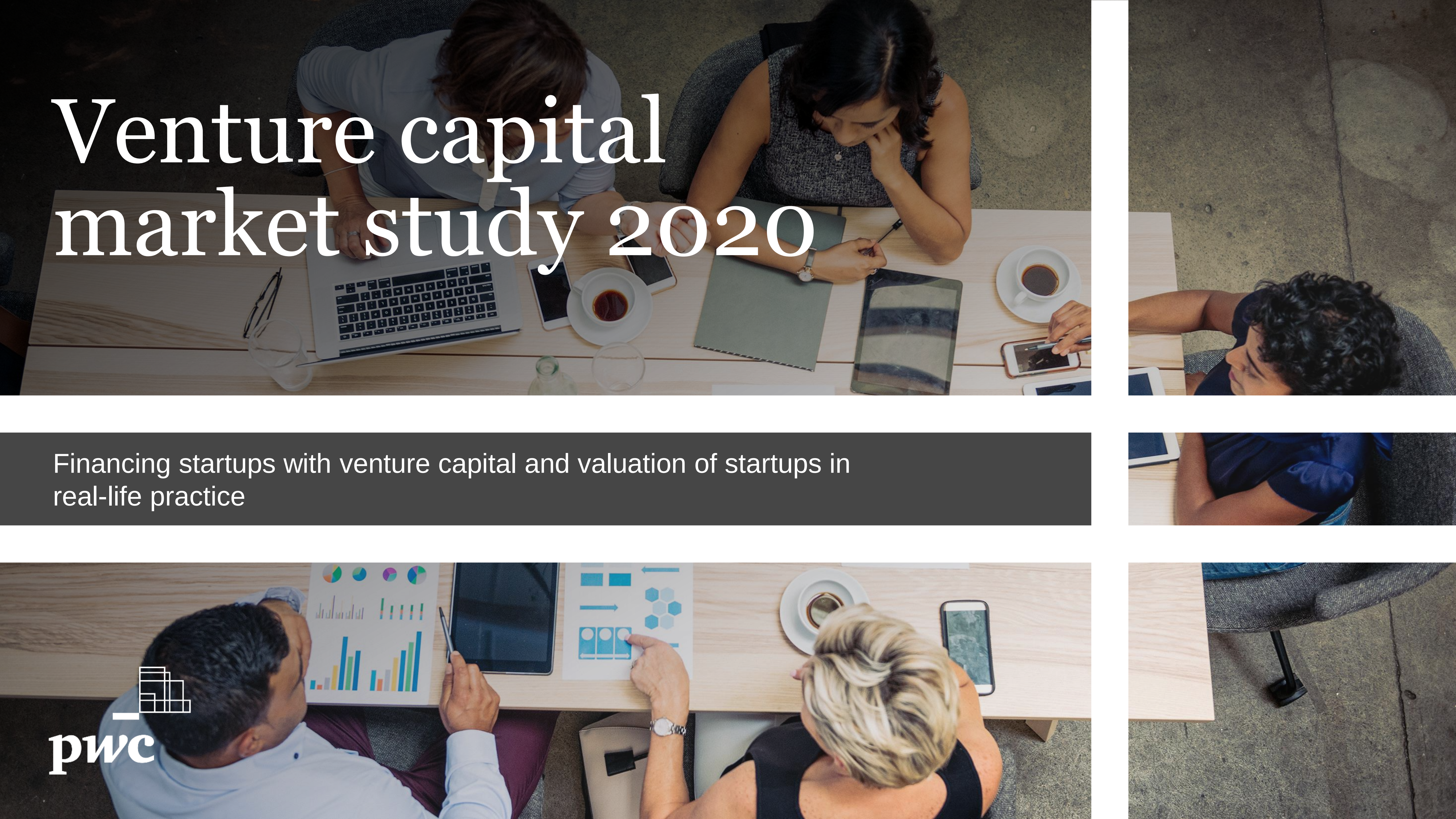


Venture capital market study 2020

Financing startups with venture capital and valuation of startups in real-life practice

pwc

Editorial

Startups are an important engine of innovation and economic growth. Venture capital is the fuel that drives startups forwards. Moreover, it gives the necessary space for founders, managers and employees to indulge their passion and potential. The financial ecosystem thus plays a significant role in shaping the development of startups. Multi-layered networks and experience among the people acting within this ecosystem are essential for success. However, there is little transparency regarding private-law agreements between the parties.

This study closes an important gap for Germany; data of this nature has long been regularly recorded and published in similar ways in other leading regions of the world. In addition to the well-known statistics on the (corporate) venture capital market, such as deal volumes, this study focuses on the concrete structure of startup financing in contracts that are not publicly known, and on the associated company valuation process.

Based on a broad and in-depth survey of investors, this study creates a unique database for Germany which provides a degree of transparency on the confidential details of startup financing. This enables benchmarking, which in turn provides decision-making aids for all parties within the transaction process.

This interdisciplinary 'bridge' between valuation practice and the legal arrangement of funding rounds in investment contracts also allows conclusions to be drawn about negotiation processes and the motivation behind them. These insights can thus help improve efficiency and effectiveness of the financing process. Venture capitalists, together with founders and managers, can increase transparency and thus make a better contribution to the success of startups and their financial ecosystem.

We hope you have an informative read, and we would welcome any suggestions you might have for future studies.

Best wishes

Prof Dirk **Honold**
Technische Hochschule Nürnberg Georg Simon Ohm

Patrick **Hümmer**
Ventury Analytics

Enrico **Reiche**
pwc

Gerhard **Wacker**
pwc

A

Executive summary

Executive summary

For this market study, Prof Dirk Honold (Nuremberg University of Applied Sciences), Ventury Analytics GmbH and PwC surveyed German and foreign investors in startups whose investment strategy has focussed on the German market or who have concluded deals in Germany. Across the total of 113 questions, asked during the summer of 2020, a maximum of 74 investors participated in the study.

In total, almost 50% of the investors were traditional venture capitalists (VC), more than 20% were corporate venture capitalists (CVCs) and more than 10% were public or semi-public investors, with typical structures and duration of investment. The investment focus was predominantly on business models in the business-to-business (B2B) sector, with a particular focus on software as a service (SaaS), software development and Industry 4.0.

In total, over 400 deals are financed annually by the participating VCs using traditional equity capital. Half of the funds invest, on average, no more than €5 million total in any one company. Only a quarter of the funds invest more than €15 million; of this group, only one is a CVC. At the level of individual funding rounds, fewer than 10% of investment funds make investments of more than €15 million. The total calculated investment volume covered by the study amounts to more than €2 billion per year.

Executive summary – funding rounds and their contractual structure

1.1

Over 70% of the participants stated that the company price ultimately achieved depends heavily on the negotiation process, in addition to scaling potential and market trends. Founders obviously have the chance to shape this part of the investment process.

1.2

The share of employee stock option plans (ESOPs) is usually 6%–10% of the total capital (fully diluted, post-money). The strike price is mostly guided by the share price of the last round of financing, and 20% of the participants stated that they would use the nominal value as a guide in early-stage phases.

1.3

In almost 50% of early-stage deals, participating liquidation preferences are agreed, which are used to compensate for higher company valuations in about a third of companies. In this respect, company valuations must always be considered in the context of the underlying contracts.

1.4

Just under a quarter of investors agree on full ratchet anti-dilution (as opposed to weighted average anti-dilution) in the early stage, although it is then only enforced in around 60% of cases, whereas the much more common weighted average anti-dilution provision is enforced in around 75% of cases.

Executive summary – valuation of startups

2.1

Investors' target shareholdings are 10%–24.9%, with over 80% planning to make follow-on investments to maintain this in subsequent rounds. Syndication means that both initial investments and follow-on investments make up less than 50% of an investor's financing volume.

2.2

In early-stage investments, investors' own experience is most often used for company valuations, followed by various multiple approaches and the venture capital (VC) method. Discounted cash flow (DCF) methods only gain importance in the later stages.

2.3

Almost two thirds of investors adjust the business plan and use a lower discount rate; in around 80% of cases, the discount rate is determined based on the investor's own experience. Risk aspects are most often included according to market criteria and management criteria when setting the discount rate.

2.4

On average, the expected internal rate of return (IRR) on the portfolio is between 32% p.a. for the early stage and 21% p.a. for the late stage, and the expected multiple is between 5.9 for the early stage and 3.2 for the late stage.

Executive summary – special questions on COVID-19

3.1

In almost 50% of deals, the valuation was adjusted or terms were changed between signing and closing in the wake of the COVID-19 crisis.

3.2

Increased financing needs were observed in three quarters of the companies surveyed. 55% of investors are in favour of co-financing from state funds, but around two thirds are not waiting for state aid to become available.

3.3

More than three quarters of investors say the COVID-19 crisis is more likely to lead to falling valuations. 92% of investors want to enforce agreed anti-dilution rights at the expense of the founders in the event of a down round due to the COVID-19 crisis.

Testimonials

“The study reflects the current VC market, where only a few investors are offering larger financing volumes. More support for startups is needed to defend European sovereignty and prosperity. Especially the innovative power of startups needs to be strengthened by expanding their set-up and increasing volumes of financing.”

Klaus Hommels (Chairman and founder | Lakestar)

“In addition to competence, many years of experience and extensive networks of venture capitalists are key to the success of their investments. This study confirms the great importance of these factors, and the transparency it creates supports the decision-making process for better structuring of investment contracts in the best possible way.”

Stefan Fischer (Managing Partner (Finance) | TVM Capital Life Science)

“The importance of corporate investors is continuously increasing; meanwhile, one in four venture capital transactions involve corporate investment. The deal terms of most corporate investors identified in the study show a high degree of congruence with those of pure financial investors, which also underlines the high degree of professionalisation of corporate investors.”

Dr. Bernhard Mohr (Managing Director | Evonik Venture Capital GmbH)

B

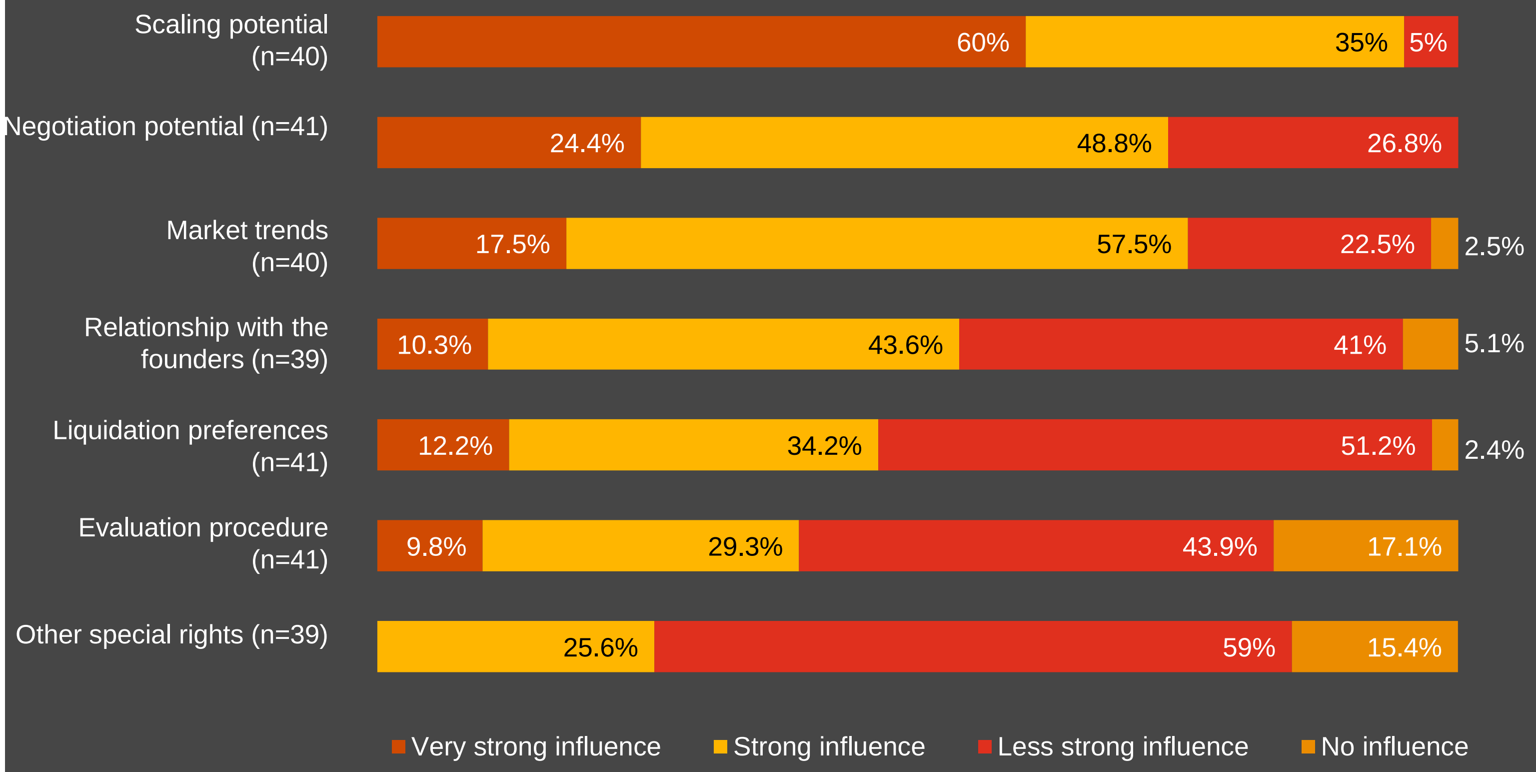
Key topics

Key topics – funding rounds and their contractual structure

1.1

Over 70% of the participants stated that the price ultimately achieved for the company depends heavily on the negotiation process, in addition to scaling potential and market trends. Founders obviously have the chance to shape this part of the investment process.

What influence do the following criteria have on the price ultimately paid for the company? (Percentage frequency)



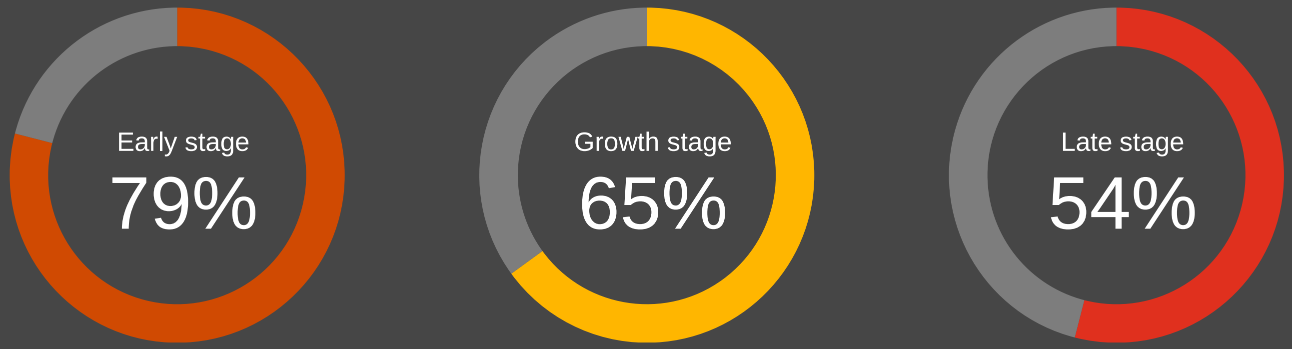
*For more information on liquidation preferences see p. 65 et seqq.

Key topics – funding rounds and their contractual structure

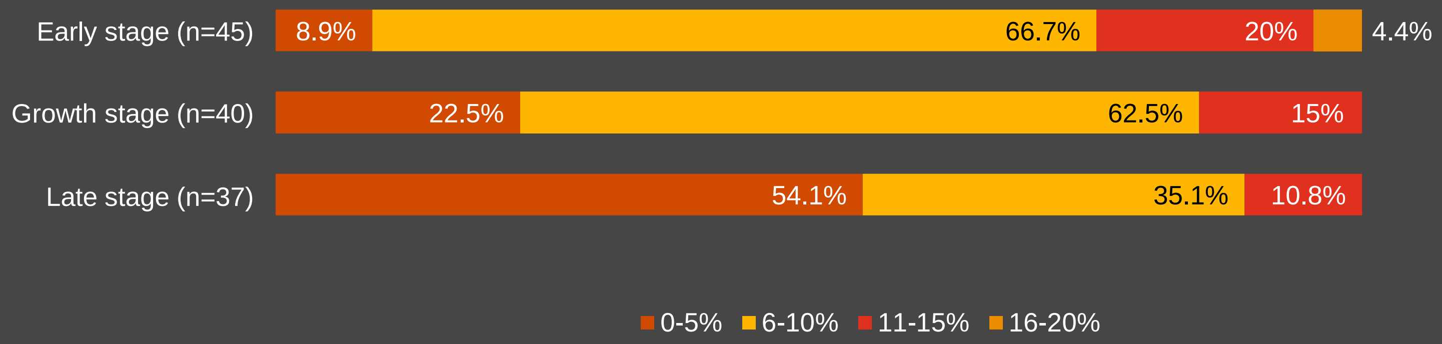
1.2

ESOPs are usually 6%–10% of total capital (fully diluted, post-money) ...

In what percentage of cases do you agree/expect ESOPs when you invest in a new company? (Mean value, n=48)



What average level (non-allocated; fully diluted post-round) of ESOP in the company do you expect/envisage? (Percentage frequency)

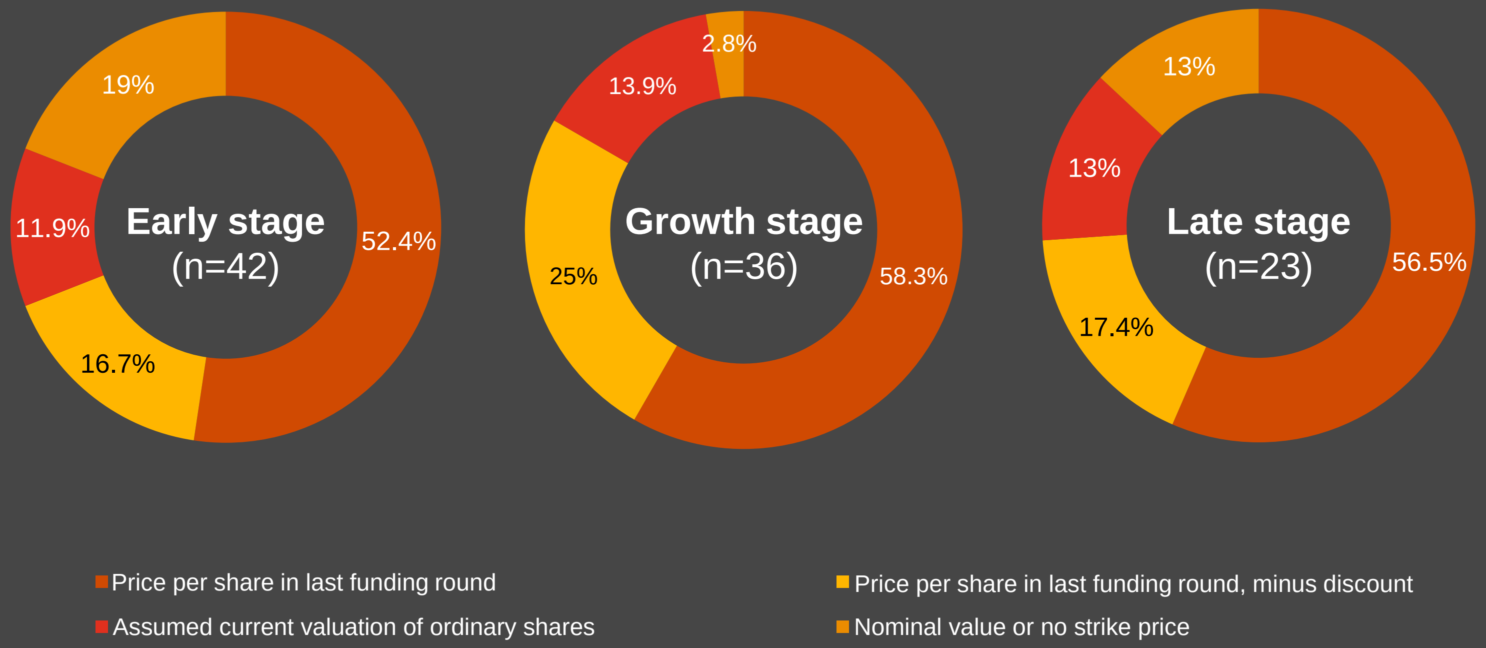


Key topics – funding rounds and their contractual structure

1.2

... with the strike price usually based on the share price of the last round of financing. In early-stage phases, 20% of the participants said that they would use the nominal value as a guide.

Do you assume that strike prices will be agreed for the issue of employee shares and, if so, what should the strike prices be based on?

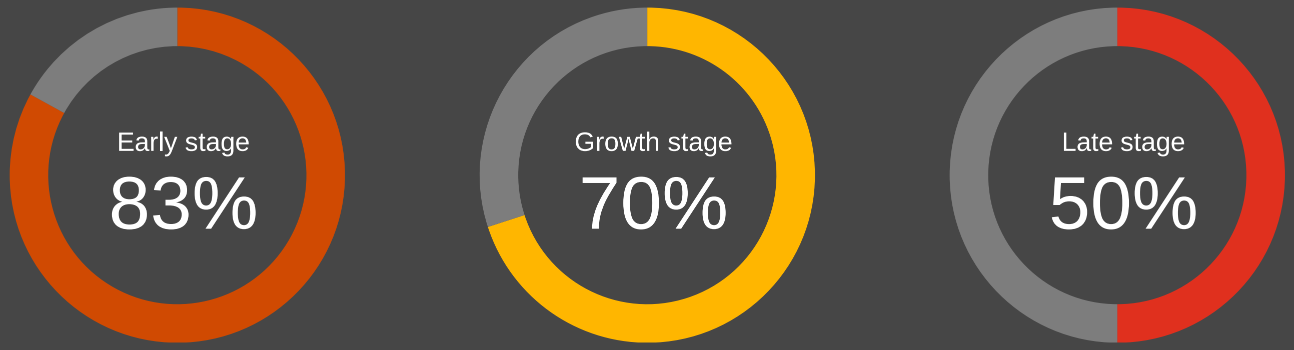


Key topics – funding rounds and their contractual structure

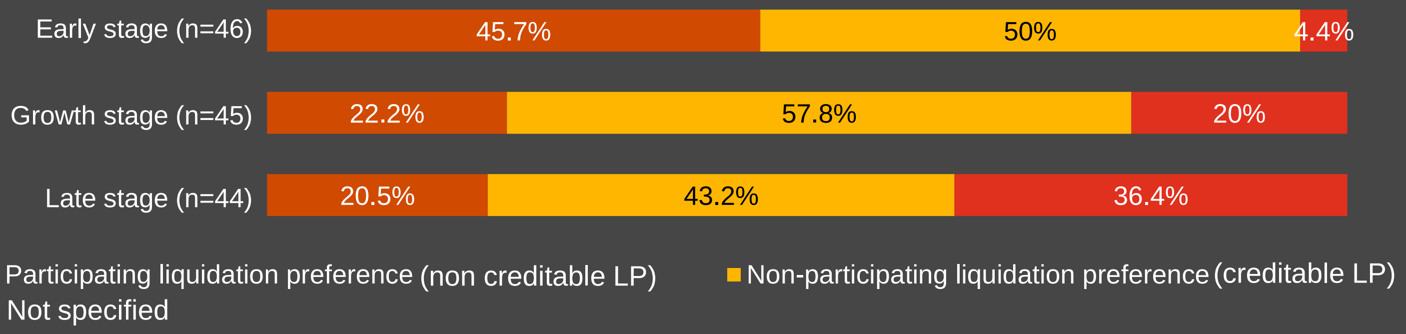
1.3

In almost 50% of early-stage deals, participating liquidation preferences are agreed, which are used to compensate for higher company valuations in about a third of companies. In this respect, company valuations must always be considered in the context of the underlying contracts.*

How often do you agree liquidation preferences when investing in a new company? (Mean value, n=54)



What kind of liquidation preferences do you agree in the different phases? (Percentage frequency)



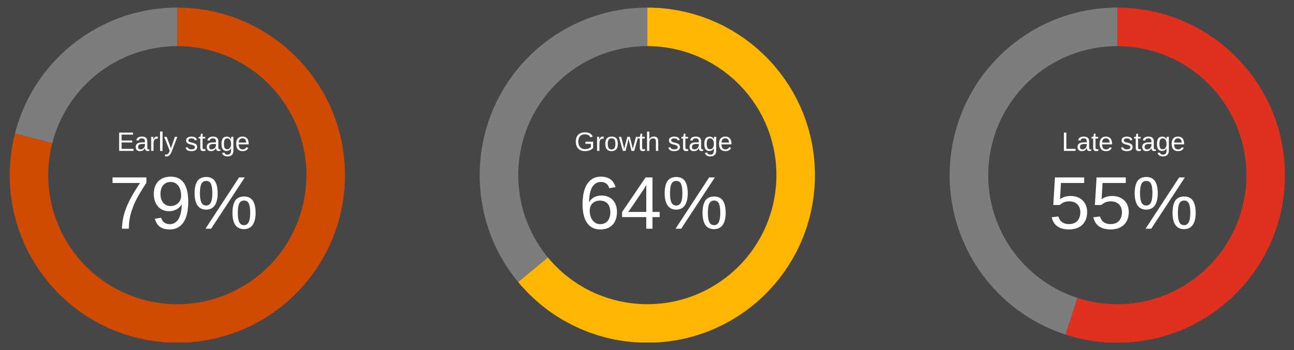
*For more information on liquidation preferences see p. 65 et seqq.

Key topics – funding rounds and their contractual structure

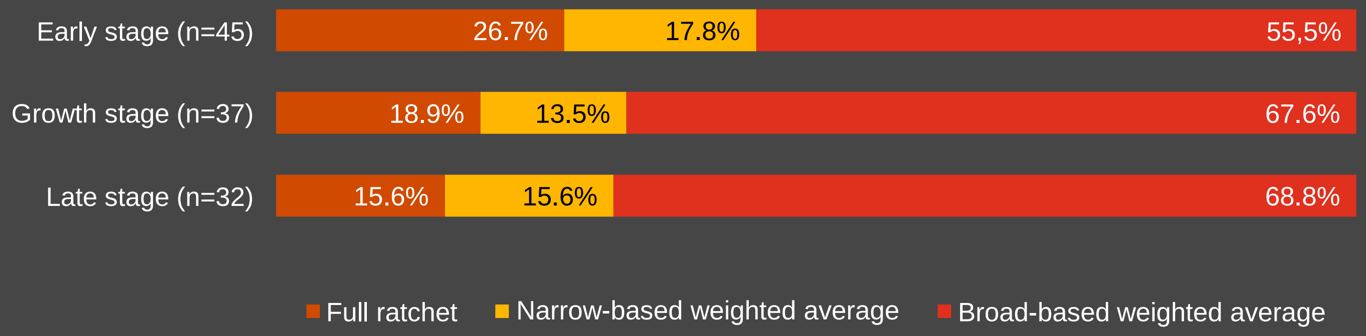
1.4

More than a quarter of investors agree full ratchet anti-dilution (as opposed to weighted average anti-dilution) in the early stage, although it is then only enforced in approx. 60% of cases, whereas the much more common weighted average anti-dilution provision is enforced in approx. 75% of cases.*

How often do you agree anti-dilution clauses when investing in a new portfolio company? (Mean value, n=52)



What type of anti-dilution clauses do you normally use? (Percentage frequency)



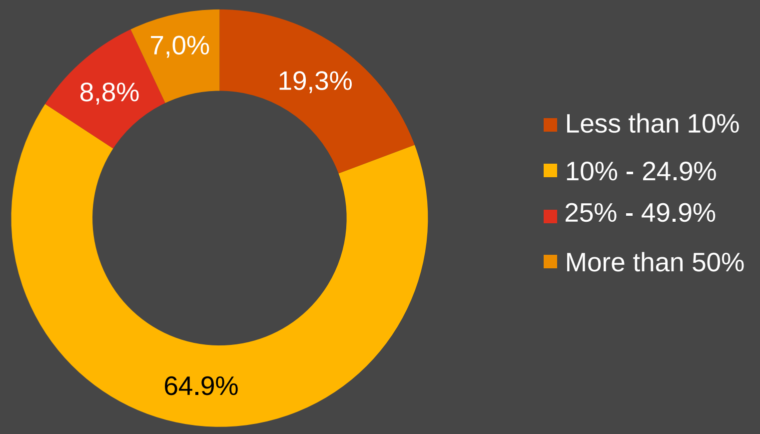
*See p. 43 and p. 68 for more information on anti-dilution clauses.

Key topics – valuation of startups

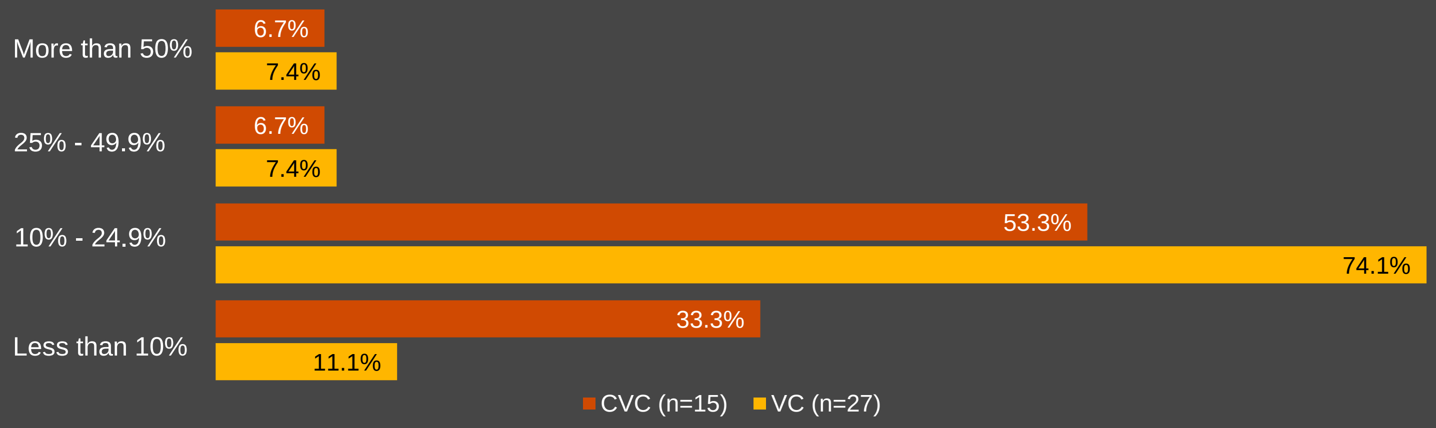
2.1

Investors' target shareholdings are 10%–24.9%, with more than 80% planning follow-up investments to maintain this ratio in the subsequent rounds. Syndication means that both initial investments and follow-on investments make up less than 50% of an investor's financing volume. Compared to VC investors, CVCs are also increasingly making investments of less than 10%.

What target shareholding in the company do you expect at the time of your initial investment? (n=57)



What target shareholding in the company do you expect at the time of your initial investment? (Broken down by VC and CVC)



Key results

Key topics – valuation of startups

The expected target shareholding for an initial investment is

10%–24.9%.

Why this is important

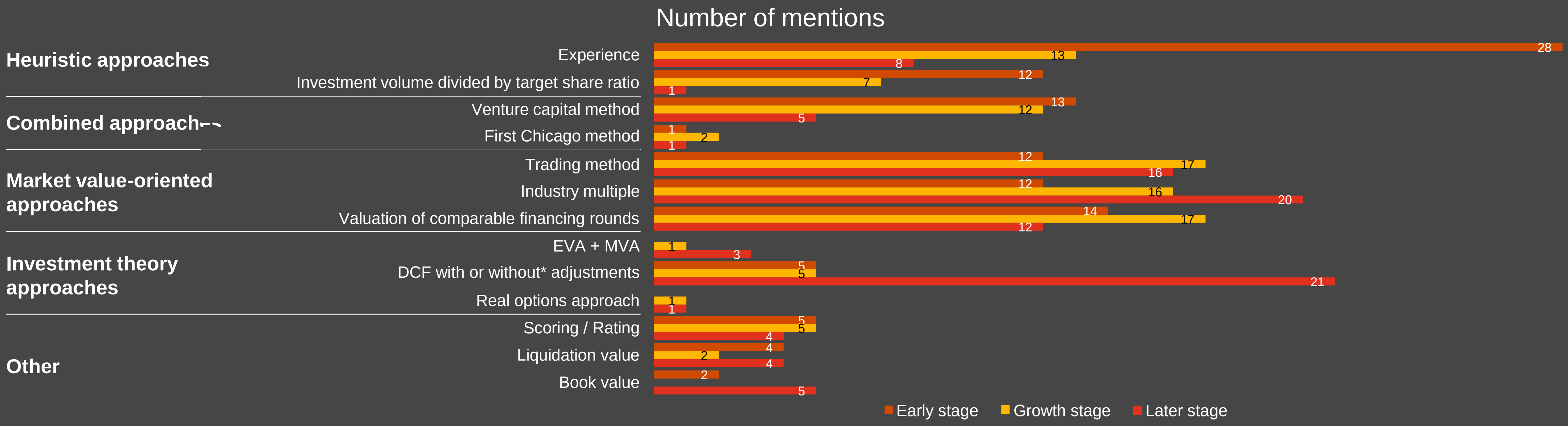
- The volume of finance made available by the investors in the first round creates implicit valuations of the startup in the expected shareholding: market logic.
- This market logic leads to low valuations for relatively low-volume investments in Germany, which can only be countered with a greater supply of large volumes of capital. (cf. Honold et al. in Ballwieser/Hachmeister: Digitalisierung und Unternehmensbewertung, 2019).
- This logic also applies to the subsequent rounds: larger total financing volumes over several rounds of financing can lead to low shareholdings among the founders, which may negatively affect their motivation.

Key topics – valuation of startups

2.2

In early-stage investments, investors' own experience is used most for company valuations, followed by various multiple approaches and the VC method; DCF methods only gain importance in the later stages.

What are your preferred valuation approaches for each company phase?



*9 out of 21 participants specified "without adjustments" in the late stage. For more information on experience see p. 78.

Key results

Key topics – valuation of startups

Experience is important in the valuation of startups, especially in early-stage rounds. This particularly applies when determining the discount rate.

Why this is important

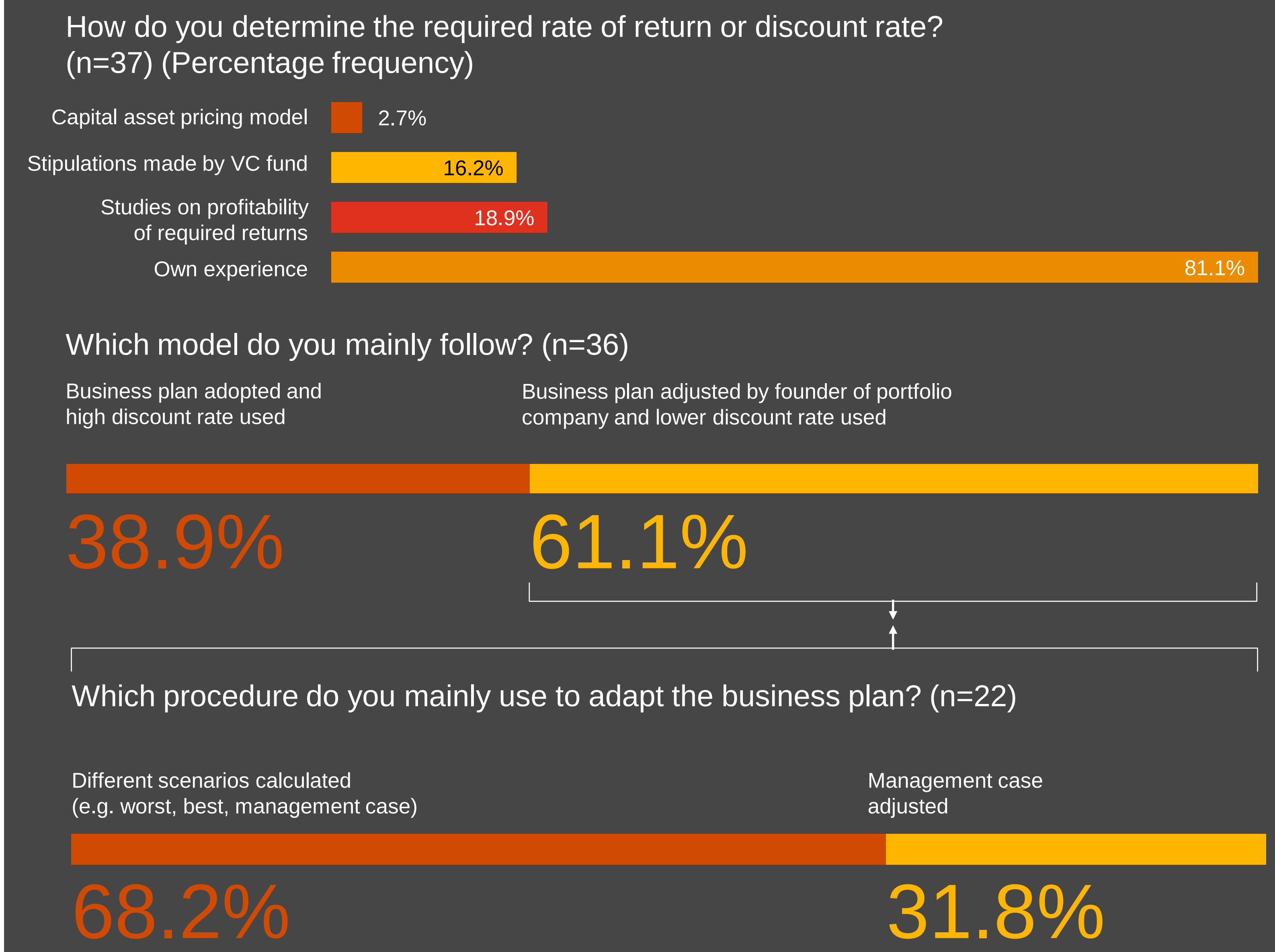
- Due to the lack of available transaction data, business plans are often adjusted based on experience and a lower discount rate is chosen accordingly to arrive at a valuation.
- To ensure success of a (corporate) venture capital fund, accumulated external expertise can be used in the valuation process alongside experience.
- Lack of experience can further complicate the valuation process, especially in the case of newly established (corporate) venture capital funds.*

*For further information see p. 61.

Key topics – valuation of startups

2.3

Almost two thirds of investors adjust the business plan by calculating different scenarios and use a lower discount rate; in around 80% of cases, the discount rate is determined based on the investor’s own experience.



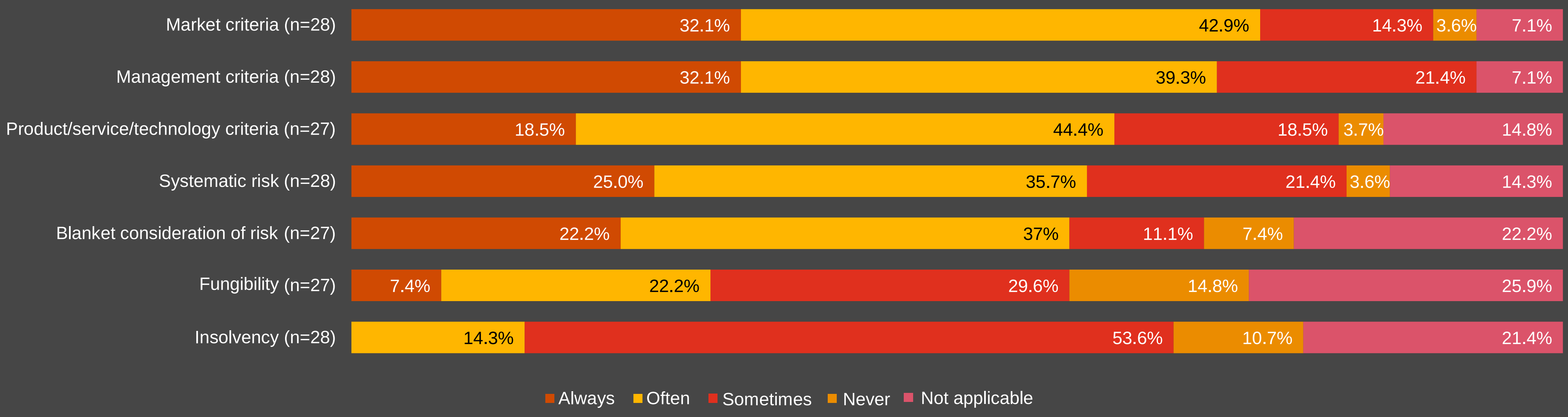
Note: Monte Carlo simulation, 0%

Key topics – valuation of startups

2.3

Risk aspects are most frequently included according to market and management criteria when determining the discount rate, followed by systematic risks or a blanket consideration of risk aspects.

What risk aspects do you usually take into account when determining the cost of capital/required rate of return/discount rate?

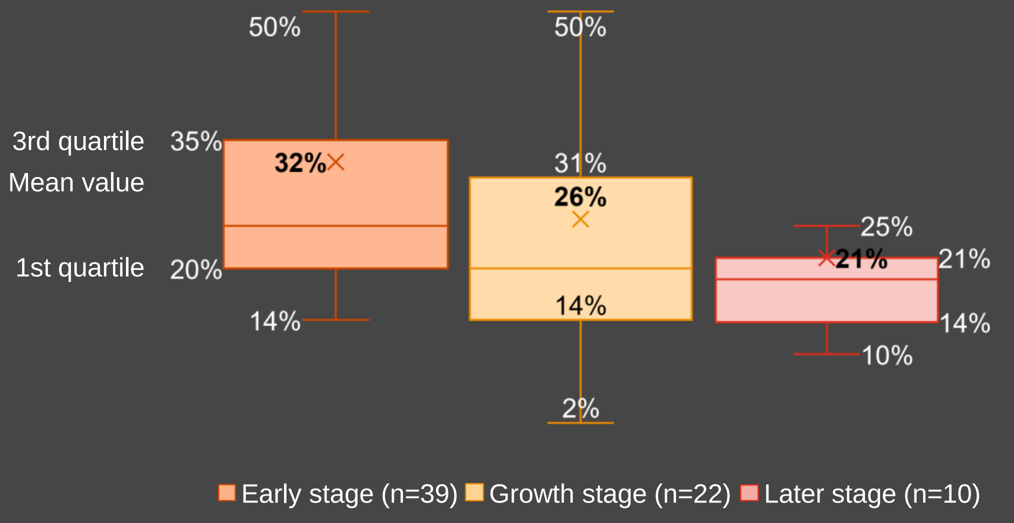


Key topics – valuation of startups

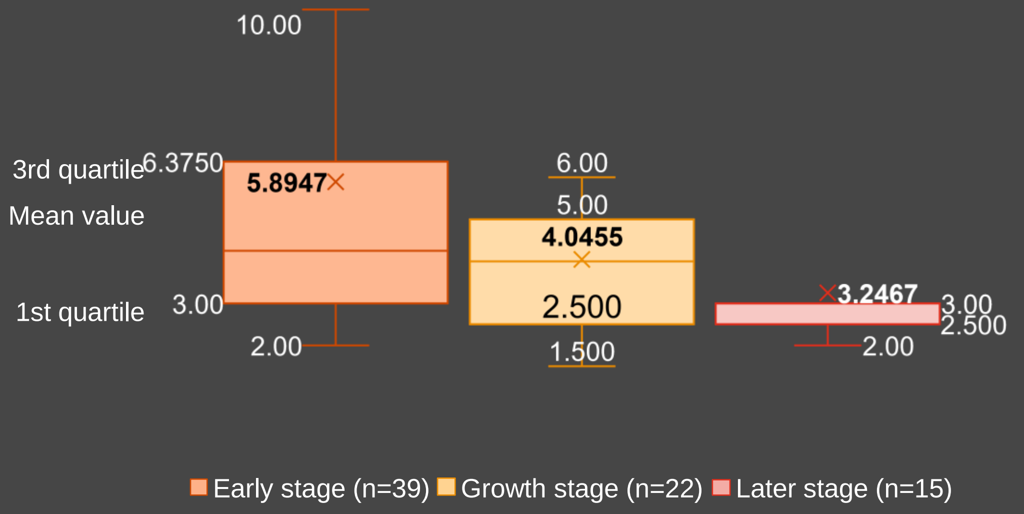
2.4

On average, the expected IRR on the portfolio is between 32% p.a. for the early stage and 21% p.a. for the late stage, and the expected multiple is between 5.9 for the early stage and 3.2 for the late stage.

What is the average IRR required?



What is the average expected multiple?

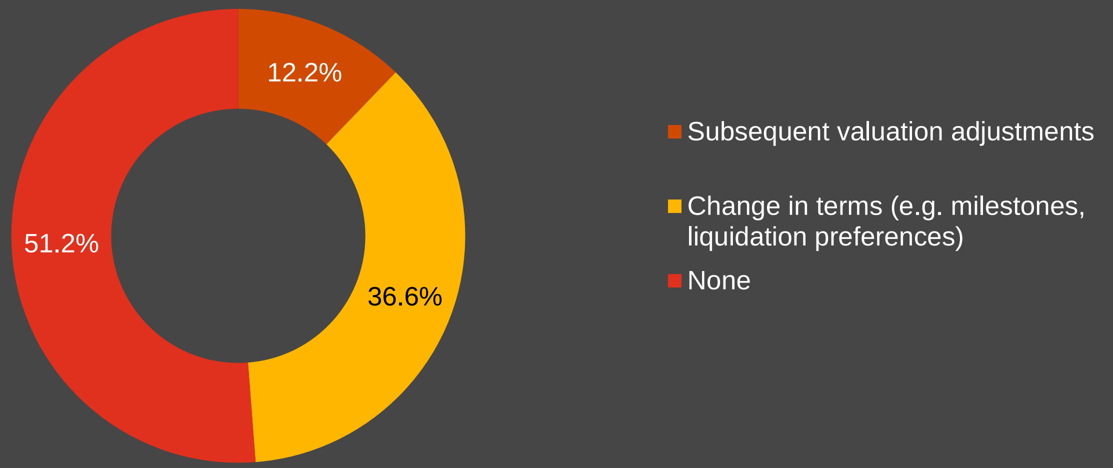


Key topics – special questions on COVID-19

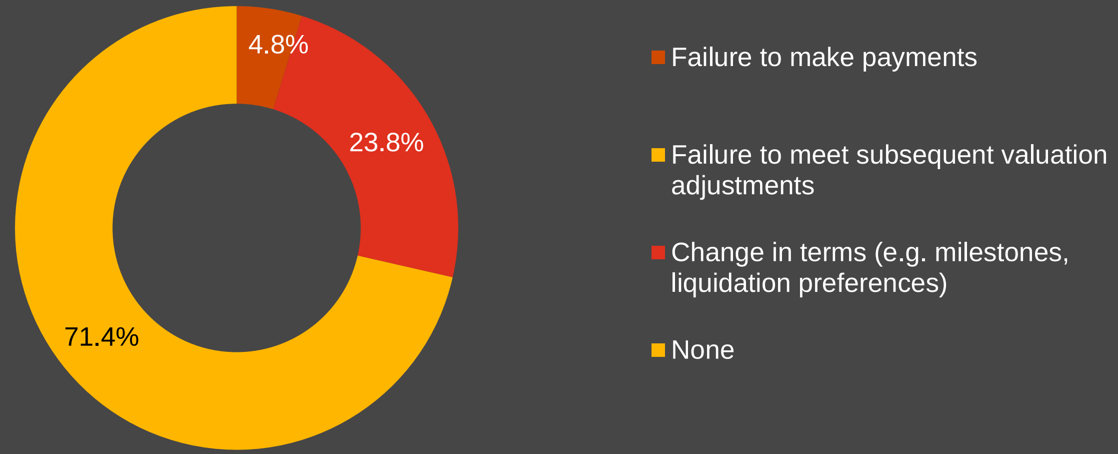
3.1

In almost 50% of the deals, the valuation was adjusted or terms were changed between signing and closing in the wake of the COVID-19 crisis. In a quarter of the deals, this happened even after closing.

What impact is the COVID-19 crisis having on deals signed before the crisis and not yet closed? (n=41)



What impact is COVID-19 having on deals closed before the crisis? (n=42)

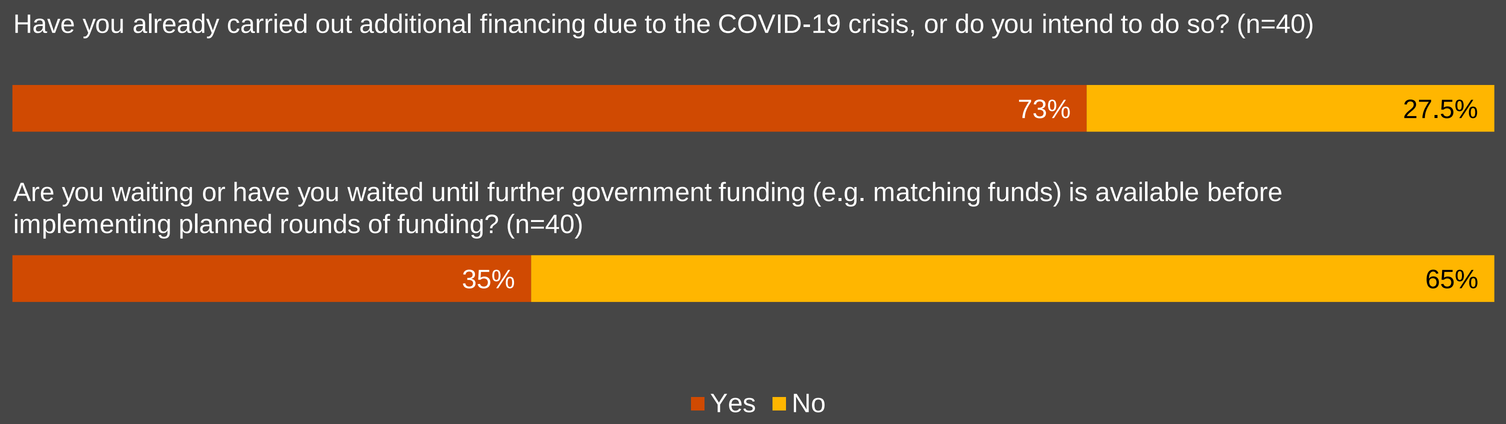


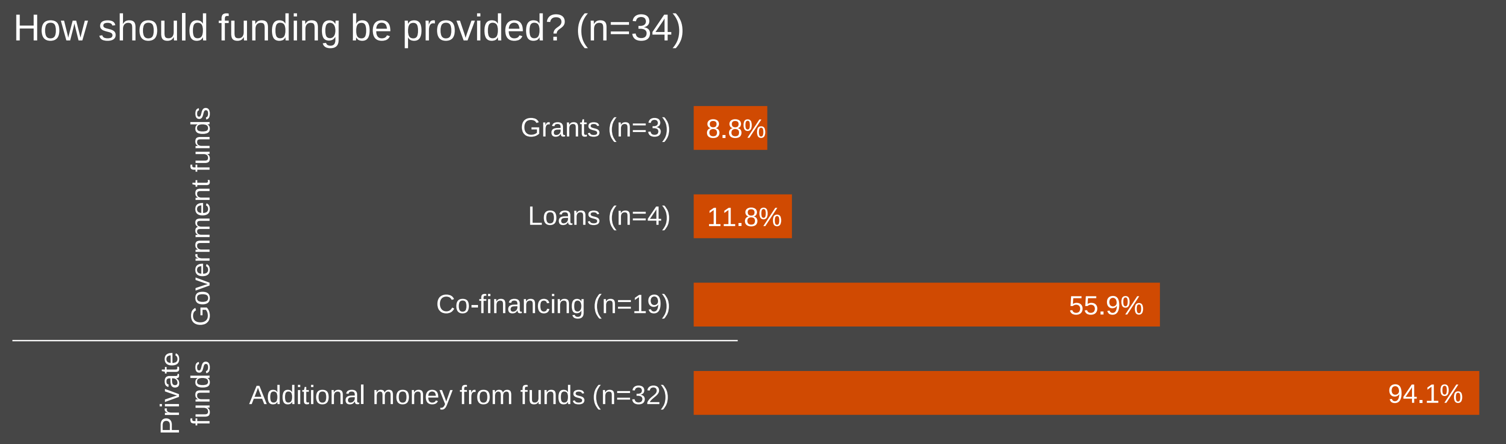
Key topics – special questions on COVID-19

3.2

Increased financing needs were observed in three quarters of the companies surveyed. 55% of investors are in favour of co-financing from state funds, but around two thirds are not waiting for state aid to become available.

Financing in the COVID-19 crisis



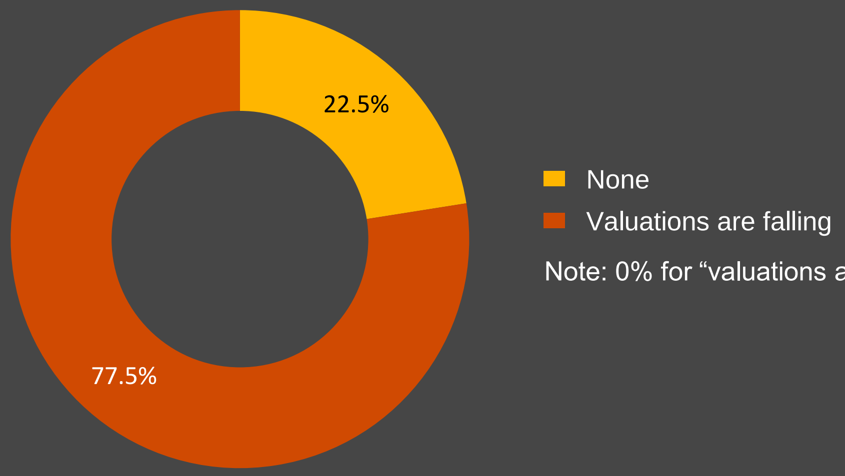


Key topics – special questions on COVID-19

3.3

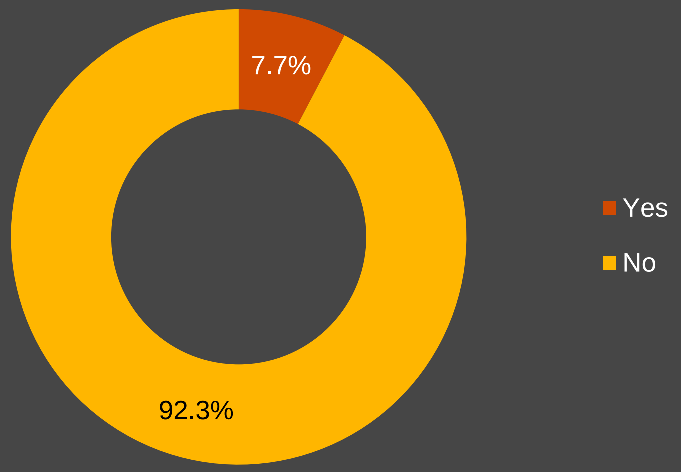
More than three quarters of investors say the COVID-19 crisis is more likely to lead to falling valuations. 92% of investors want to enforce agreed anti-dilution rights at the expense of the founders in the event of a down round due to the COVID-19 crisis.

What impact is the COVID-19 crisis having on valuations? (n=40)



Note: 0% for "valuations are rising"

In the event of a down round in the next round of financing, are you planning to limit the extent to which you apply agreed anti-dilution clauses due to the COVID-19 crisis? (n=39)



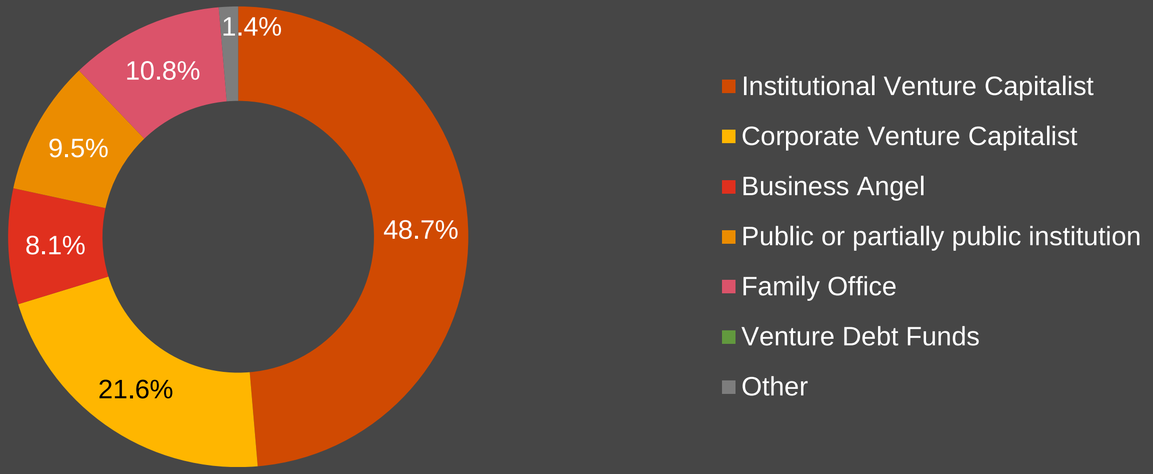
C 1.0 Further topics

Further topics – general

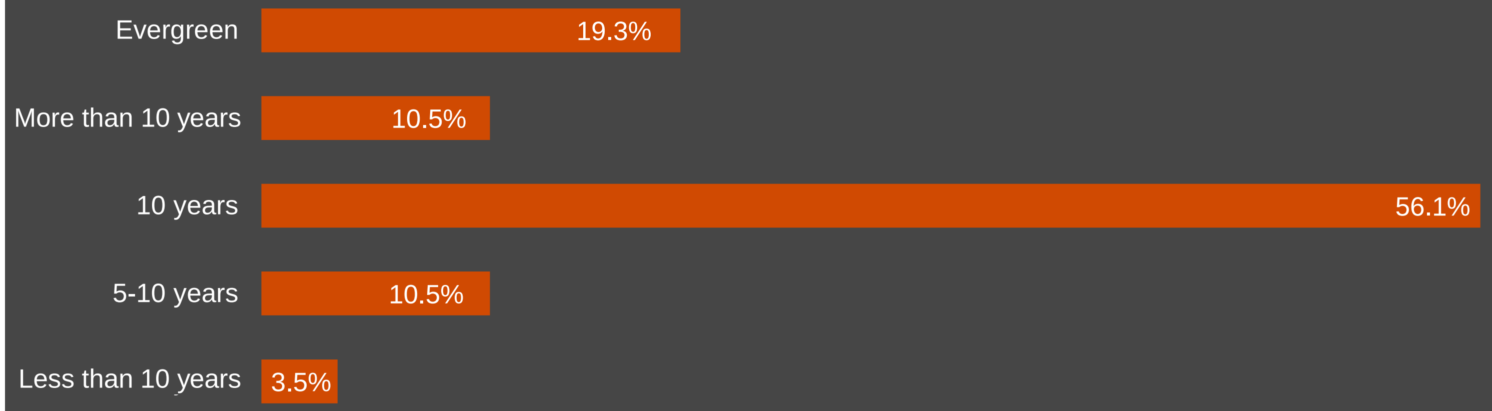
1.1

Approximately 50% of participants were traditional VCs, more than 20% were CVCs and around 10% were public or semi-public funds, most with an average running time of 10 years and options for extension. Almost a fifth of the participants managed evergreen funds.*

What type of venture capitalist are you? (n=74)



What is the average duration of your funds? (n=57)



*Evergreen funds are funds that do not have a fixed term. See p. 62 for information on investment duration and renewal options.

Further topics – general

1.2

A total of 60 participants reported holding a total of 170 funds (average: 2.83 per company). 40% of the funds range between €30m–€100m, with a tendency towards various different fund sizes.

Distribution of fund sizes among participants (n=60)

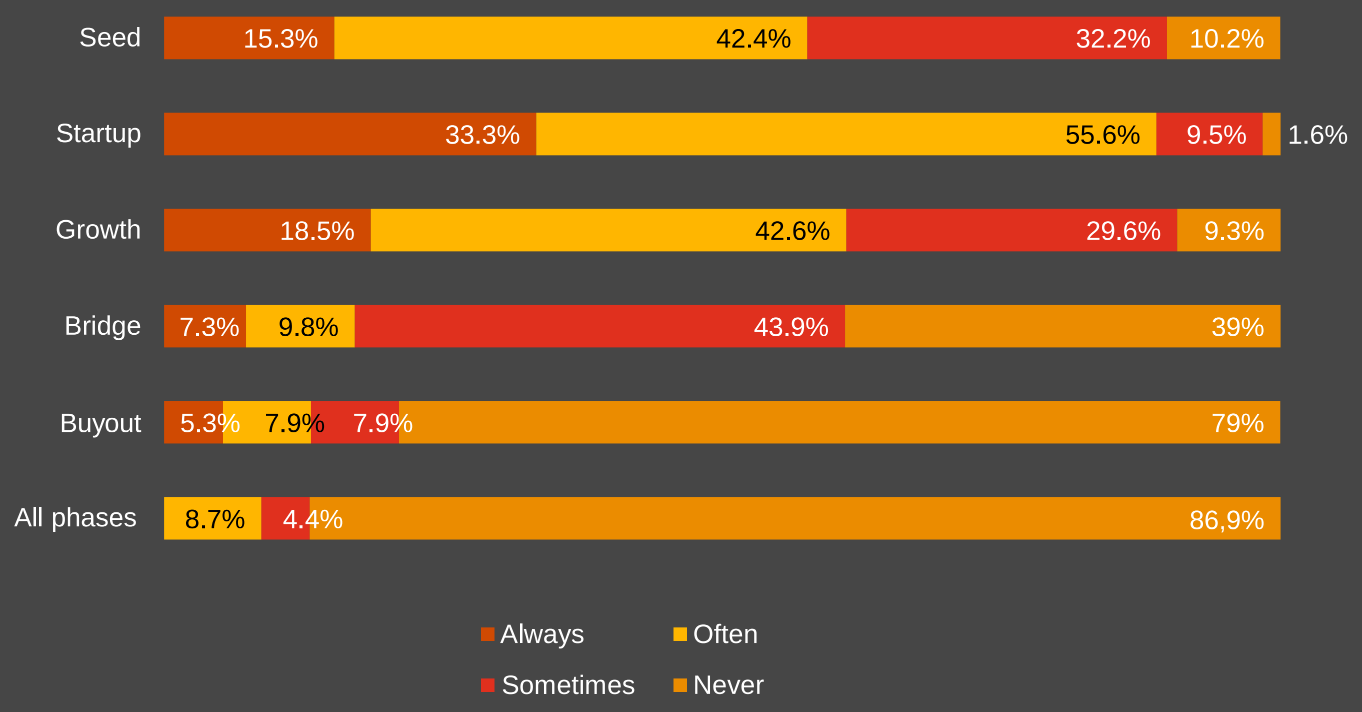
	Number of funds	
More than €200m	38	→ 22.3%
€100m–€200m	24	→ 14.1%
€30m–€100m	68	→ 40.0%
Less than €30m	40	→ 23.5%

Further topics – general

1.3

The participants invest mainly in the startup phase, with fewer investing in seed and growth deals. Hardly any funds invest across all phases.

Which company phase do your VC funds mainly invest in? (n=64) (Percentage frequency)



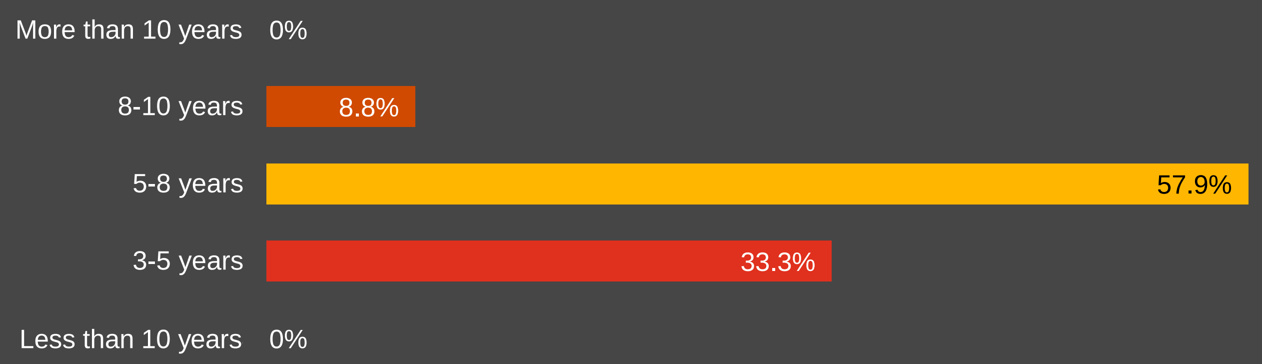
For more information on the participants' investment foci, see p. 63.

Further topics – general

1.4

The most common investment duration is five to eight years, and almost 70% of investors complete no more than five deals per year. ‘Cherry picking’ dominates over ‘spray and pray’.

What is the average investment period you plan per investment? (n=57)
(Percentage frequency)



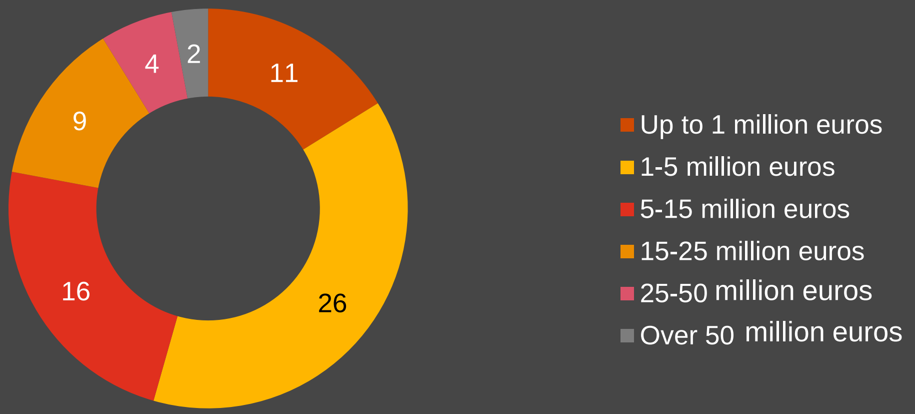
Approximately how many deals do you close per year? (n=56)

Further topics – general

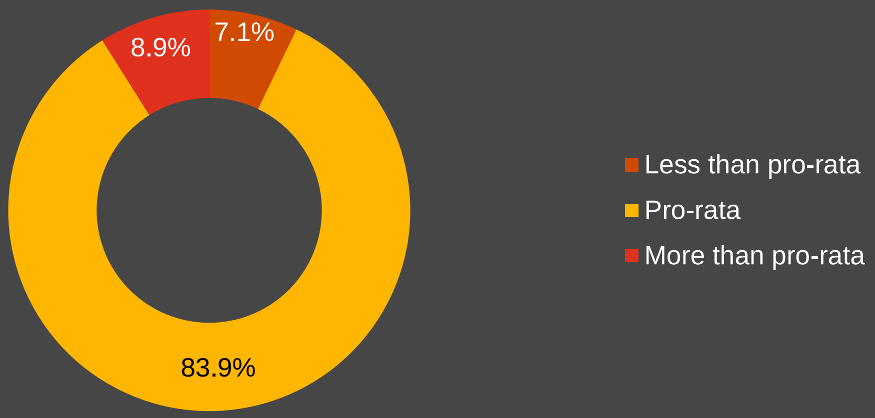
1.5

Half of the funds invest no more than €5 million in each portfolio company, and only a quarter invest more than €15 million. At the same time, over 80% of the participants plan to participate in follow-up rounds to maintain their shareholding (pro-rata).

What total financing volume do you usually transact for a portfolio company? (n=58)*



How do you plan to participate in follow-up rounds? (n=56)



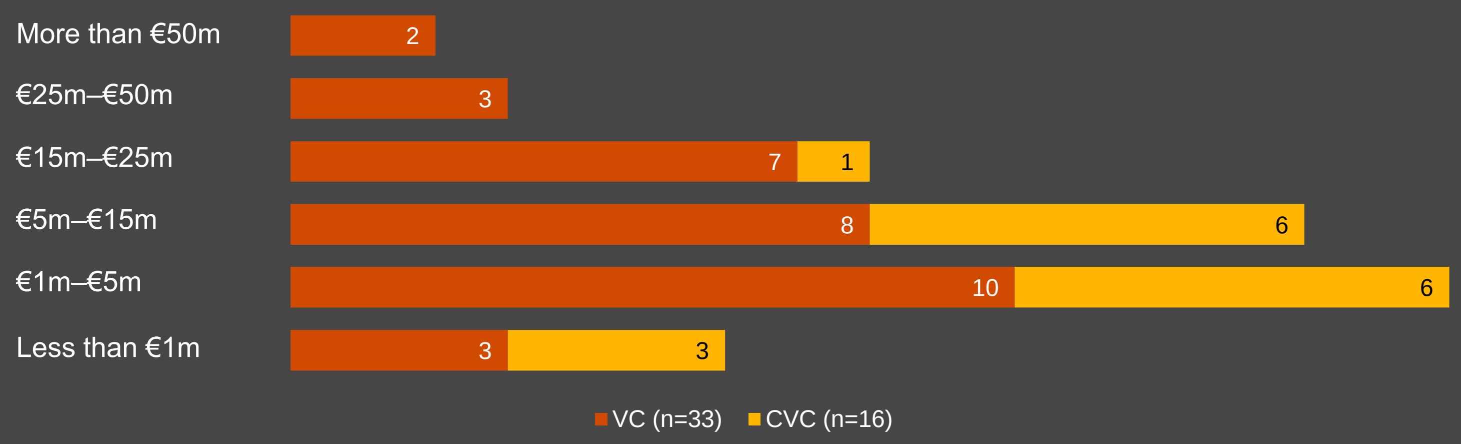
*8 participants selected multiple answers. These participants mostly had several funds of different sizes. Because of this, the number of responses was 68.

Further topics – general

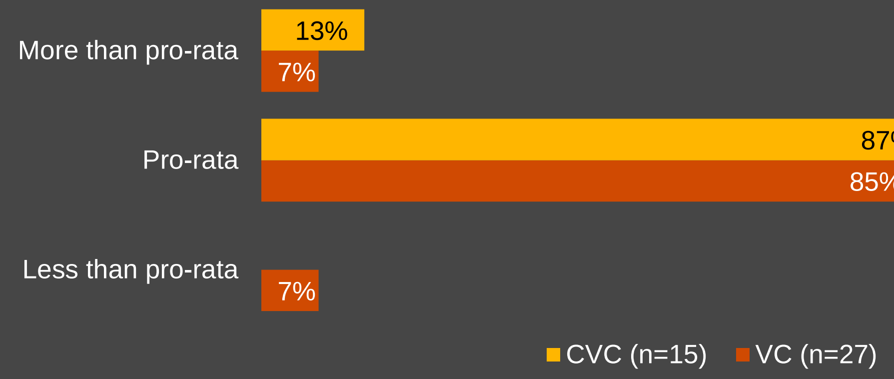
1.6

If we separate the answers given into institutional venture capitalists (VCs) and corporate venture capitalists (CVCs), we can see that only one CVC provides financing of over €15 million per portfolio company.

What total financing volume do you usually transact for a portfolio company? (n=49)



How do you plan to participate in follow-up rounds? (n=42) (Percentage frequency)



Key results

Further topics – general

Only a quarter of the funds invest more than

€15 million,

and of these funds only one is a CVC.

Why this is important

→ German policymakers want to use the Zukunftsfonds (Future Fund) to encourage the establishment of more large-volume VC funds.

→ The comprehensive measures from the Future Fund for larger-volume co-investments are currently only matched by a limited number of large-volume VC funds.

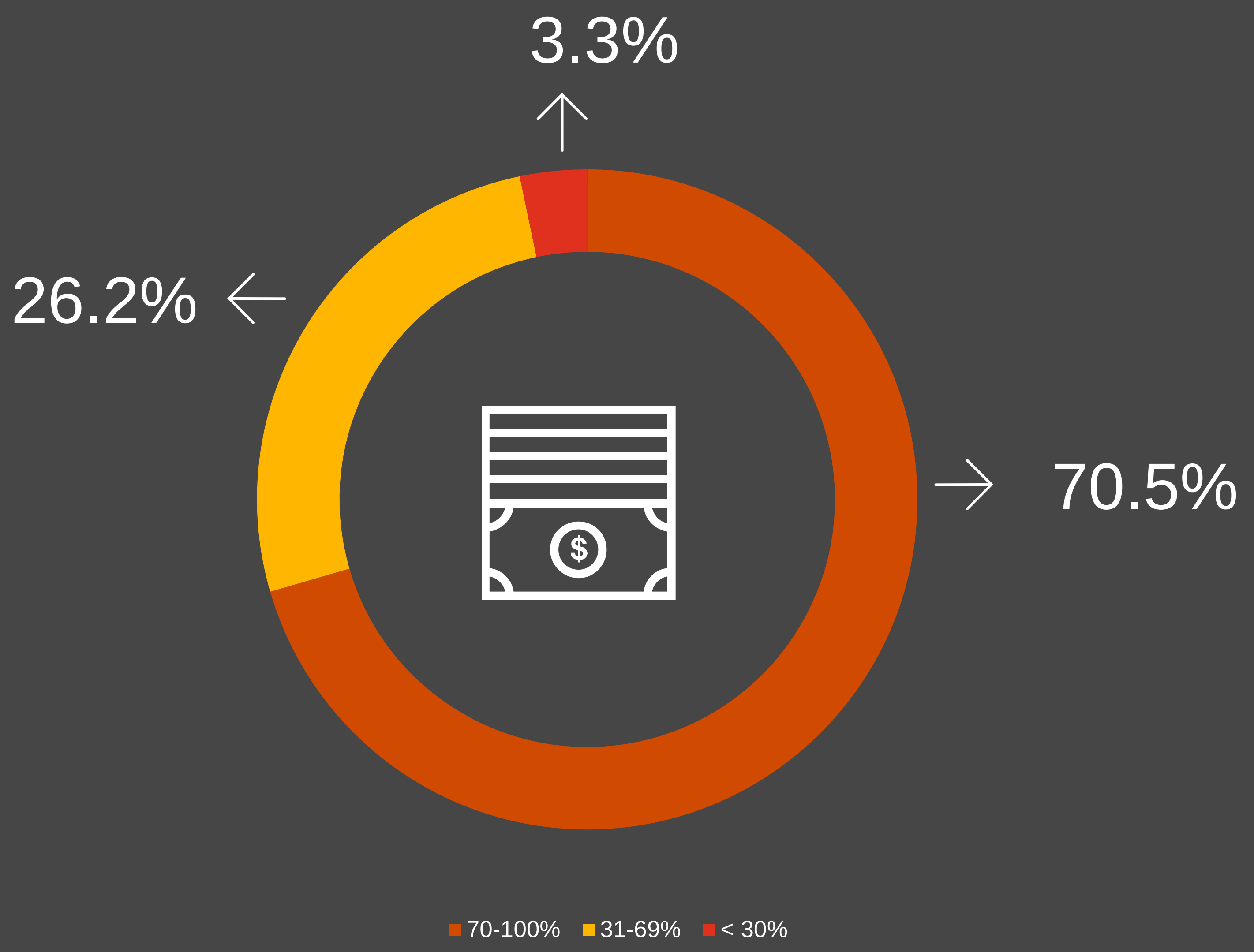
→ More large-volume investments would also be good for CVCs.

Further topics – general

1.7

The investment focus of the participants is predominantly on B2B business models. Over 70% of investors make 70%–100% of their investments in portfolio companies with this focus.

Which market participants are the main focus of the companies in which you invest? (Diagram shows percentage share of investments in B2B companies) (n=61)

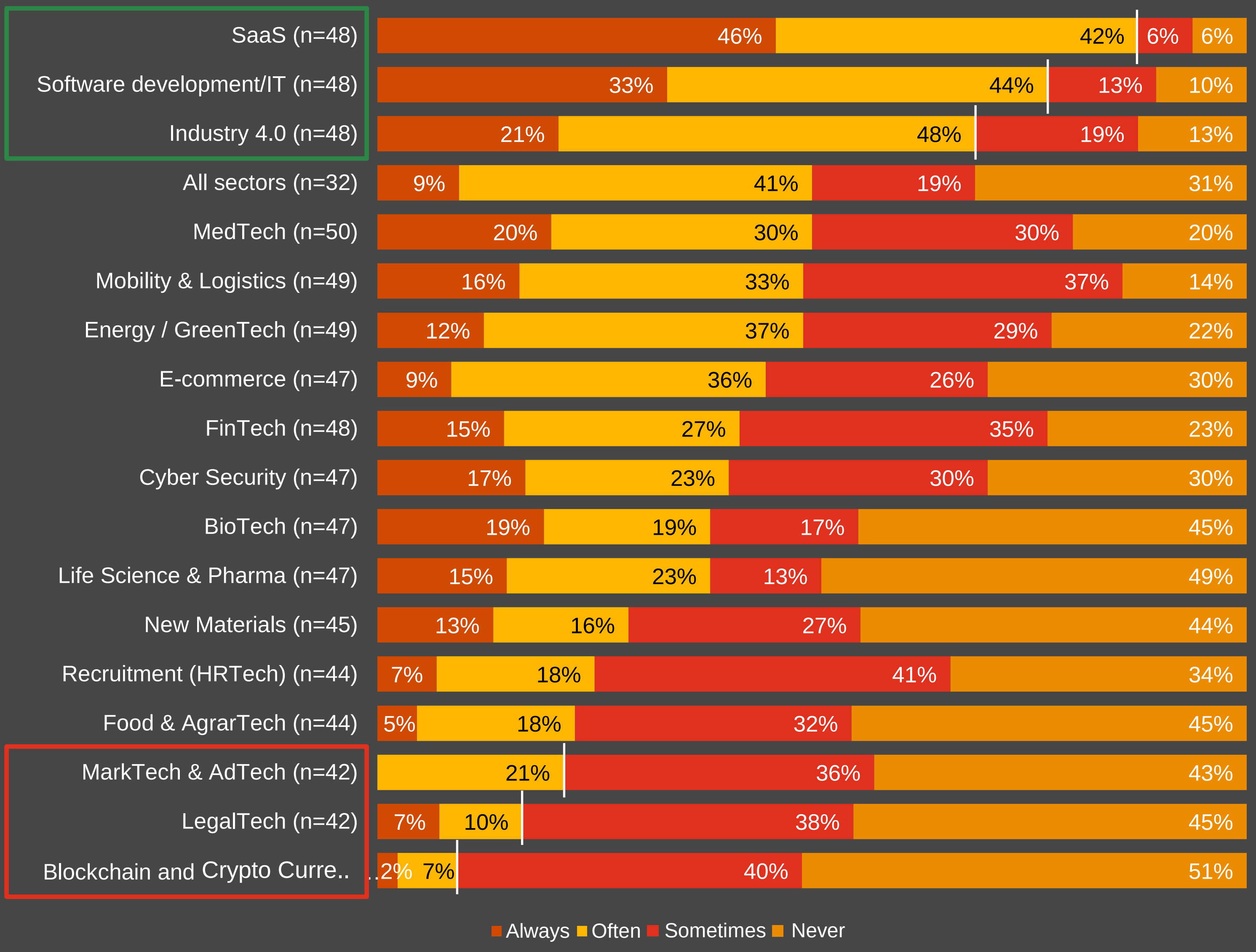


Further topics – general

1.8

The participants' industry focus is predominantly SaaS, software development and Industry 4.0, which are addressed by approx. 70%–90%. Life sciences/Medtech, Biotech, Fintech, e-commerce, energy technology/green technology, cybersecurity, and mobility and logistics are addressed by 40%–50% of the participants.

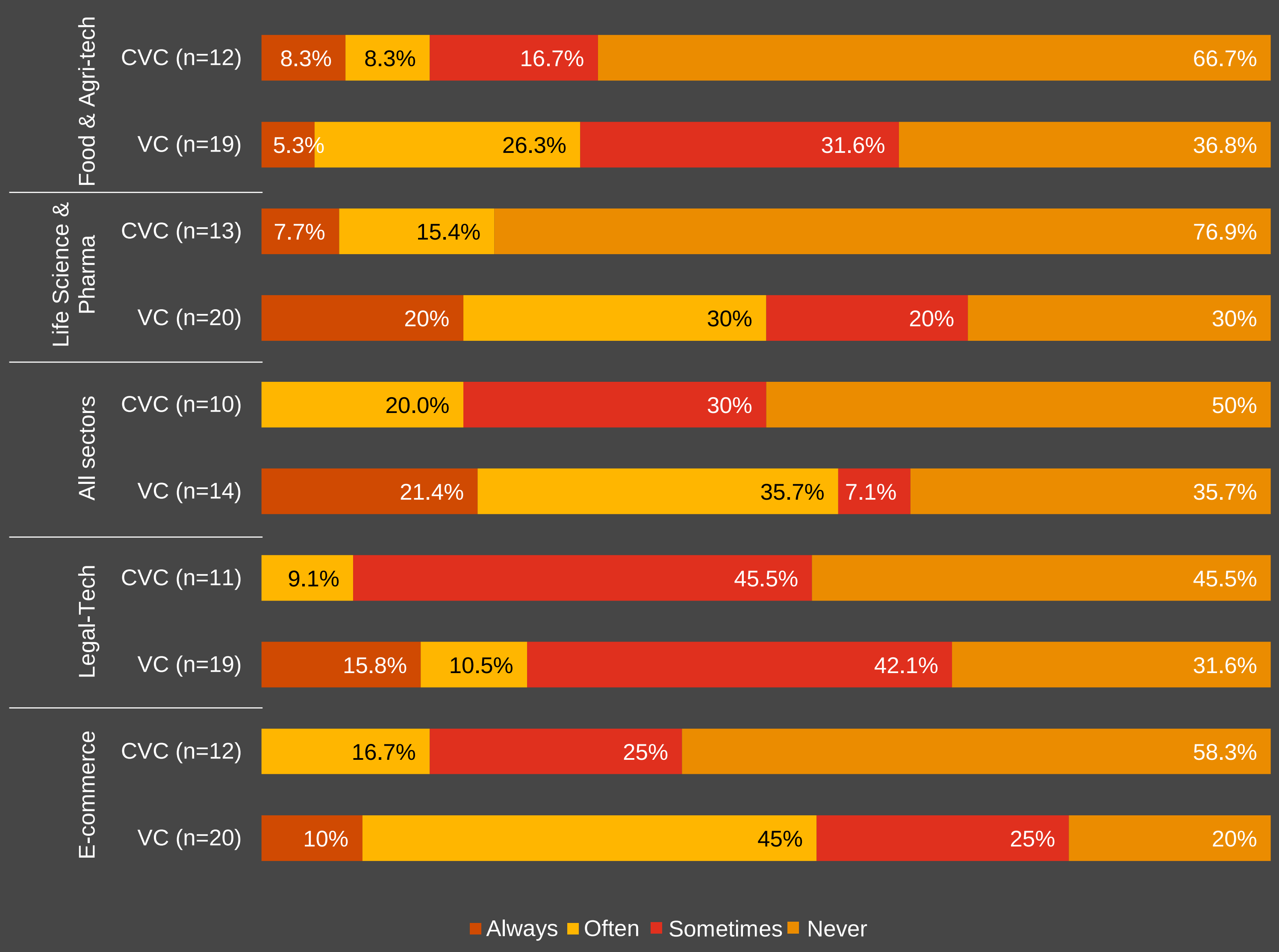
Which sector do your funds focus on? (Percentage frequency)



Further topics – general

1.9

The biggest differences between VCs and CVCs can be seen in the e-commerce, legal-tech, life sciences, and food and agri-tech sectors.

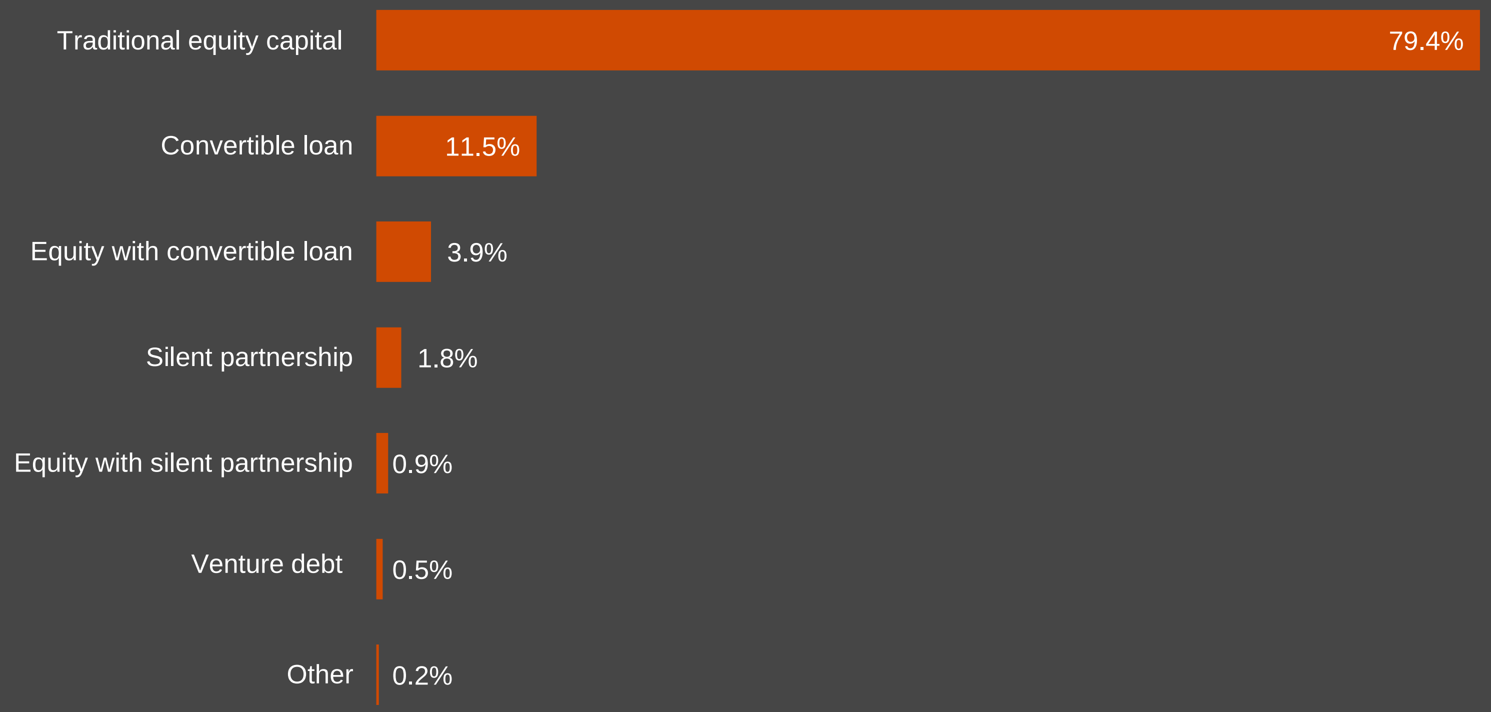


Further topics – general

1.10

The most common type of investment is traditional, direct equity capital investment.

What type of investment do you normally make in your portfolio companies? (n=54)

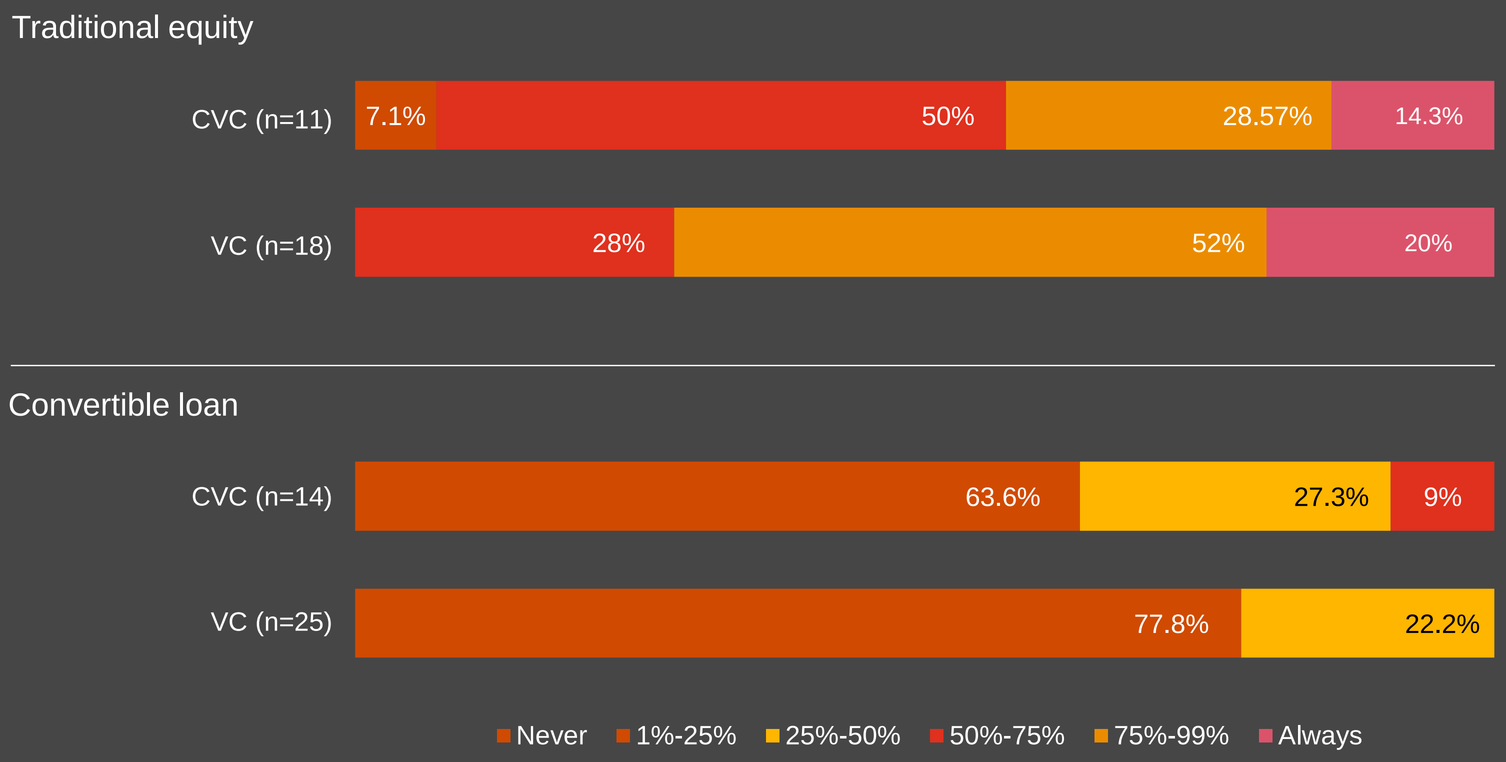


Further topics – general

1.11

Traditional equity investment is somewhat more pronounced among VCs. On the other hand, corporate venture capitalists are more willing to issue convertible loans.

What type of investment do you normally make in your portfolio companies? (Percentage frequency)



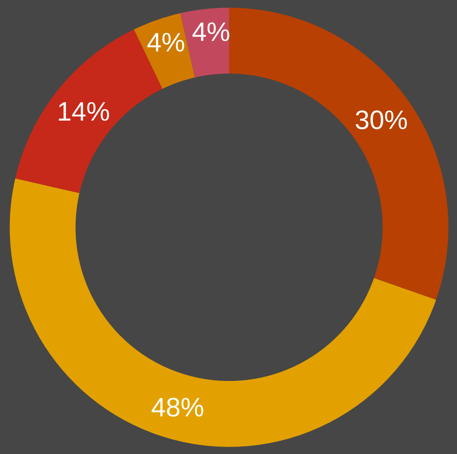
Number of VC participants = 26 | Number of CVC participants = 14

Further topics – general

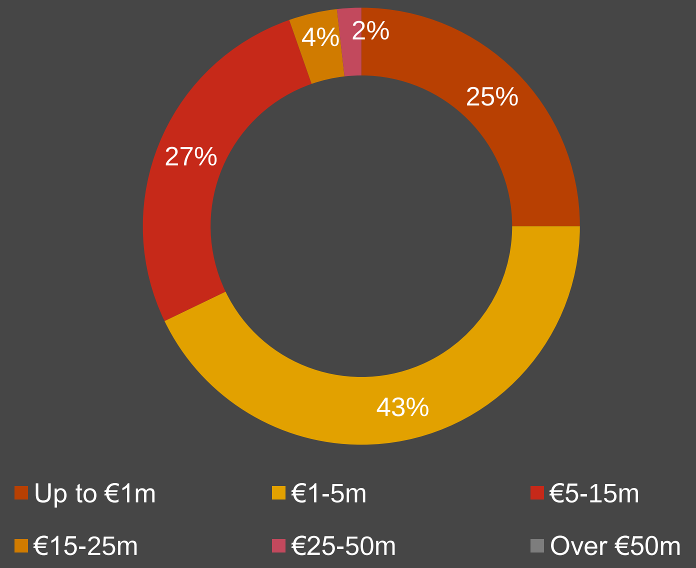
1.12

There are no significant differences in volume within individual rounds of financing between initial investments and follow-up investments. More than two thirds of the participants invest no more than €5 million in the initial or follow-on investments, with a tendency towards higher volumes (€5m–€15m) in the follow-on investments.

What is the typical volume of your individual funding rounds for **initial investments** (n=56)?



What is the typical volume of your individual funding rounds for **follow-up investments** (n=56)?



C

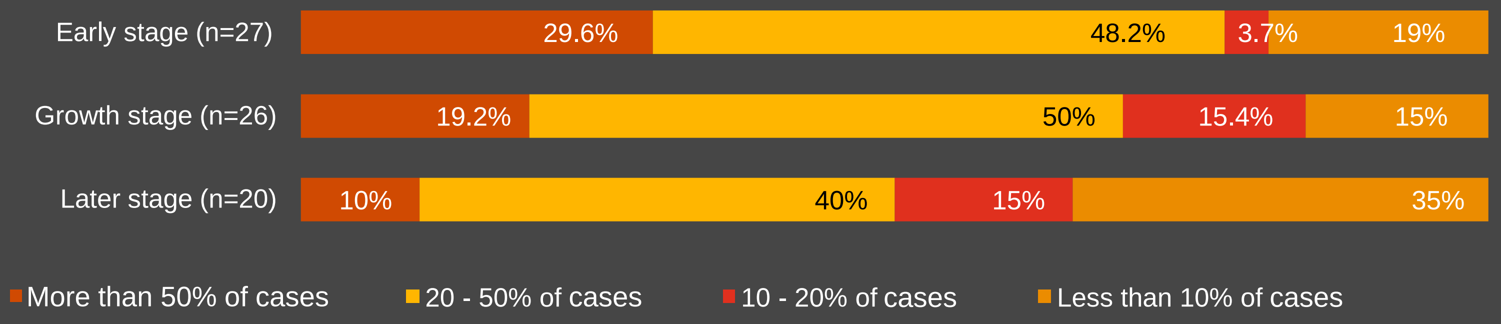
2.0 Further topics

Further topics – funding rounds and their contractual structure

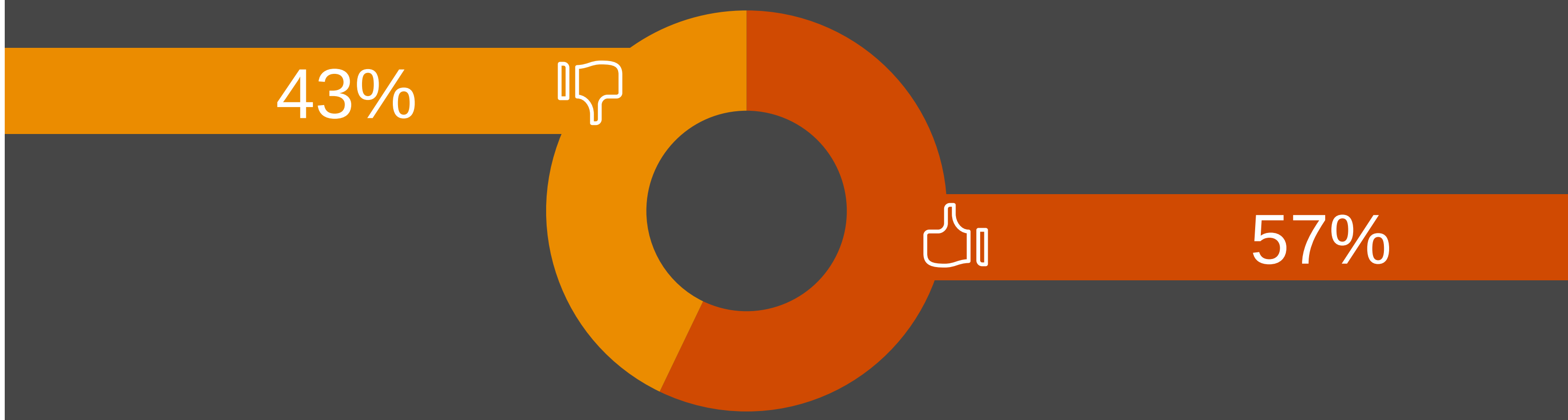
2.1

Liquidation preferences are also used by investors, especially in early phases, to offset high company values. Later on, slightly more than half of investors factor existing liquidation preferences into the company value.

How often have you negotiated more favourable liquidation preferences to offset high company values? (Percentage frequency)



Do you factor existing liquidation preferences from previous funding rounds into company values? (n=49)



Key results

Further topics – funding rounds and their contractual structure

Liquidation preferences are used by investors to offset high company values.

Why this is important

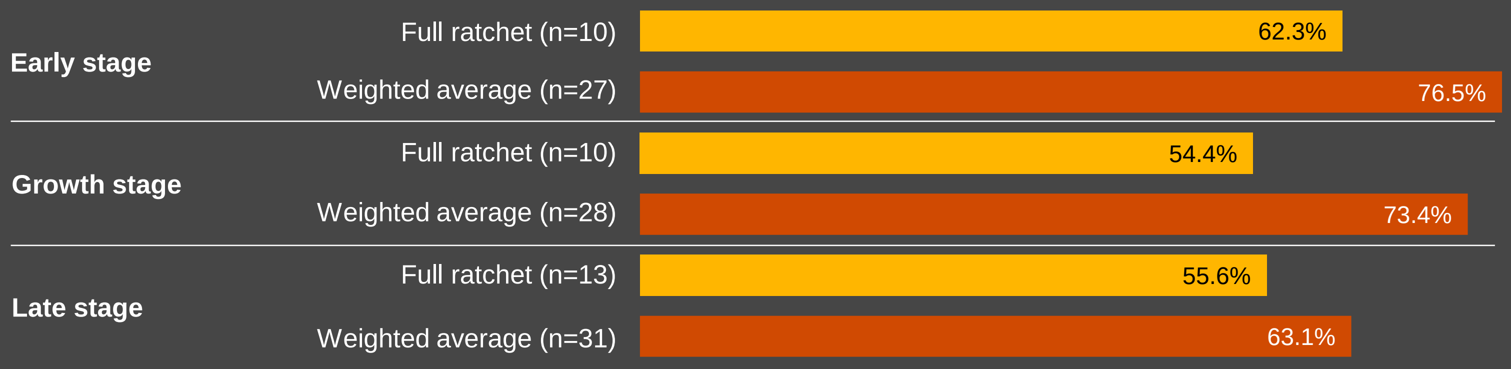
- Company values are often only determined based on the financing volume and shareholding within a funding round, and not in the context of the special rights agreed.
- Liquidation preferences, as other studies also confirm, may allow investors to accept a valuation they would have rejected without liquidation preferences or with weaker liquidation preferences.
- Use of waterfall analyses to determine the distribution of exit proceeds with liquidation preferences and other special cash flow rights creates a clear picture.

Further topics – funding rounds and their contractual structure

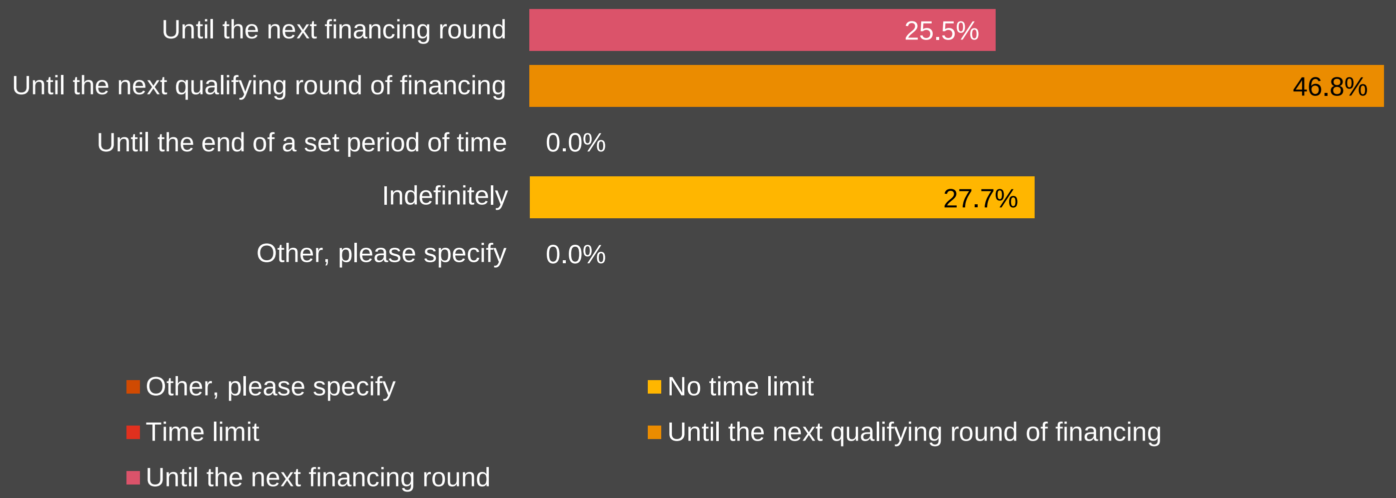
2.2

For almost three quarters of investors, anti-dilution rights apply only until the next round of financing. This is because new investors force old investors to waive their rights by making this a condition of their investment. Time limits are not used at all.

In what percentage of cases do you enforce full ratchet/weighted average anti-dilution clauses?



How long do anti-dilution rights usually apply for? (n=47) (Percentage frequency)

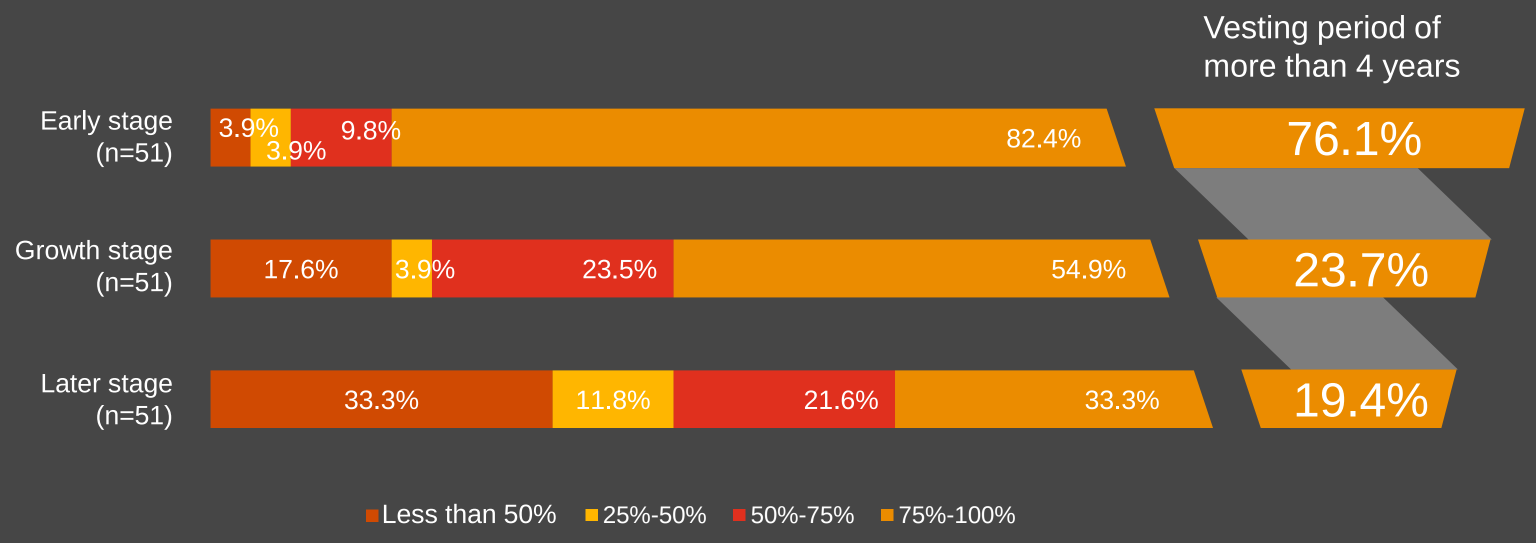


Further topics – funding rounds and their contractual structure

2.3

While in the early stage, vesting is agreed for founders in more than 80% of cases, this number drops to just a third in the late stage. The vesting period also decreases from the early stage to the late stage.

How often do you agree vesting clauses for founders?



The exact breakdown of the agreed terms can be found on p. 70.

Further topics – funding rounds and their contractual structure

2.4

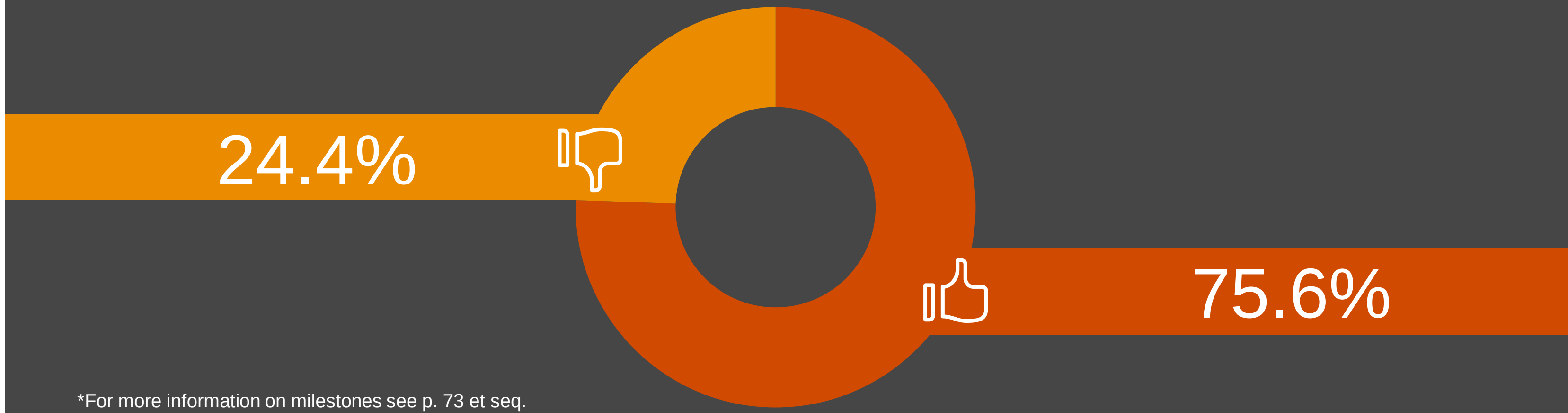
Milestones are mostly agreed for two or three tranches. Although two very measurable factors predominate – namely, sales and technical targets – the investors must still decide whether targets have been achieved.*

Do you use objective or subjective factors to determine milestones? (n=50) (Percentage frequency)

→ 20 x mentions of sales targets as objective milestones

→ 5 x mentions of technical development goals and product development

If objective: do you still require investor approval? (n=45) (Percentage frequency)



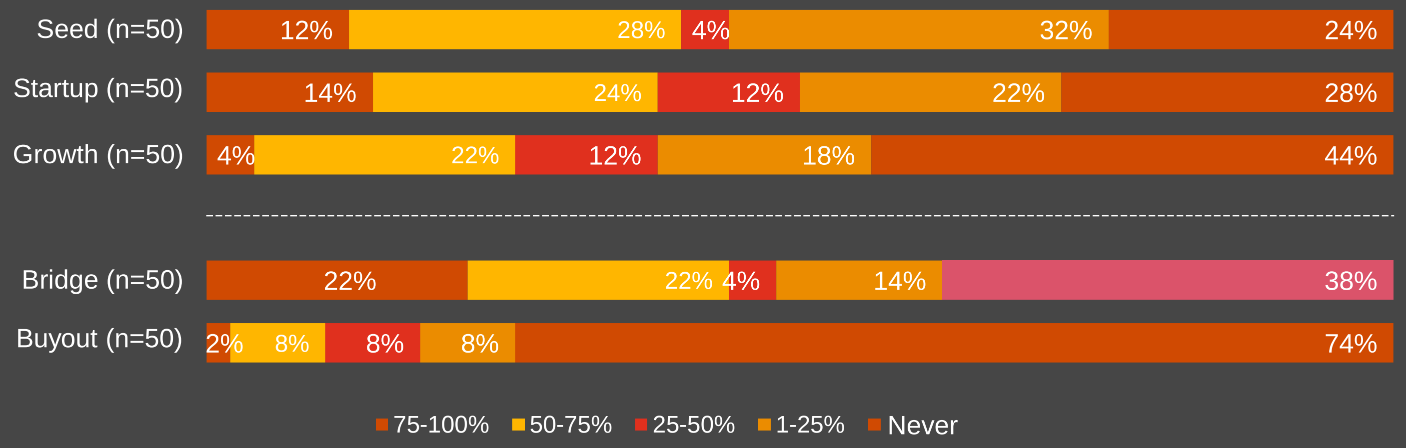
*For more information on milestones see p. 73 et seq.

Further topics – funding rounds and their contractual structure

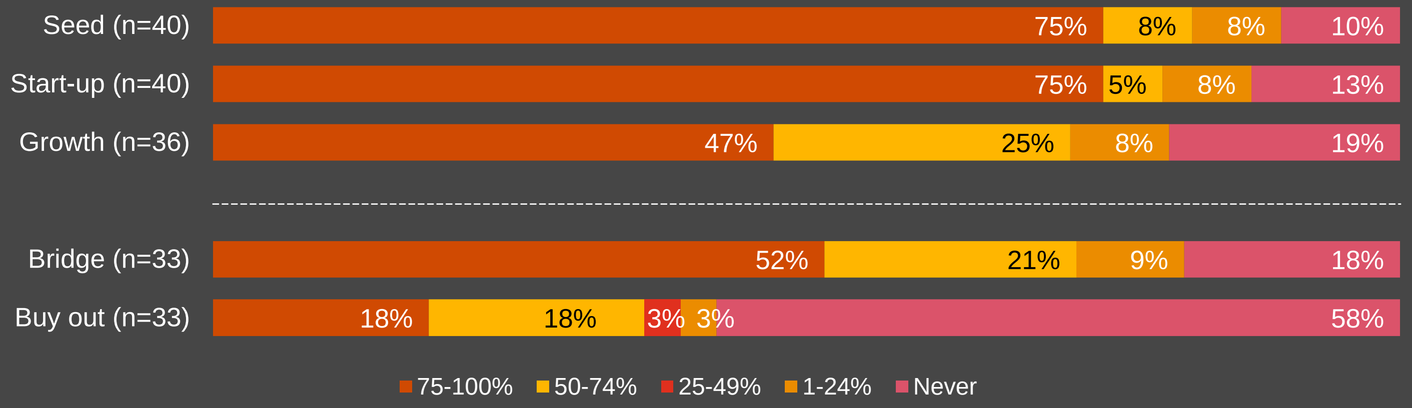
2.5

Convertible loans are rarely agreed in more than 50% of cases. Where they are agreed, discounts of 20% and individually agreed caps on the subsequent valuation predominate.

In which phases do you invest in companies via convertible loans?
(Percentage frequency)



What percentage of your convertible loans contain discounts, for conversion purposes, on the valuation of the following funding round?



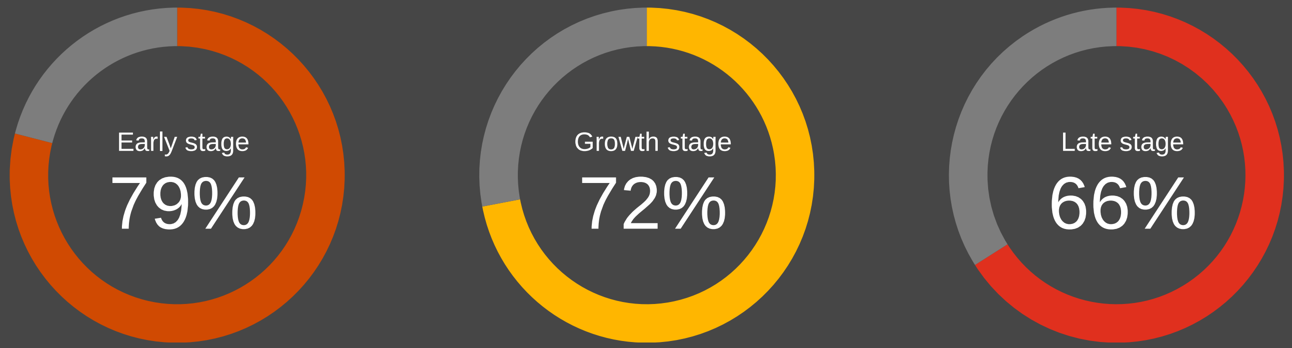
For further analyses of convertible loans, see p. 75 et seq.

Further topics – funding rounds and their contractual structure

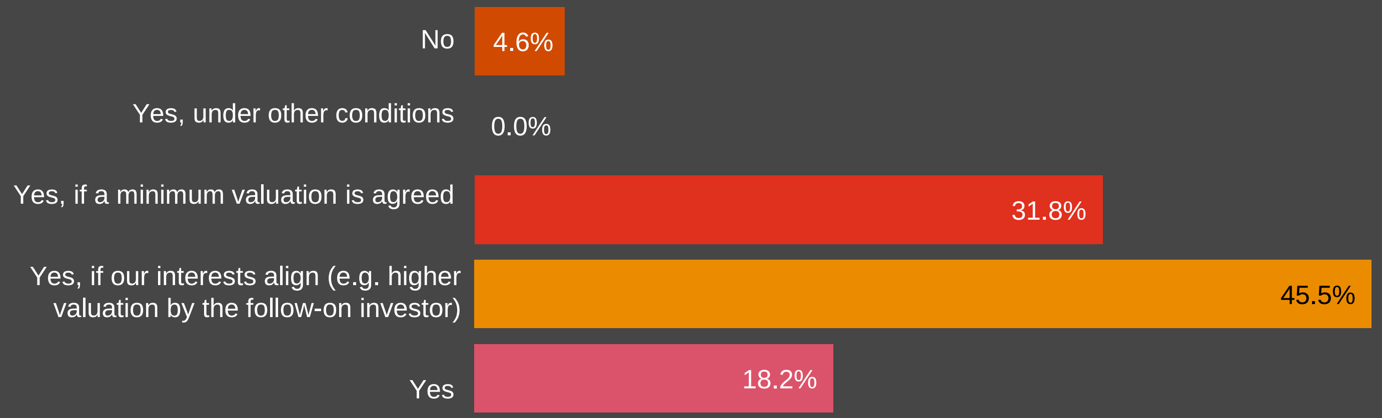
2.6

Drag-along rights are standard in the early stage segment, with a slight tendency to decrease over the lifetime of the portfolio company. Almost half of investors even accept drag-along rights from follow-on investors in subsequent rounds; just under a third, however, will only accept them if a minimum valuation is agreed.

For what percentage of your investments do you agree drag-along rights? (Mean value, n=48)



Do you accept drag-along rights against you from follow-on investors? (n=44) (Percentage frequency)

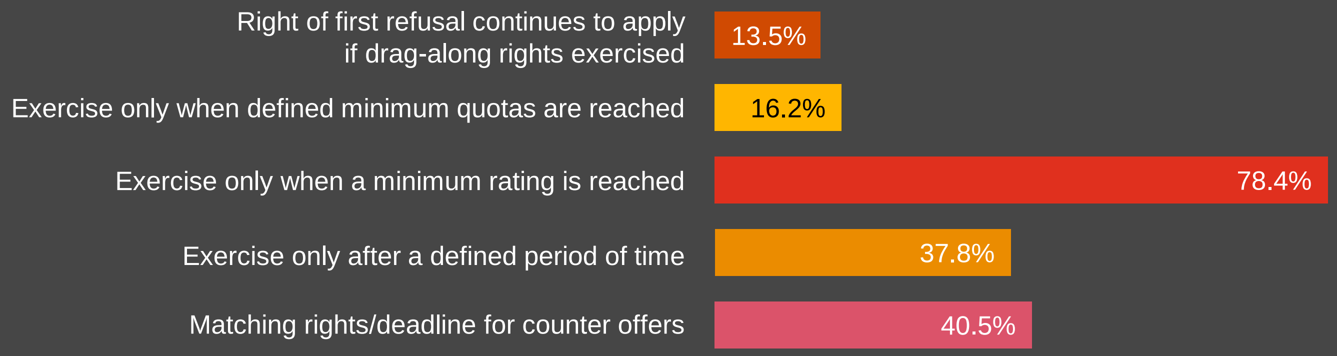


Further topics – funding rounds and their contractual structure

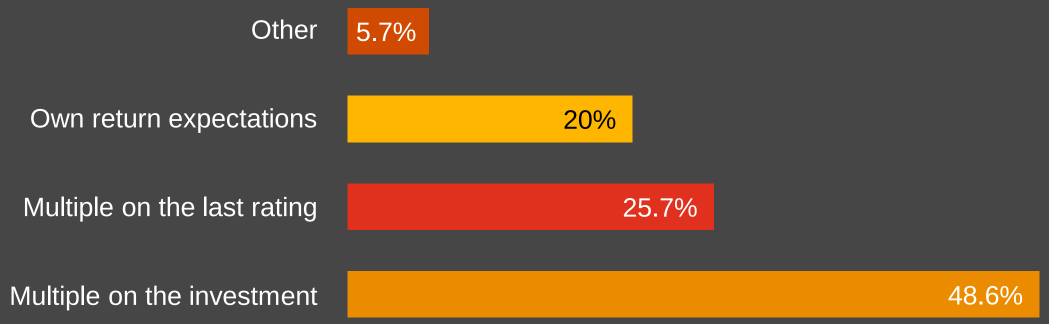
2.7

In most cases, a minimum valuation is required for drag-along rights, which is calculated from a certain multiple on the investment of the round in question. In the vast majority of cases, rights of first refusal do not apply if drag-along rights are agreed.

Which of these options do you agree to in drag-along clauses? (n=37) (Percentage frequency)



How do you calculate the minimum rating for drag-along clauses? (n=35) (Percentage frequency)

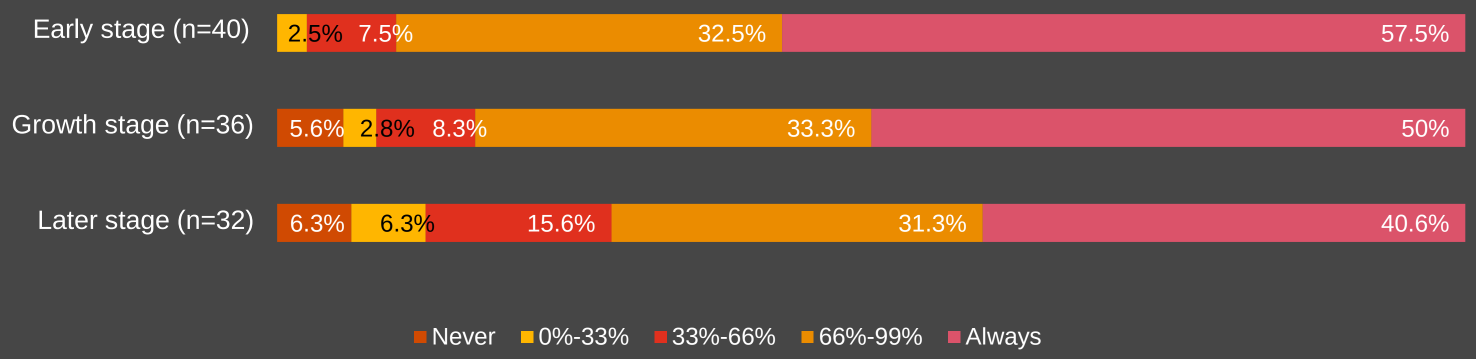


Further topics – funding rounds and their contractual structure

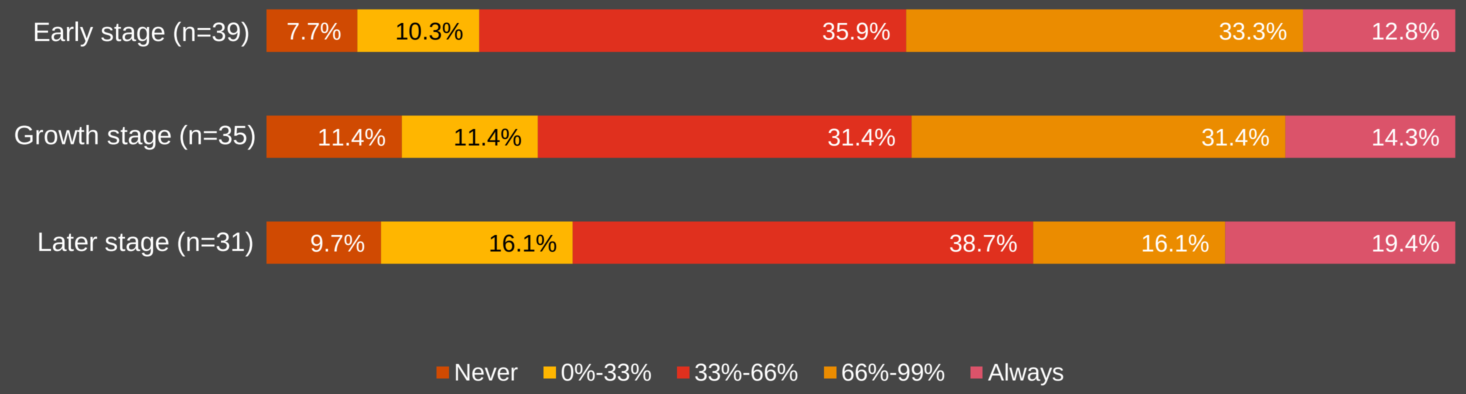
2.8

Tag-along rights are almost always agreed upon by investors. On the other hand, founders are only rarely granted these rights or are not granted them at all in up to 25% of cases.

For what percentage of your investments do you agree tag-along clauses?



In what percentage of your cases are founders also granted tag-along rights?

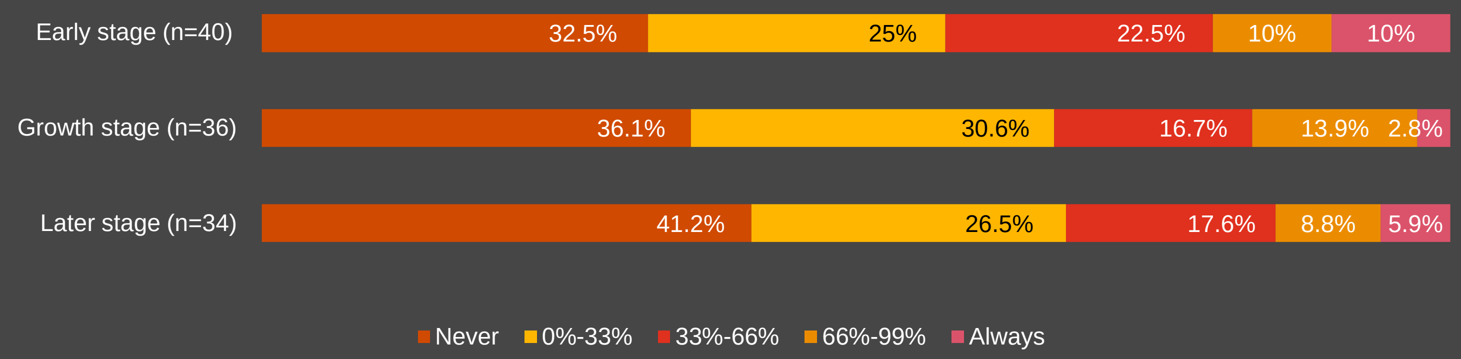


Further topics – funding rounds and their contractual structure

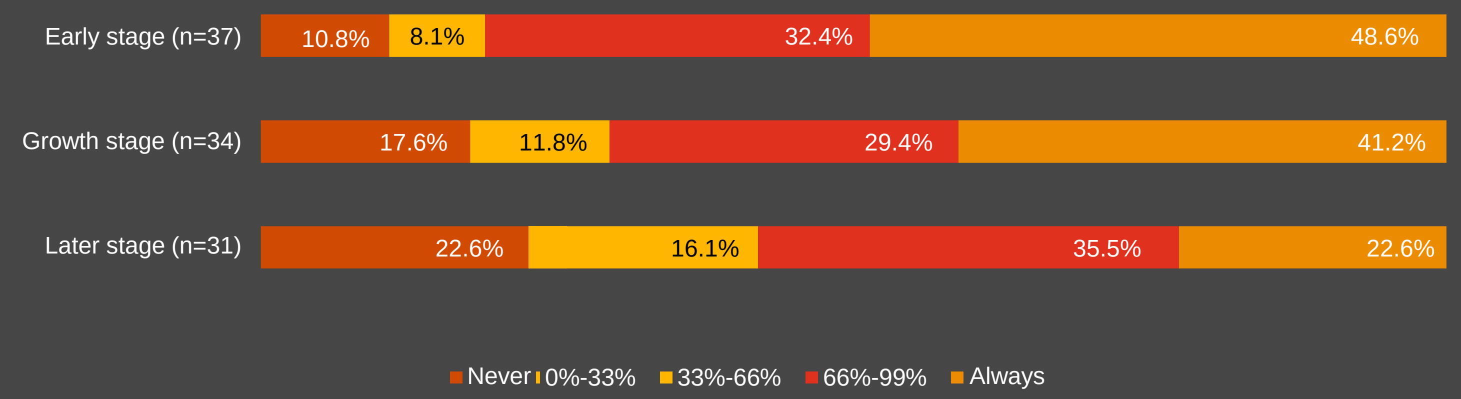
2.8

Redemption rights are relatively little-used instruments; a third of investors stated that they never agree these rights in the early stage, and a little over 40% do not do so in the late stage. The opposite is true of rights of first refusal: approximately 50% of the participants stated that they always embed rights of first refusal into the contracts in the early stage. Relevance of these rights decreases in later phases, so only a quarter of investors insist on them in the late stage. This could be explained by the fact that the sale of individual shares becomes increasingly unlikely in later phases; instead, a joint exit is more likely.

For what percentage of your investments do you agree redemption rights?



For what percentage of your investments do you agree rights of first refusal?



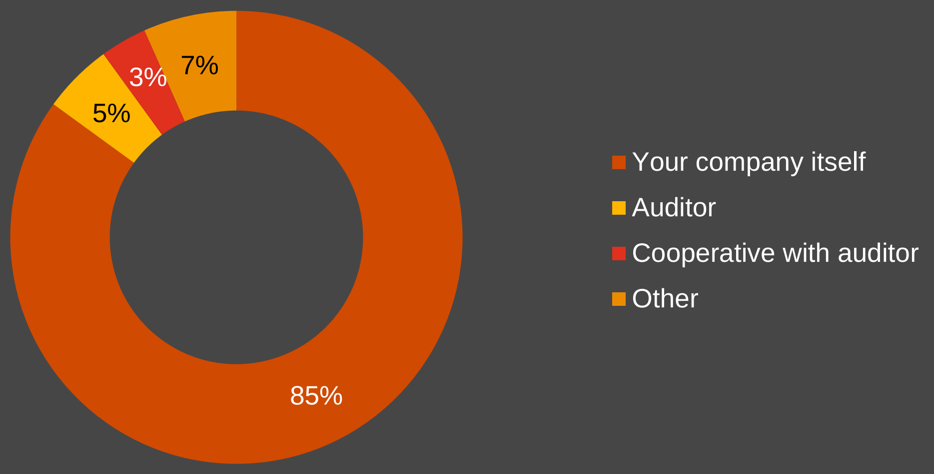
C 3.0 Further topics

Further topics – valuation of startups

3.1

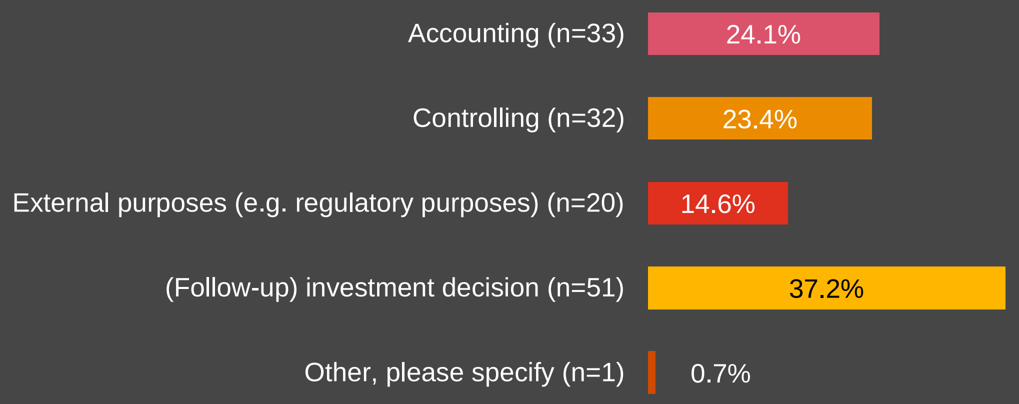
Valuations of portfolio companies are mostly carried out in-house for (follow-up) investment decisions.

Who undertakes (follow-up) valuations of portfolio companies? (n=60)



Why are (follow-up) valuations of portfolio companies carried out?

Percentage frequency (number of participants: 61)

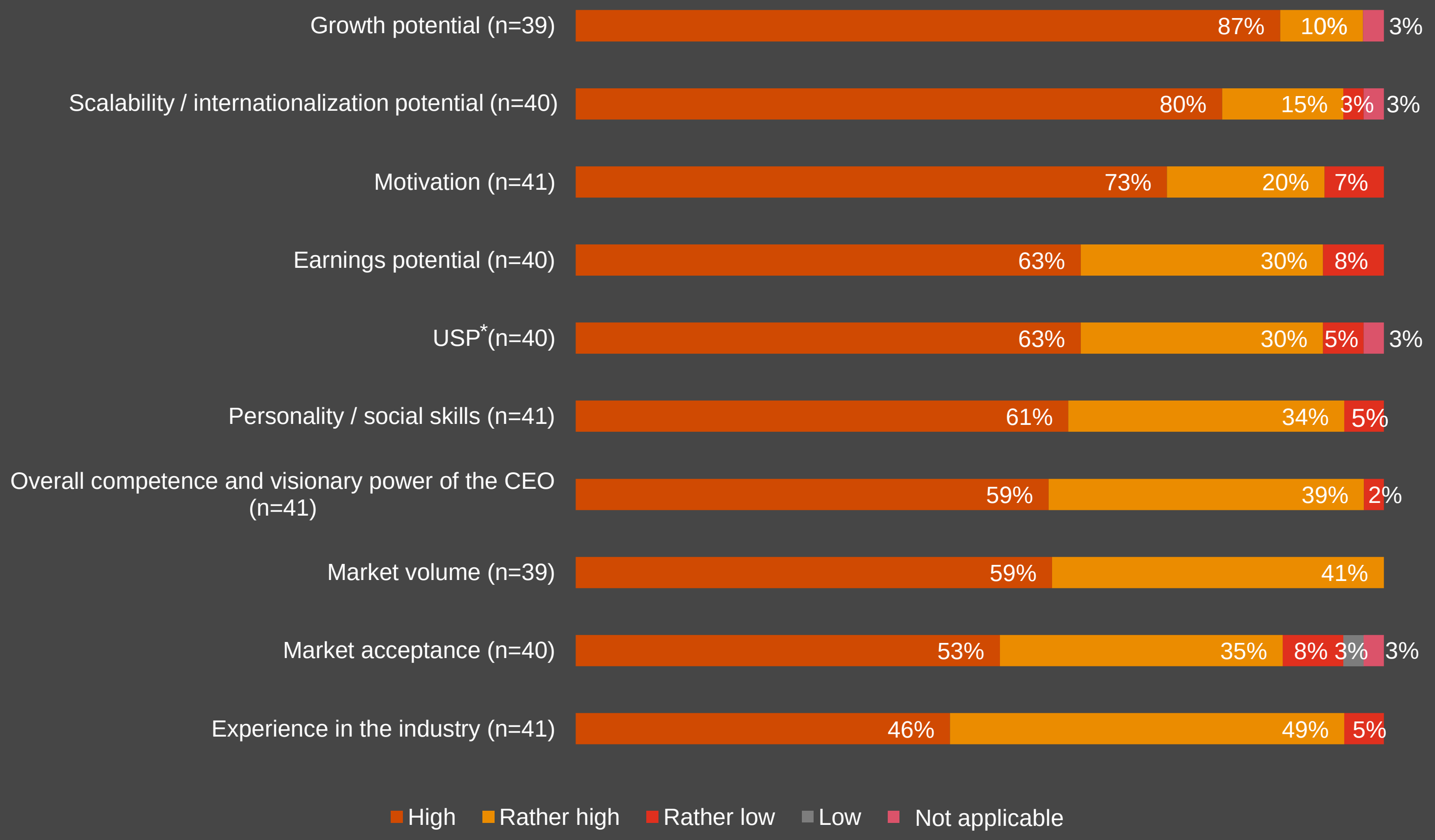


Further topics – valuation of startups

3.2

When evaluating startups, market-specific criteria in particular play a major role, along with the unique selling point (USP) and personal elements.*

Ranking of the most important qualitative evaluation criteria



*For more information on the qualitative evaluation criteria see p.79 et seqq.

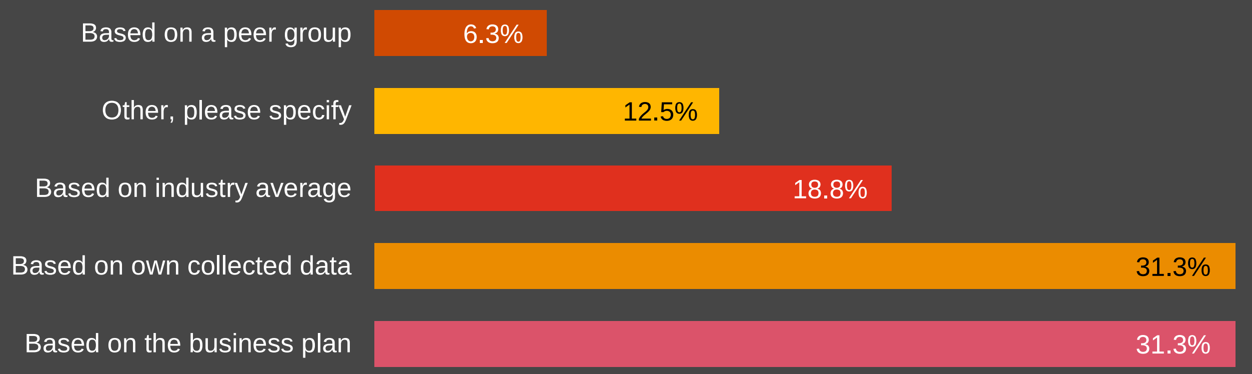
Further topics – valuation of startups

3.3

Most funders determine the growth rate either based on the business plan or their own data. Peer groups or industry averages are used less frequently.

How many phases do you assume in the DCF model? (n=15) (Percentage frequency)

How do you determine the growth rate in the detailed planning phase? (n=16)



For more information on the DCF model, see p. 83.

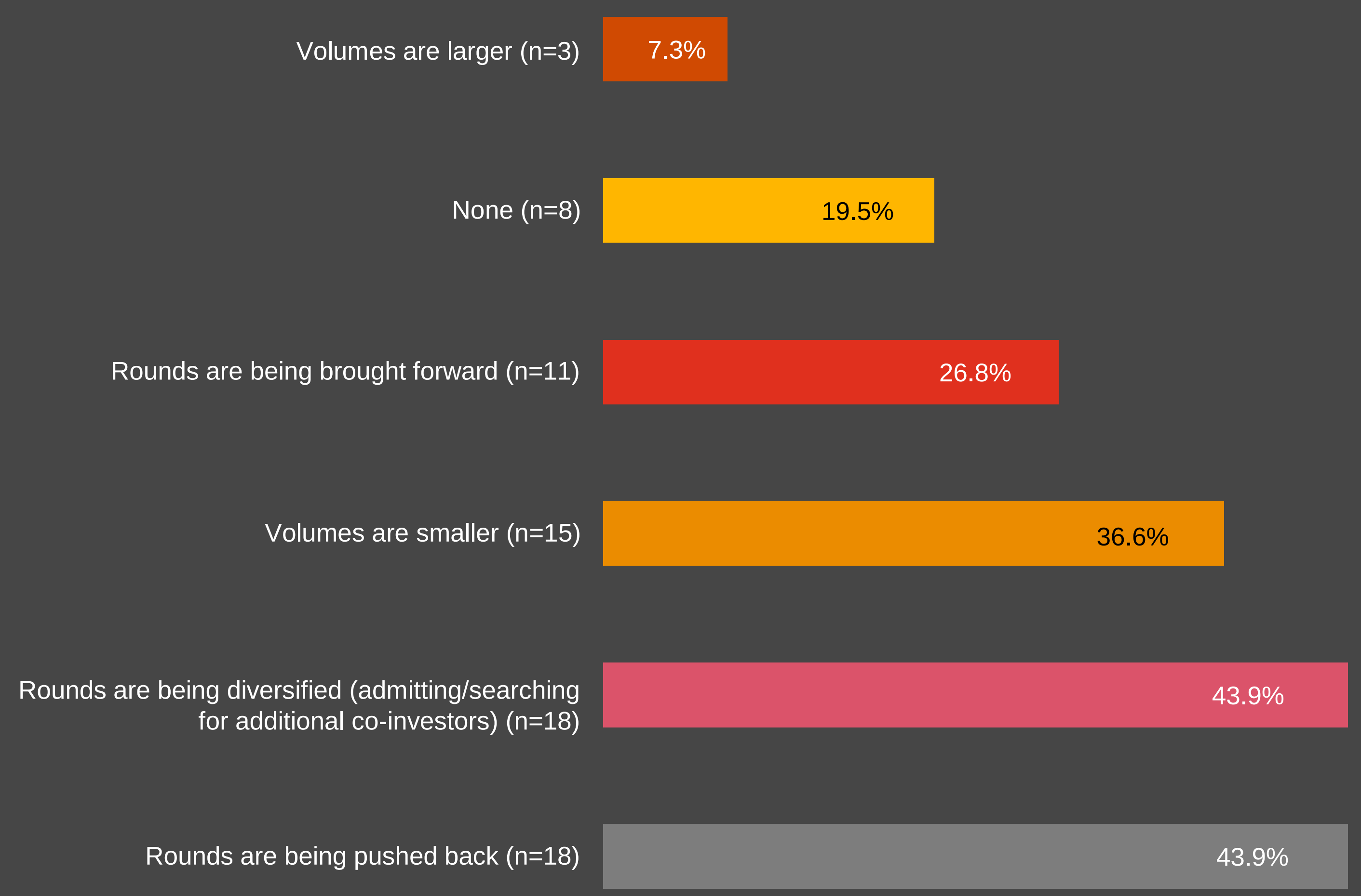
4.0 Further topics

Further topics – special questions on COVID-19

4.1

The COVID-19 crisis has created a tendency for rounds to be postponed or more diversified. There is also a trend towards smaller rounds.

What impact has the COVID-19 crisis had on closing further funding rounds in your existing portfolio? (n=41) (Percentage frequency)

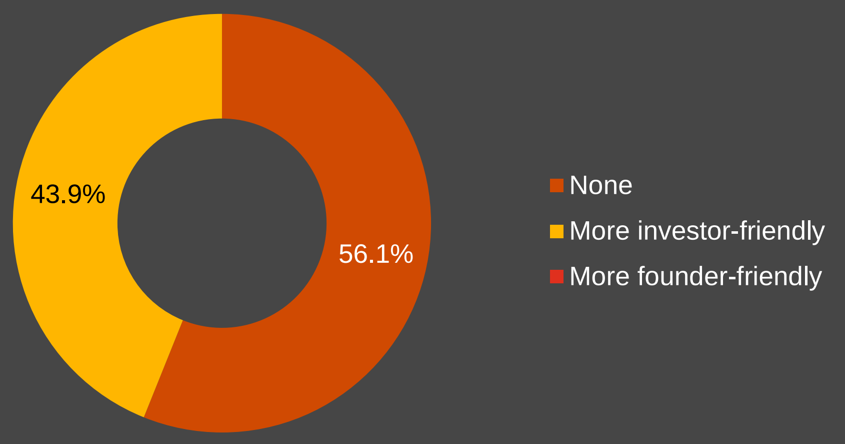


Further topics – special questions on COVID-19

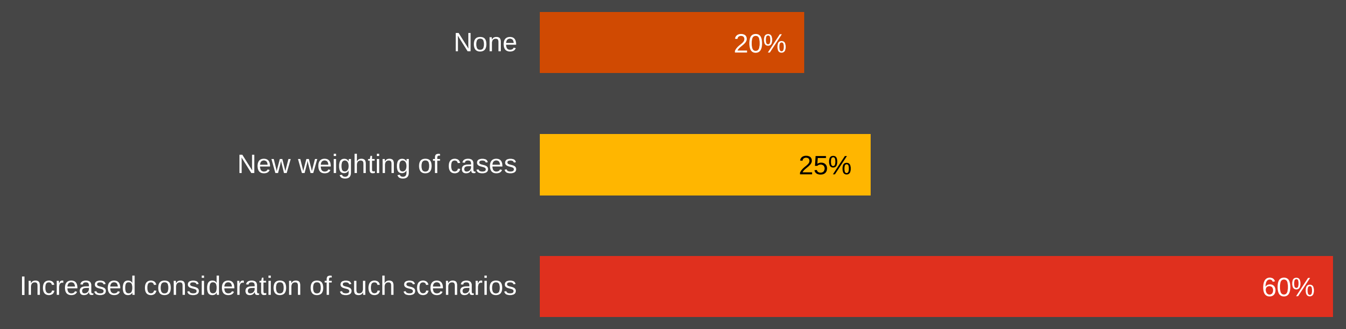
4.2

Accordingly, more investor-friendly liquidation preferences are being chosen in 44% of cases. Special scenarios are calculated for valuation.

What changes in liquidation preferences have occurred due to the COVID-19 crisis? (n=41)



What impact has the COVID-19 crisis had on calculating scenarios? (Adjustment of best, worst, normal cases) (n=40) (Percentage frequency)



Key results

Further topics – special questions on COVID-19

In the majority of cases, valuations or terms have been changed between signing and closing. 92% of investors want to enforce agreed anti-dilution rights at the expense of the founders in the event of a down round due to the COVID-19 crisis.

Why this is important

- There may be charges in the round of financing that has just taken place and in the subsequent round due to COVID-19.
- Anti-dilution rights in down rounds can greatly reduce founder shareholdings beyond normal dilution, which can negatively affect founder motivation.
- Startups needed and continue to need government support during the pandemic to strengthen the startup ecosystem in the crisis: implementing the Future Fund quickly may help.

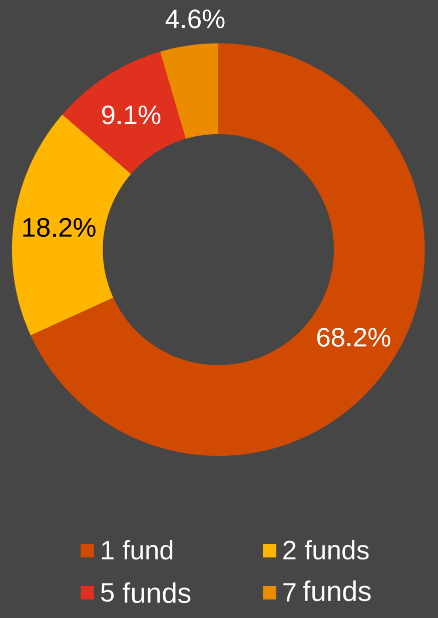
D

Appendix: further questions

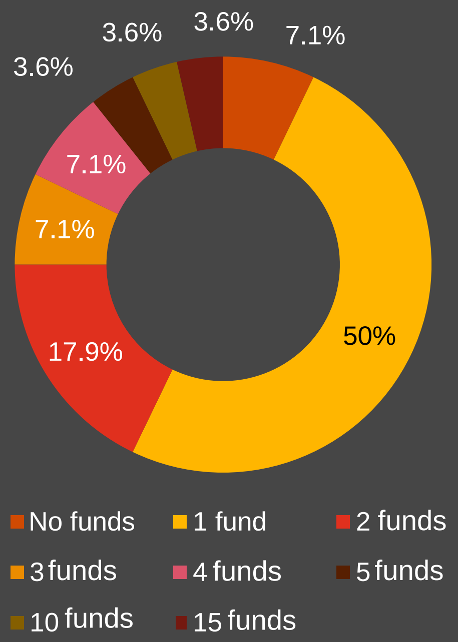
Appendix – data on the participants

1.1 For the most part, participants hold only one fund per size category. For fund sizes above €200 million, distribution is more heterogeneous and there is a tendency for the participants to hold more funds. In general, however, it can be said that participants mostly manage multiple funds of different sizes.

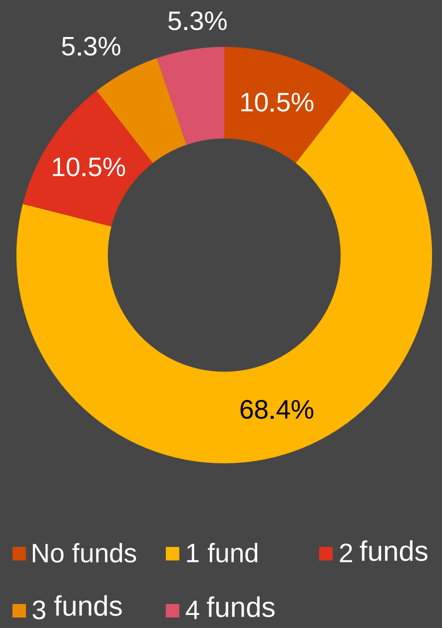
Less than €30m (n=22)



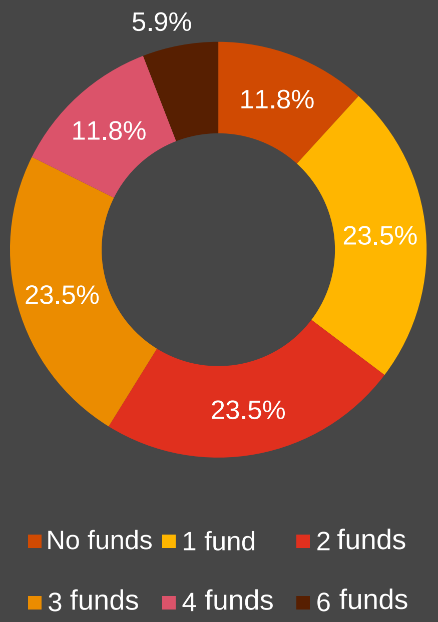
€30m–€100m (n=28)



€100m–€200m (n=19)



More than €200m (n=17)

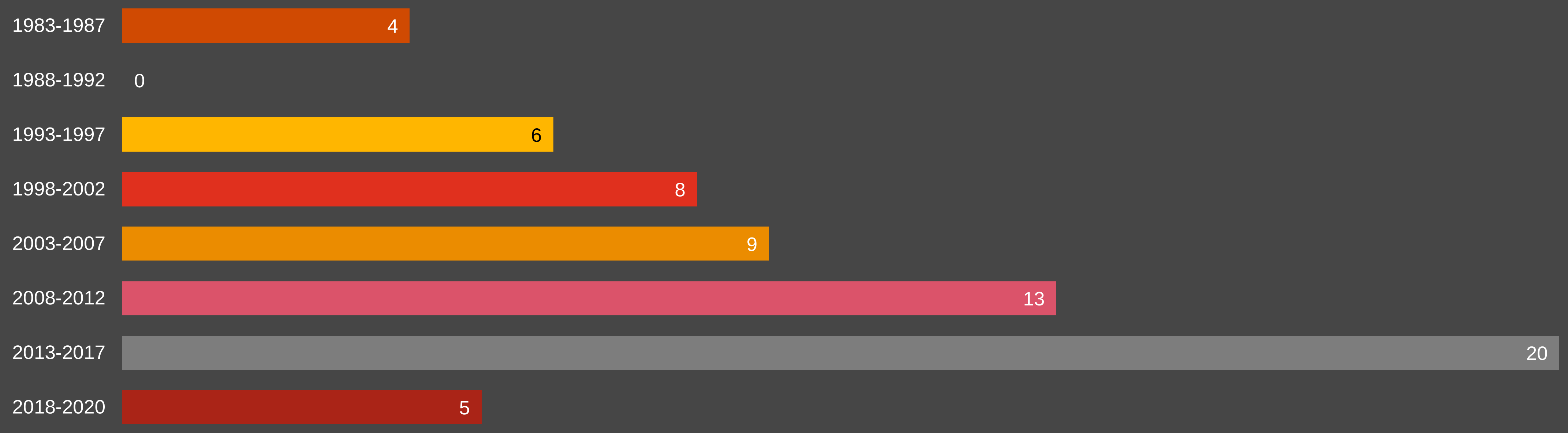


Appendix – data on the participants

1.2

Most of the participants' companies were founded between 2013 and 2017.

When was your venture capital company founded?
(n=65)

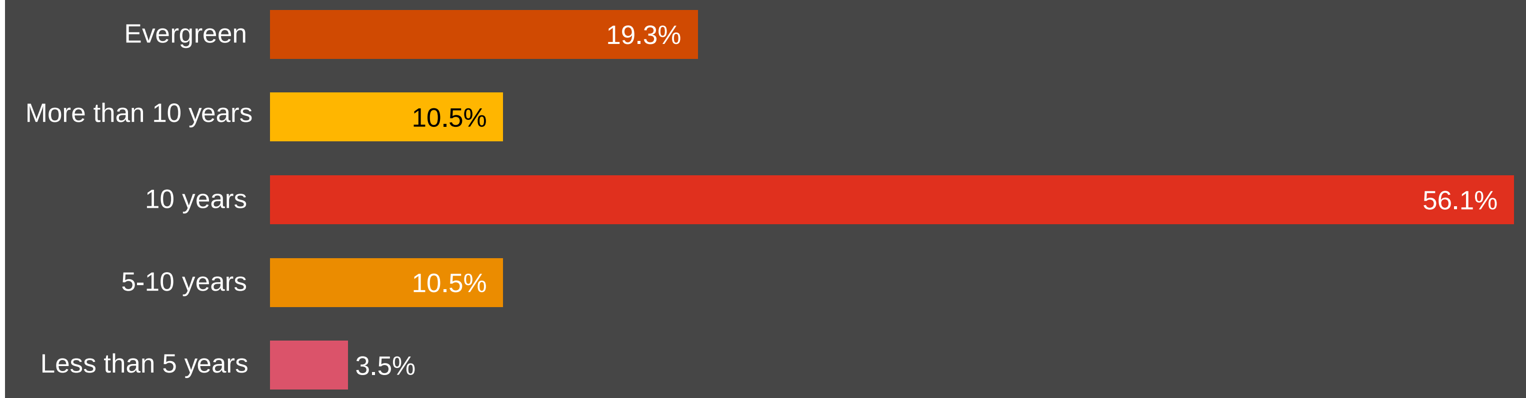


Appendix – data on the participants

1.3

The average running time is ten years with renewal options, with an investment period of five to eight years. Almost a fifth of the participants manage evergreen funds.

What is the average duration of your funds? (n=57) (Percentage frequency)



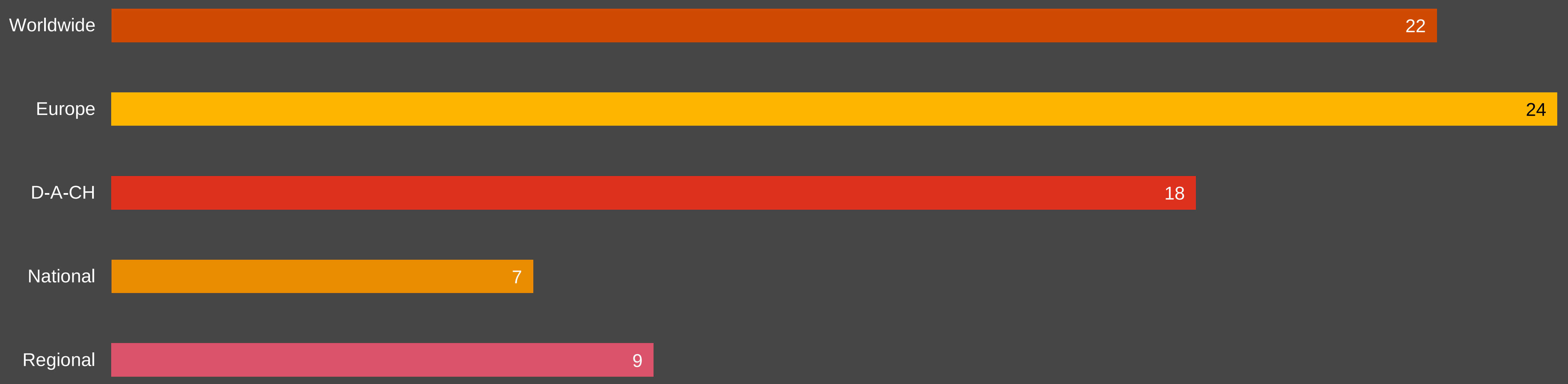
Are there options for extending the duration of your funds? (n=57)

Appendix – data on the participants

1.4

The majority of the participants' funds focus on European and global investments.

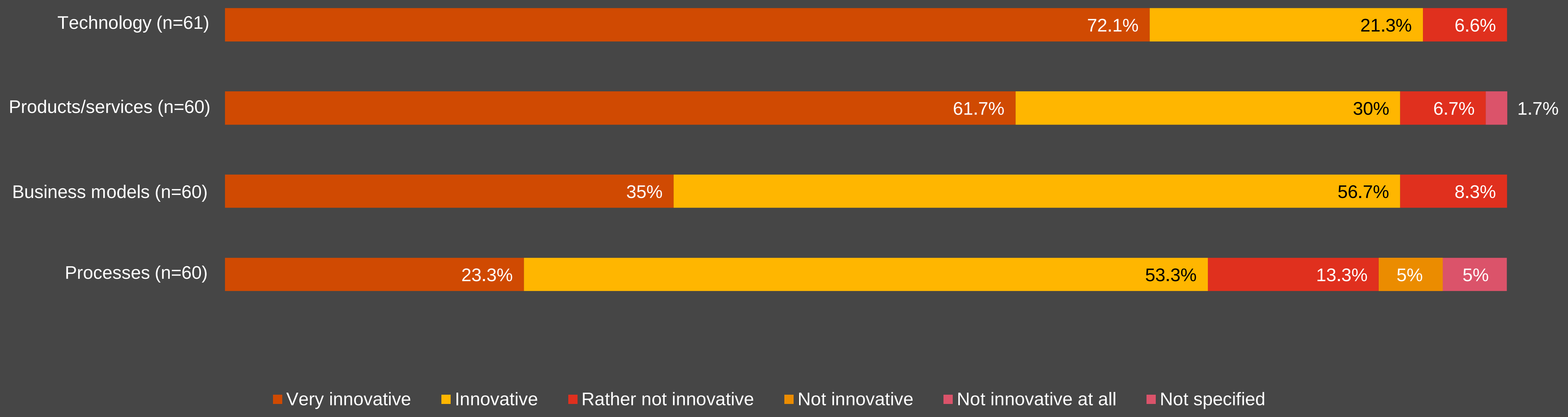
Which regions do your funds invest in?
(n=62) (Number of funds)



Appendix – data on the participants

1.5 The participants' portfolio companies are mostly very innovative in terms of technology and the products/services offered. Business models and processes contribute less to their innovative strength.

How innovative are your portfolio companies in terms of ... ?
(Percentage frequency)

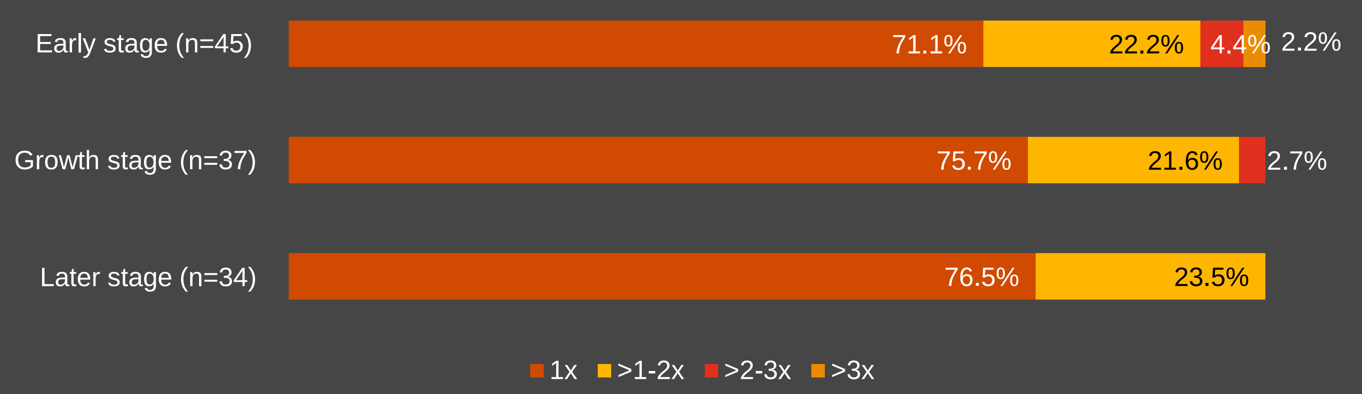


Appendix – data on liquidation preferences

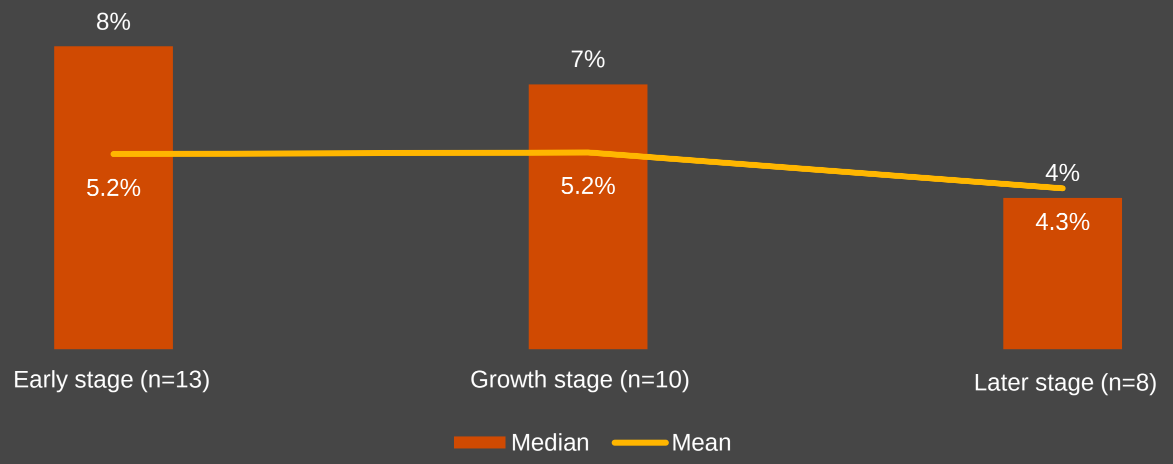
2.1

Most of the participants do not agree a multiplier on the investment in the liquidation preferences.

What multiplier do you usually use for liquidation preferences? (Percentage frequency)



What interest rate do you usually apply to liquidation preferences?



Appendix – data on liquidation preferences

2.2

Caps on participation are fairly rare, being agreed in only one third of cases. Dividend preferences are also not agreed very frequently.

For what percentage of your liquidation preferences do you agree on a cap on participation? (Mean value, percentage)

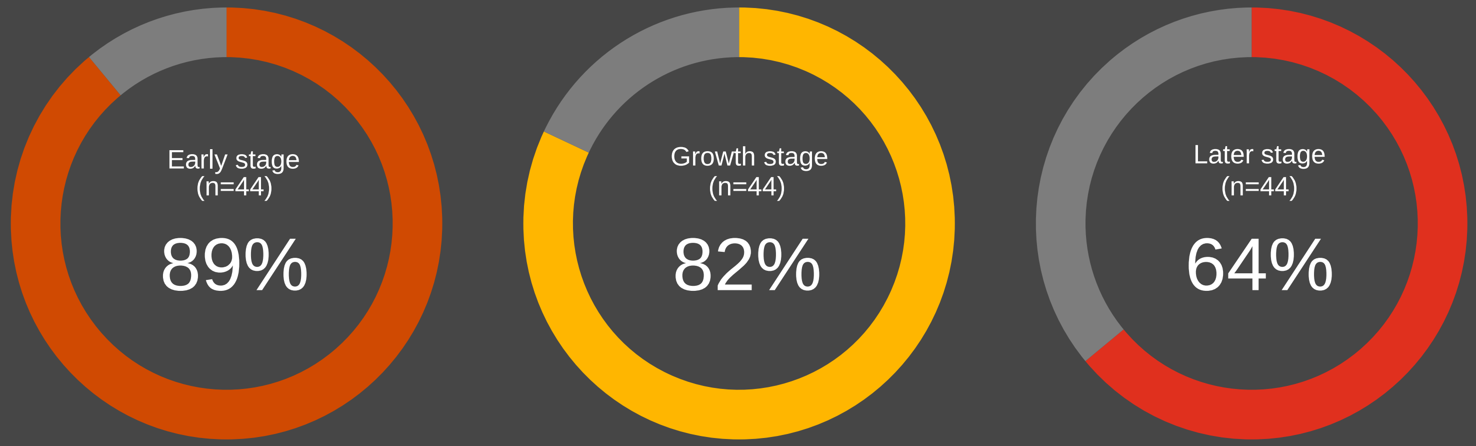
How often do you agree dividend preferences? (Mean value, percentage)

Appendix – data on liquidation preferences

2.3

In the early stage, liquidation preferences are almost always agreed according to the last-in, first-out (LIFO) principle. This decreases somewhat in the late stage in particular.

In what percentage of cases are your agreed liquidation preferences senior to previous preferences (i.e. the liquidation preference agreed most recently has priority)?

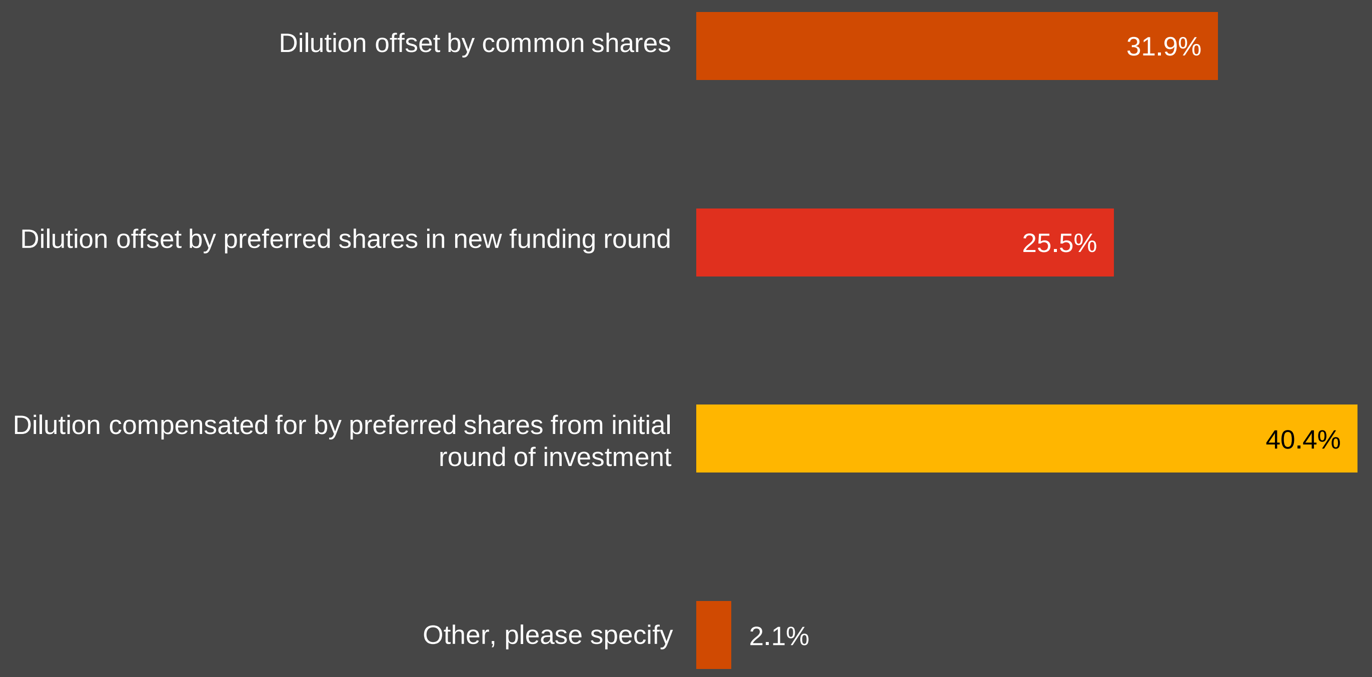


Appendix – data on anti-dilution

3.1

If anti-dilution clauses are enforced, investors receive compensatory shares in capital increases to counteract their dilution. There is a tendency among participants to issue the share class that was also issued in the initial investment round. However, no clear market standard can be identified.

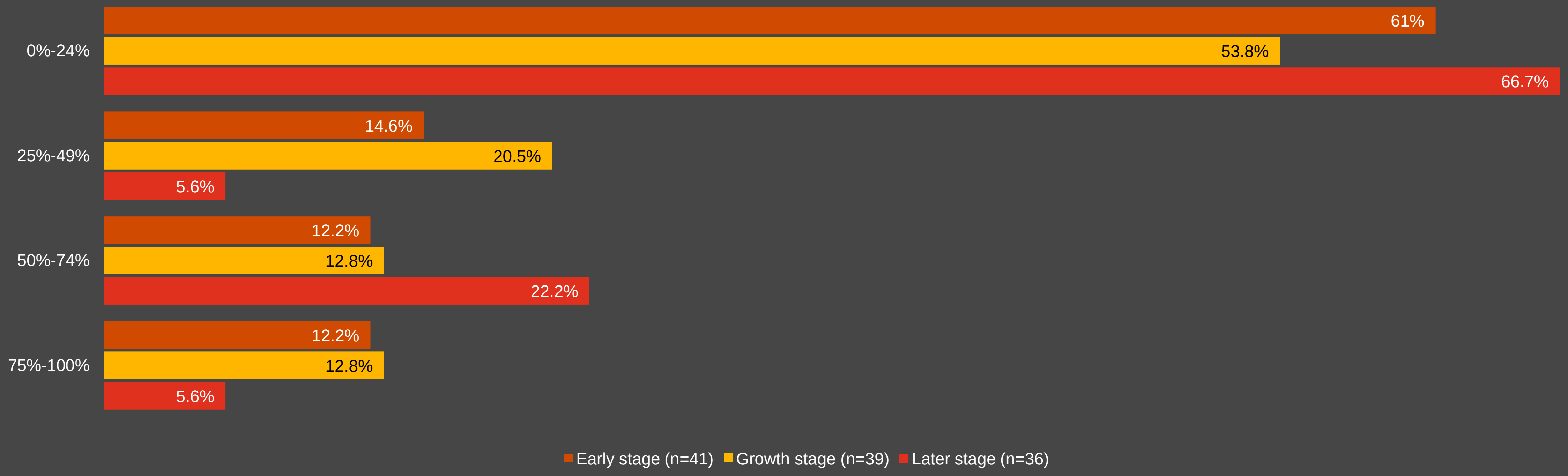
Which share class is usually issued for anti-dilution when increasing capital? (n=47)
(Percentage frequency)



Appendix – pay-to-play data

4.1 Pay-to-play clauses are rarely agreed.

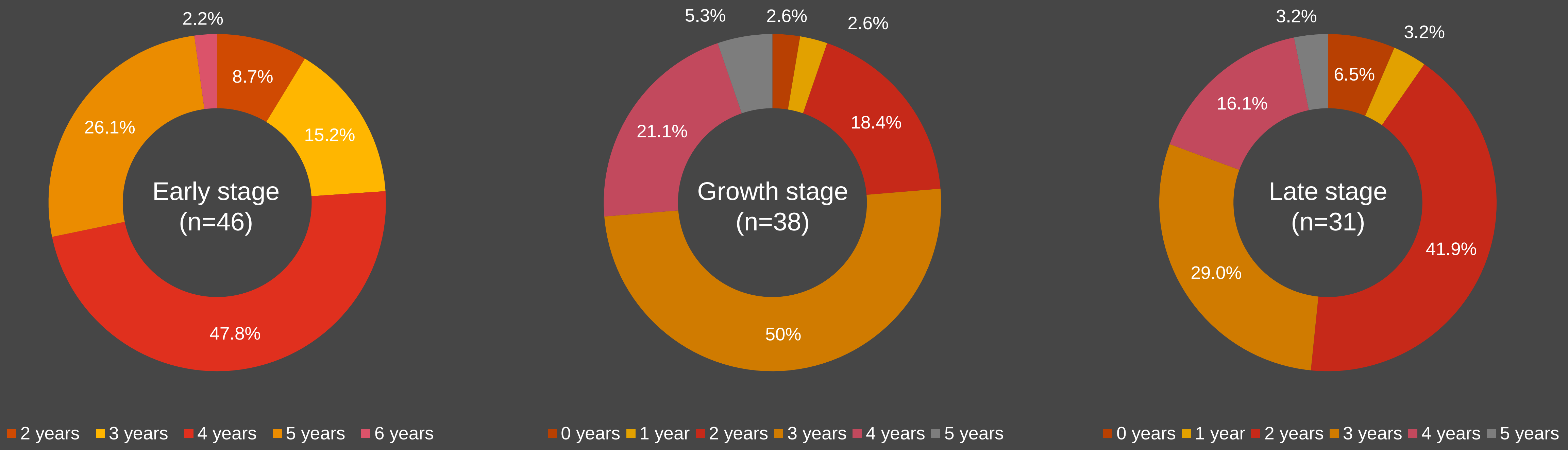
How often do you agree pay-to-play clauses? (Percentage frequency)



Appendix – vesting data

5.1 Vesting periods of three to five years are common for early-stage startups. In the growth stage, these periods decrease (as would be expected) to between two and four years, and they are usually only two or three years in the late stage.

For what period do you conclude vesting agreements? (Please give the average number of years)

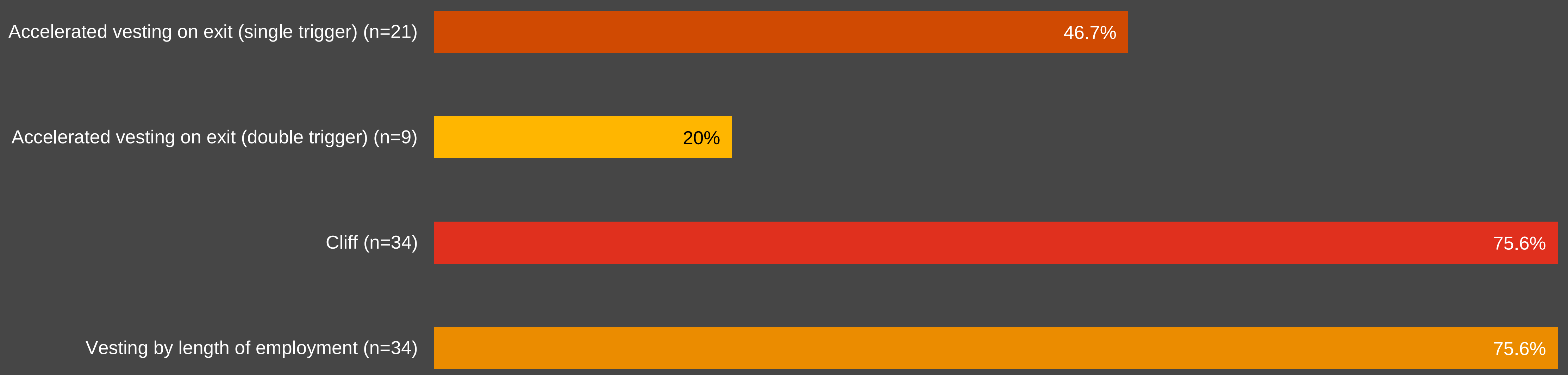


Appendix – vesting data

5.2

20% of the participants use double-trigger acceleration of vesting, while 46.67% use single-trigger acceleration. Cliffs and linking vesting to length of employment are popular options, used by 75.56% of respondents.

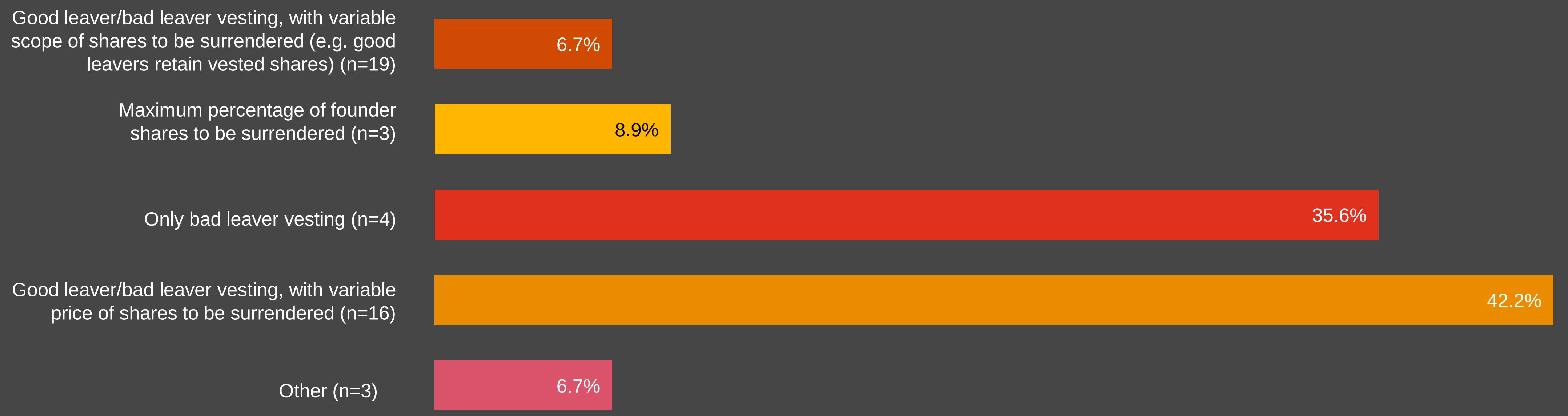
Which options do you use for founder vesting? (n=45) (Percentage frequency)



Appendix – vesting data

5.3 As a rule, individual good leaver/bad leaver arrangements are made.

What forms of vesting do you agree with regard to the scope and price of shares to be surrendered by founders leaving the company? (n=45) (Percentage frequency)

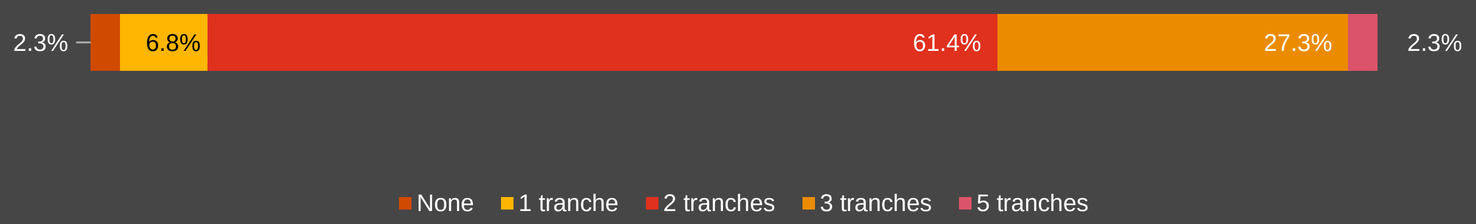


Appendix – data on milestones

6.1

In most cases, participants agree on two tranches when using milestones. Both valuation and investment milestones are used.

How many tranches do you normally agree on when using milestones? (n=44)



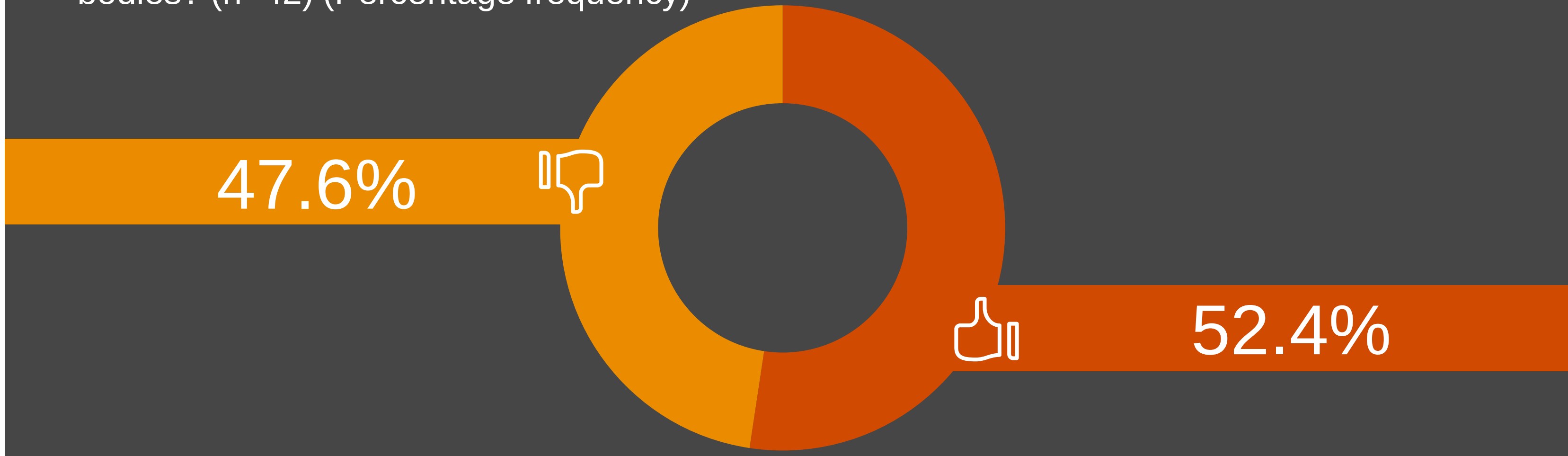
What type of milestones do you use? (n=44) (Percentage frequency)

Appendix – data on milestones

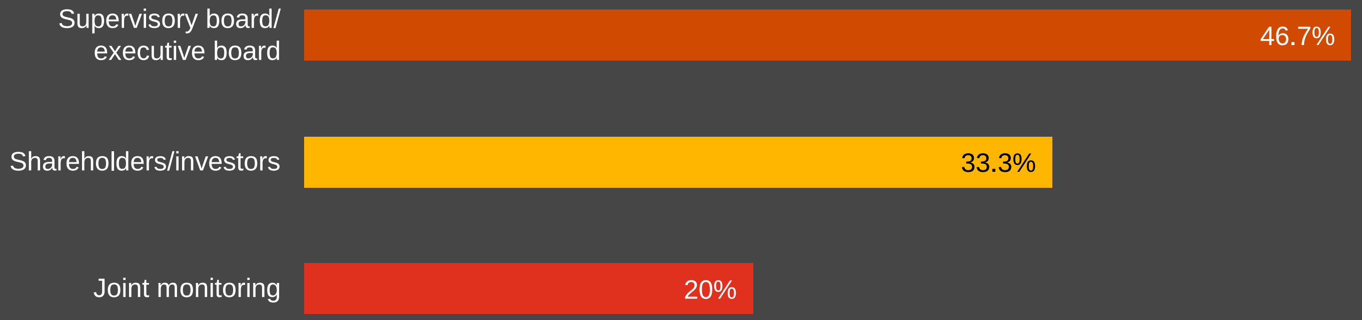
6.2

Many non-neutral bodies monitor the achievement of milestones, whether objective or subjective milestones. The following were named as subjective milestones: personnel development, recruitment of key personnel, team development, technical roadmap.

If objective: do you ensure that achievement of milestones can be ascertained by neutral bodies? (n=42) (Percentage frequency)



If subjective: who checks whether milestones have been achieved? (n=15) (Percentage frequency)

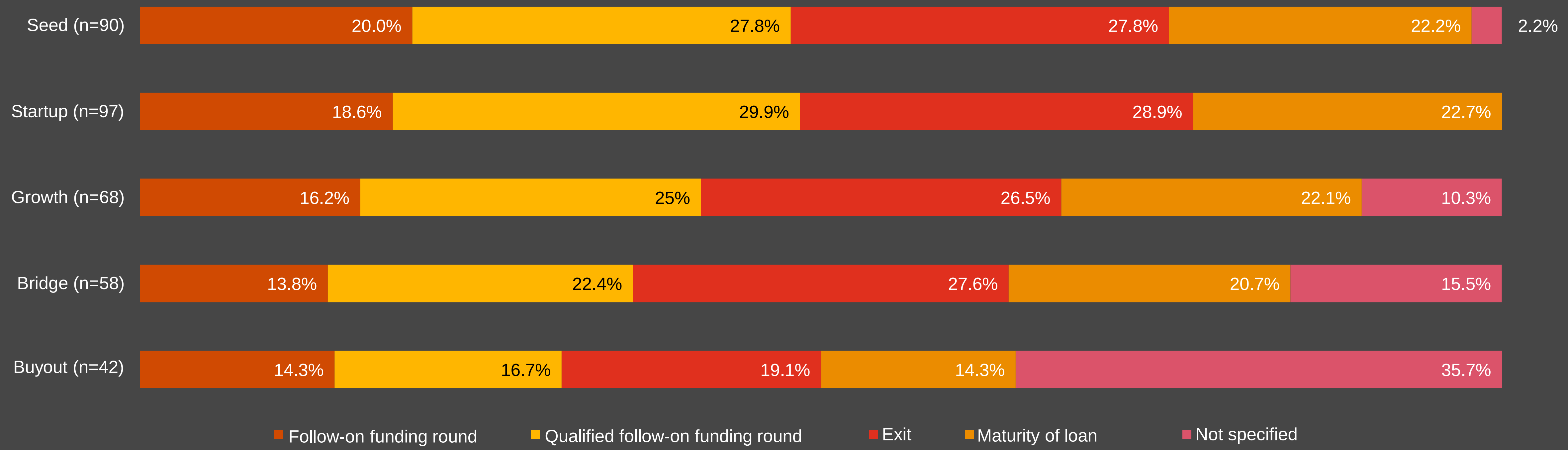


Appendix – convertible loan data

7.1

A qualified follow-on funding round is the event most commonly agreed upon for exercising conversion rights.

Which events for exercising conversion rights do you mainly agree upon? (Percentage frequency)



Appendix – convertible loan data

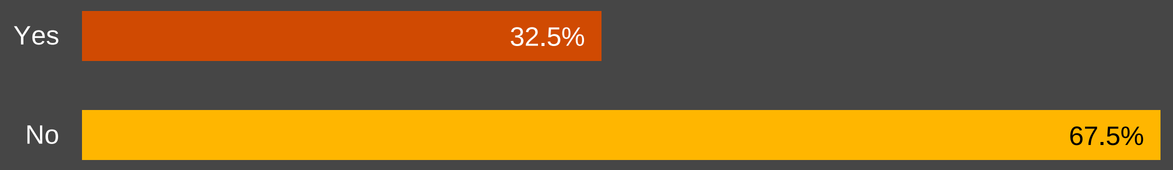
7.2

Slightly more than half of the respondents do not consider notarisation of a convertible loan necessary.

Do you expect notarisation of convertible loans? (n=42) (Percentage frequency)

Do you accept conversion obligations (instead of conversion rights on the part of the lender)? (n=41) (Percentage frequency)

Do you combine open-ended investments with convertible loans? (See also HTGF standard model) (n=40) (Percentage frequency)

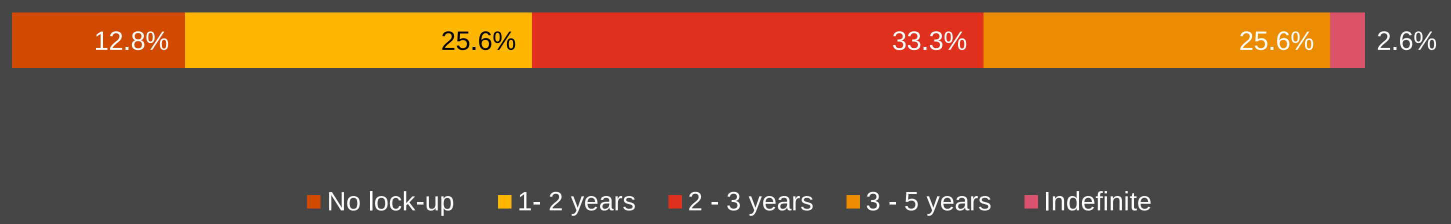


Appendix – data on founder lock-up

8.1

Founder lock-ups are very common, but their durations vary. More than half of the participants agree to terms of more than two years.

Do you expect lock-ups (bans on divestment) from founders and if so, what duration do you expect them to have? (n=39) (Percentage frequency)



Does the tag-along right of founders take precedence over a lock-up? (n=35) (Percentage frequency)

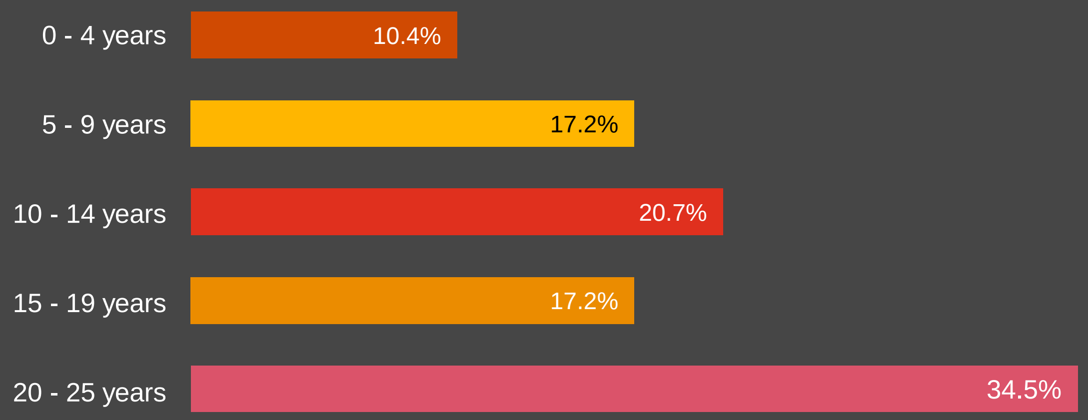
Appendix – company valuation data

9.1

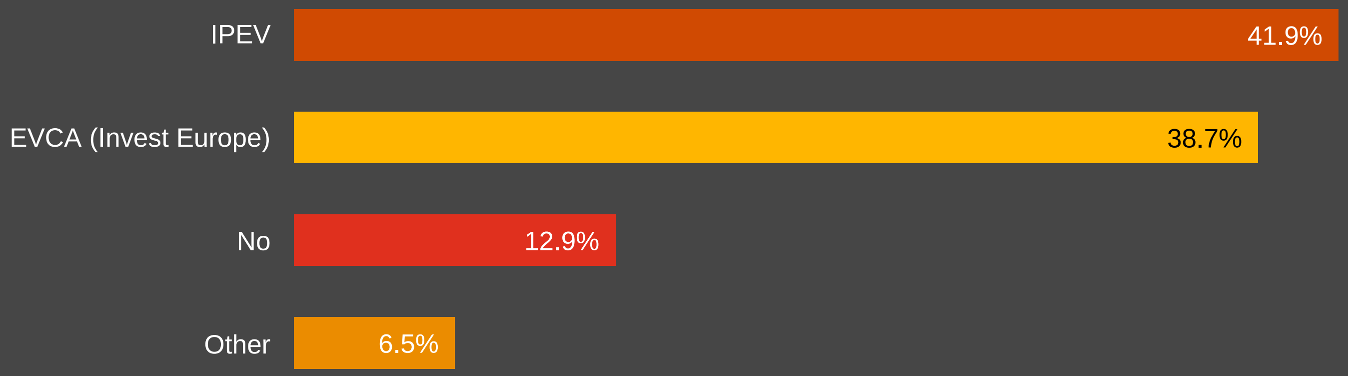
Overall, levels of experience are very high. 72% of the respondents have more than 10 years' experience in evaluating startups. 34% have more than 20 years' experience.

Most of them also follow the IPEV and EVCA valuation guidelines.

How many years of experience do you have in evaluating startups? (n=29) (Percentage frequency)



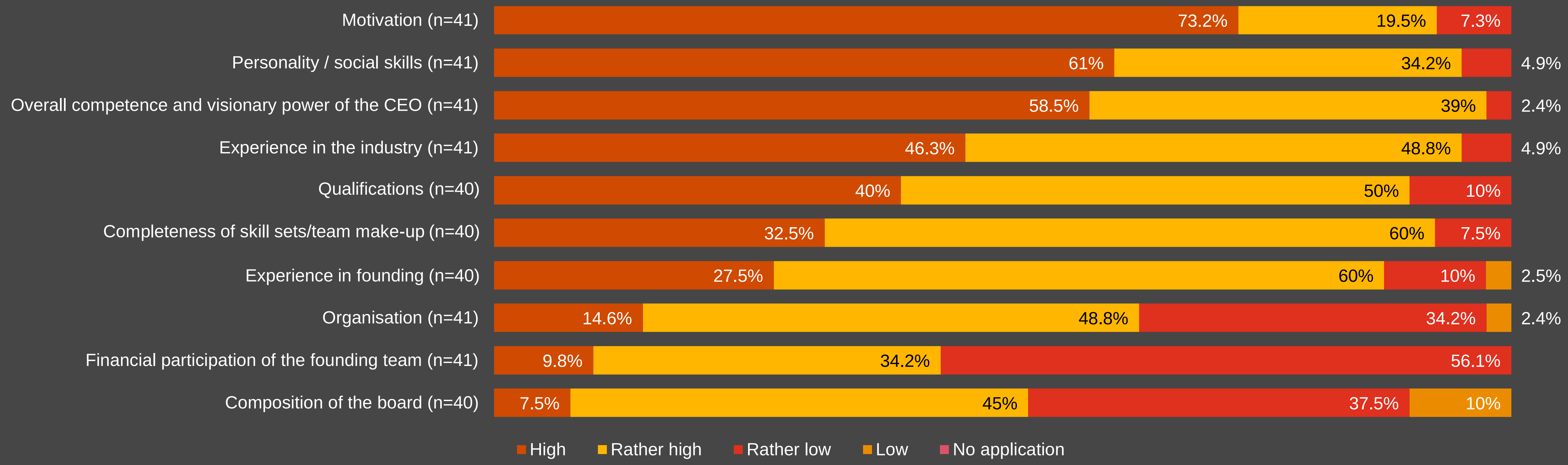
Do you follow any of these guidelines for valuation? (n=32) (Percentage frequency)



Appendix – company valuation data

9.2 The founders' motivation and personalities are important criteria for evaluation.

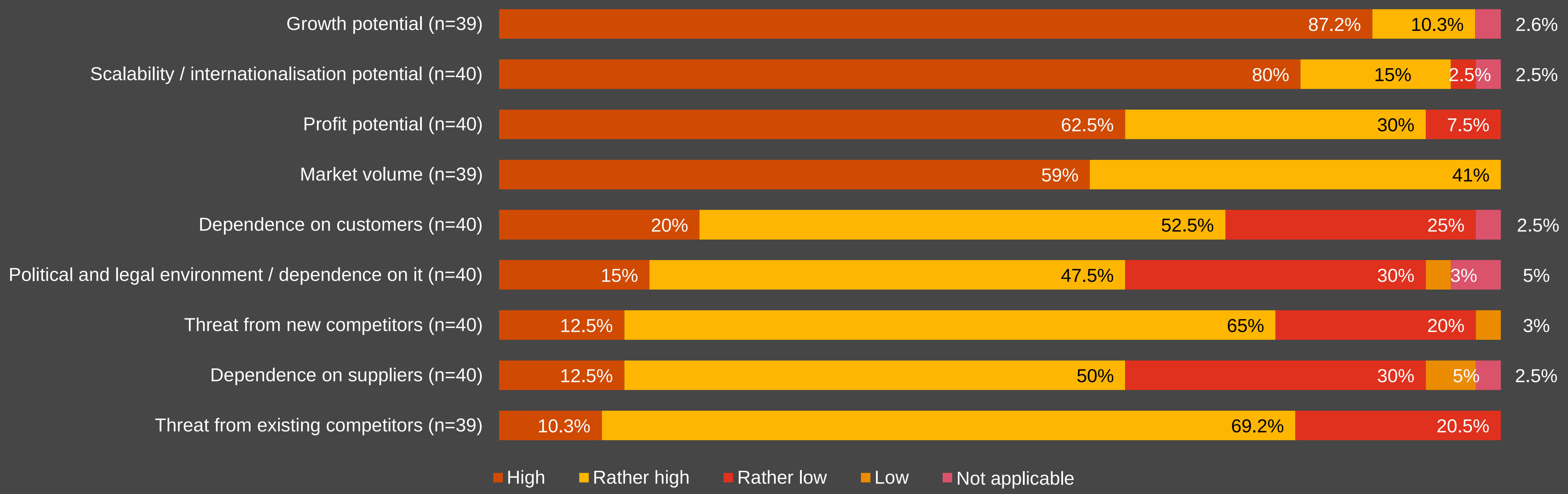
How important are the following categories for valuation of a portfolio company?



Appendix – company valuation data

9.3 Growth potential, scalability/internationalization potential, earnings potential and market volume are also important evaluation criteria.

How important are the following categories for valuation of a portfolio company? (Percentage frequency)

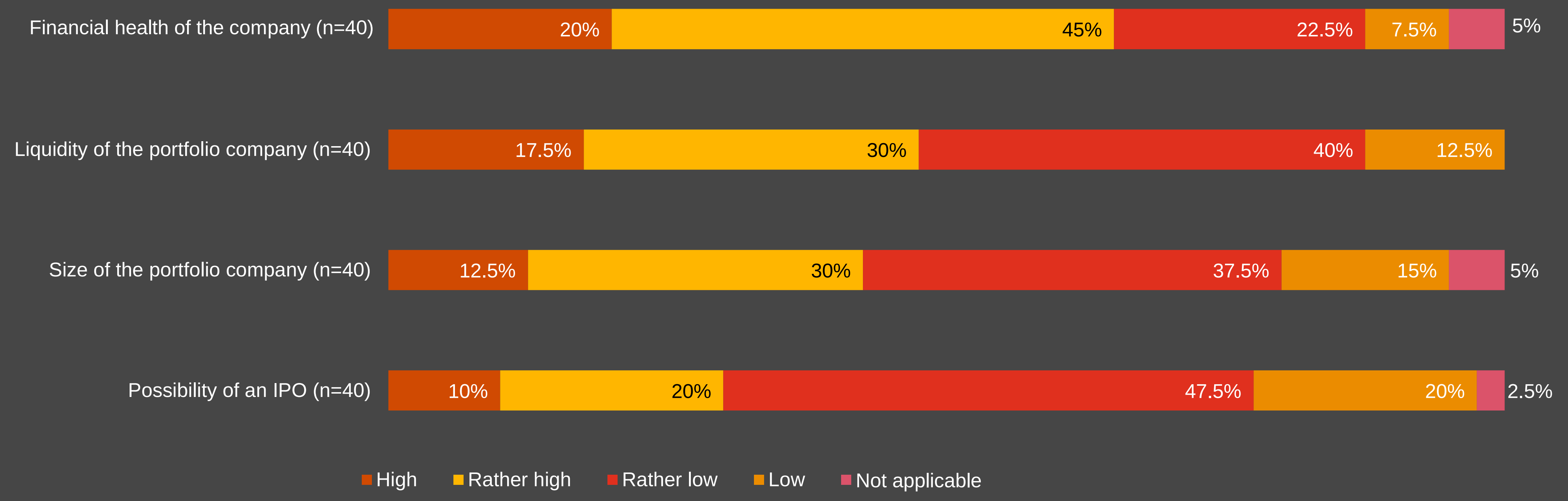


Appendix – company valuation data

9.4

Financial health and liquidity are also important assessment criteria.

How important are the following categories for valuation of a portfolio company?

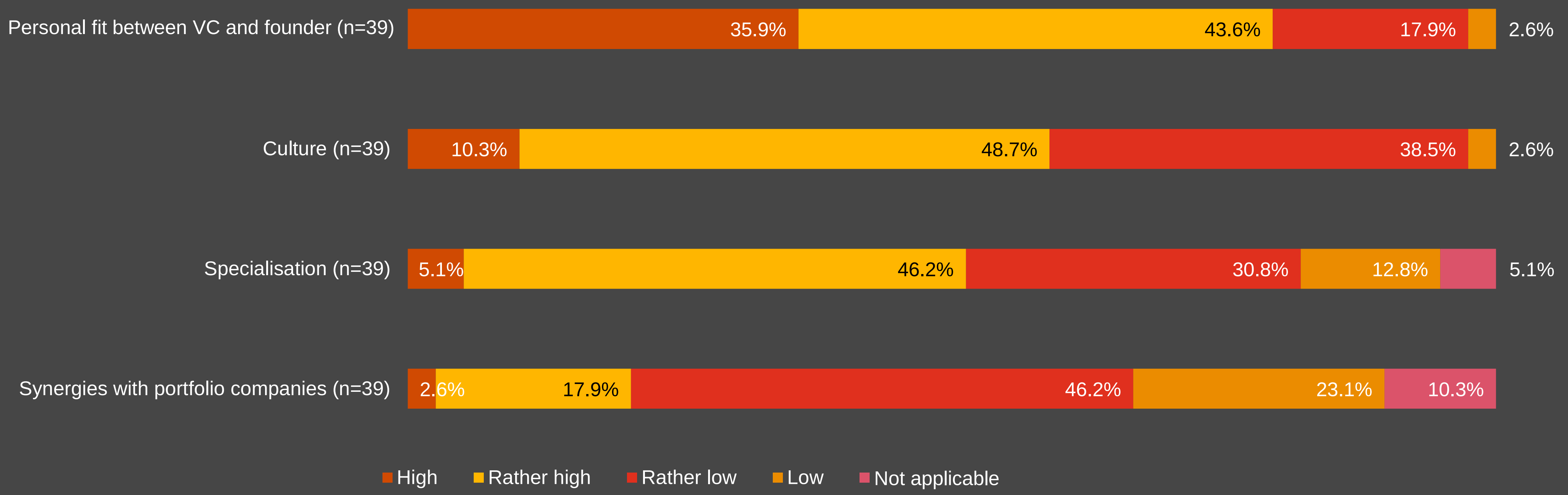


Appendix – company valuation data

9.5

The personal fit between the VCs and the founder also plays an important role.

How important are the following categories for valuation of a portfolio company?

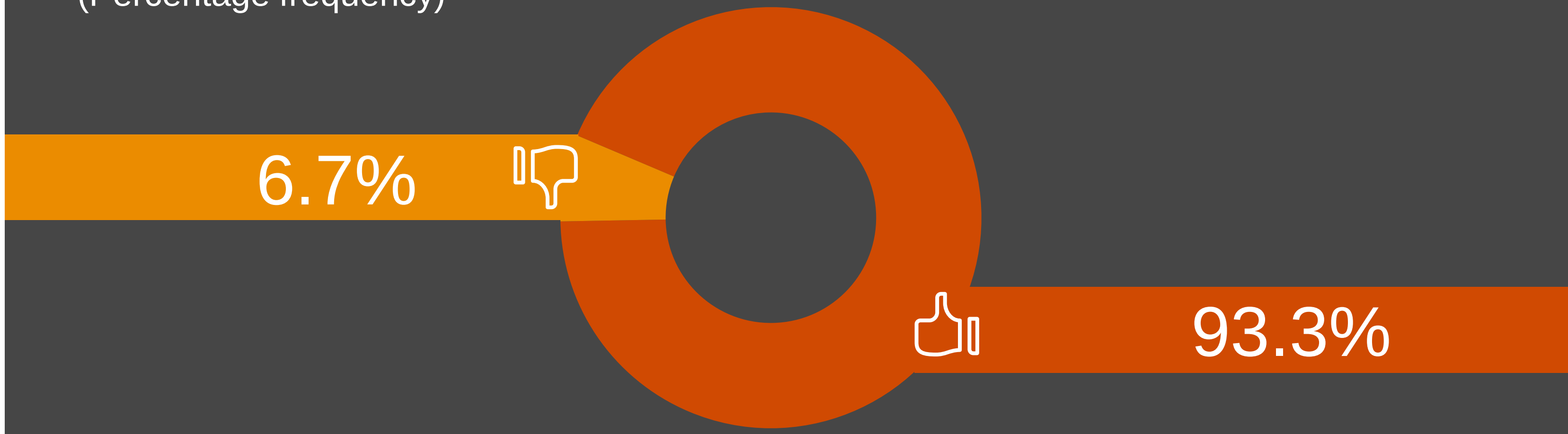


Appendix – company valuation data

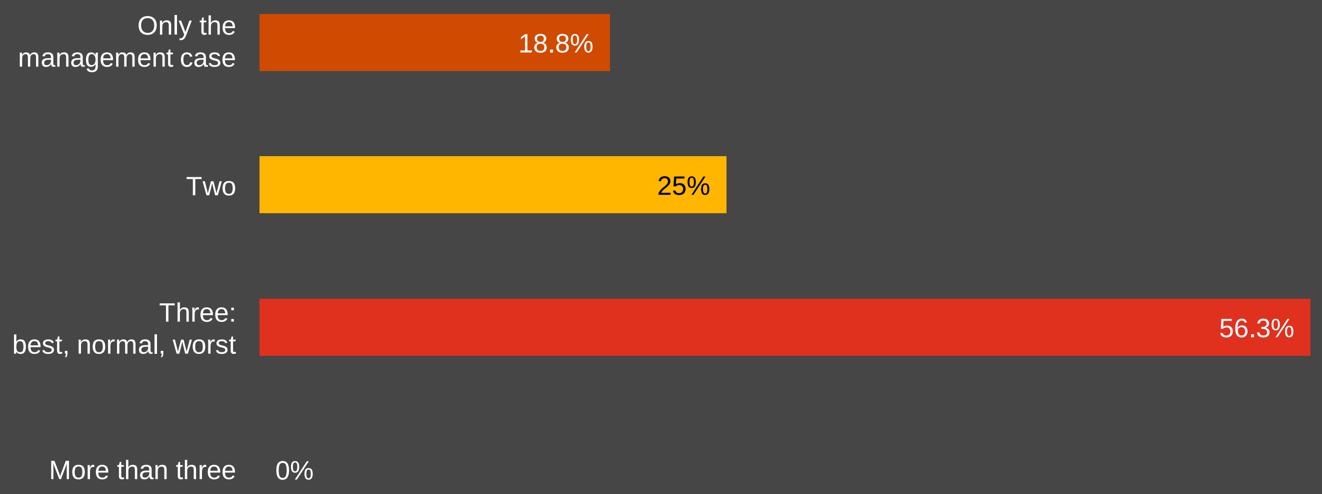
9.6

The growth rate for terminal value almost always exceeds the rate of inflation, and most respondents calculate three scenarios.

Does the growth rate for terminal value usually exceed the rate of inflation? (n=15) (Percentage frequency)



How many cash flow scenarios do you use? (n=16) (Percentage frequency)

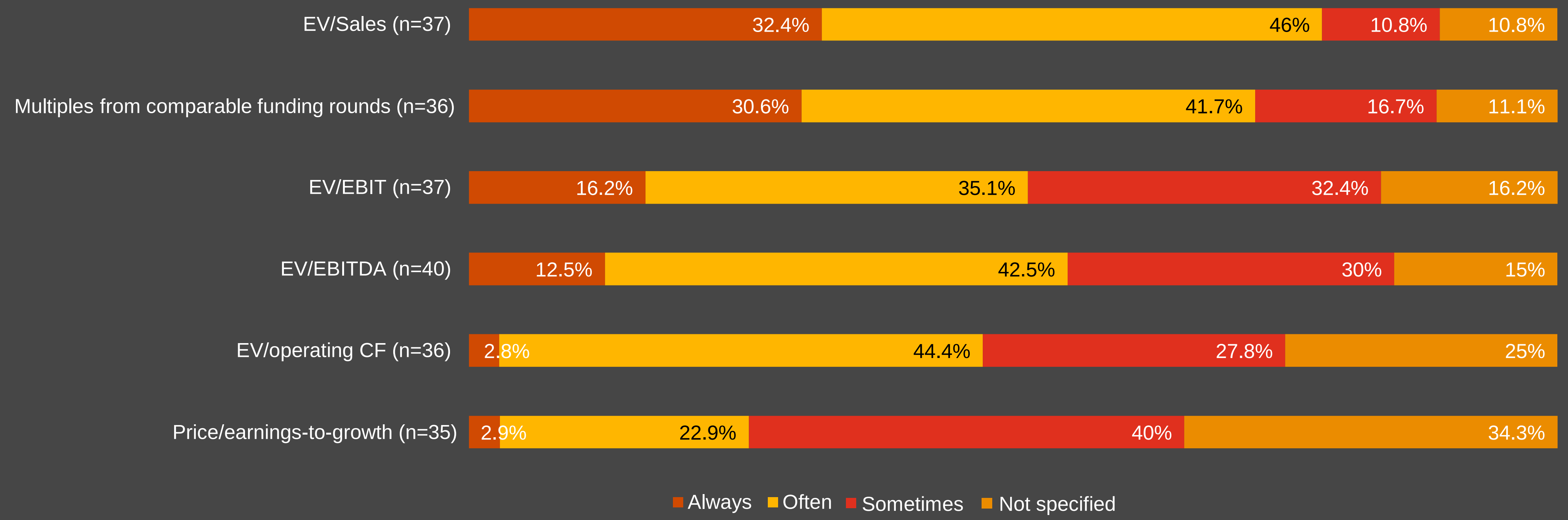


Appendix – company valuation data

9.7

The participants most frequently use multiples from comparable funding rounds and turnover multiples.

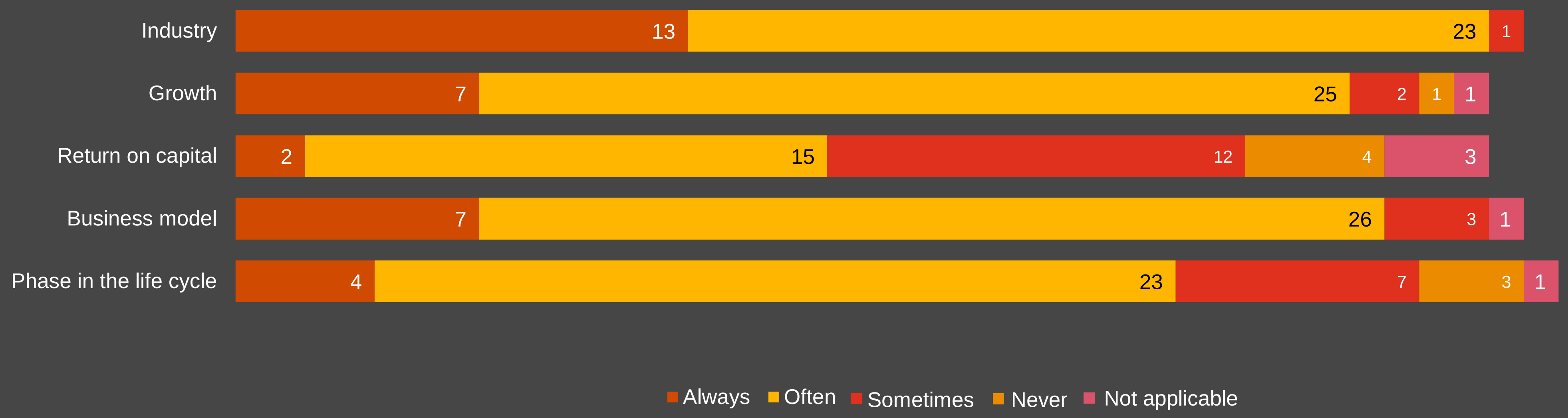
How often do you use the following multiples? (Percentage frequency)



Appendix – company valuation data

9.8 The industry in which the company operates is the most important criterion, closely followed by company growth and the business model.

How often do you use the following criteria when selecting a comparison group? (Number of mentions)

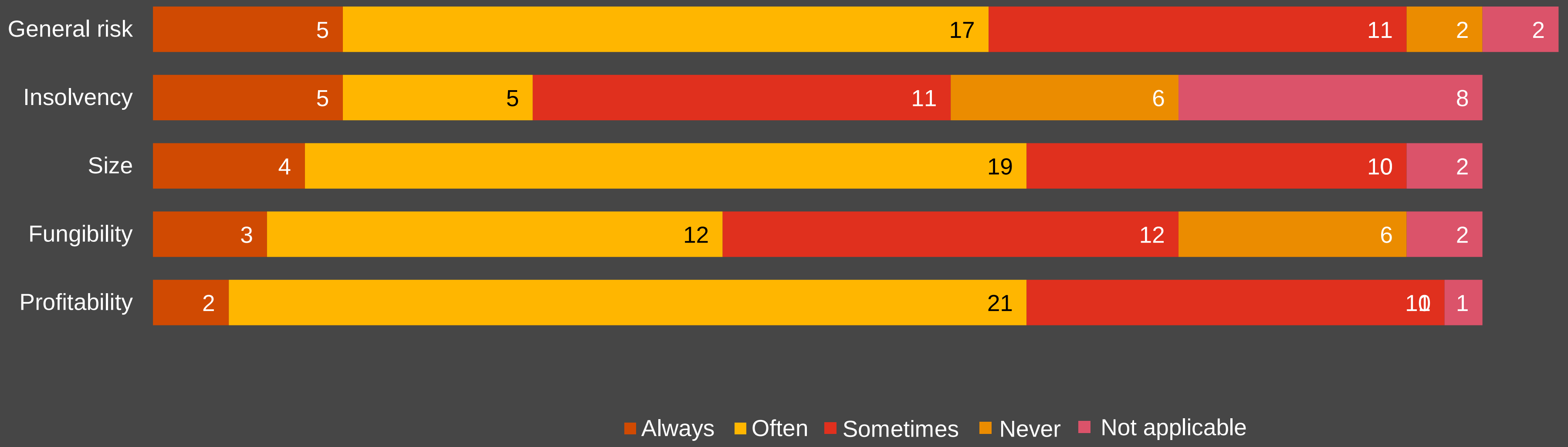


Appendix – company valuation data

9.9

Multiples are often adjusted for general risk and profitability.

How often do you adjust your selected multiples for the following factors? (Number of mentions)

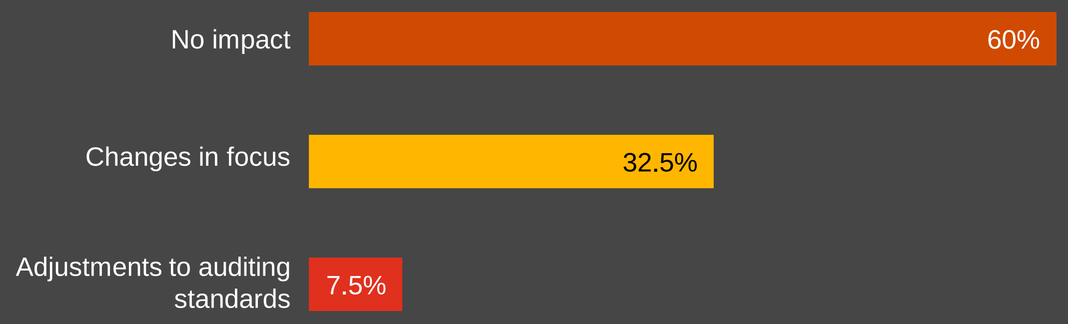


Appendix – data on COVID-19

10.1

Almost a third of respondents have adjusted their areas of focus for due diligence on the business models of portfolio companies, but COVID-19 has had no effect on due diligence processes in the majority of cases.

What impact has the COVID-19 crisis had on business model due diligence? (n=40) (Percentage frequency)

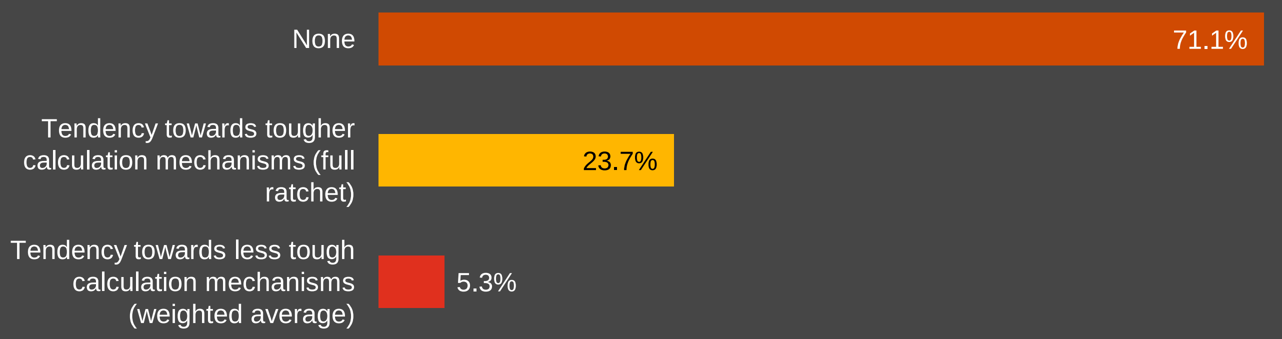


Appendix – data on COVID-19

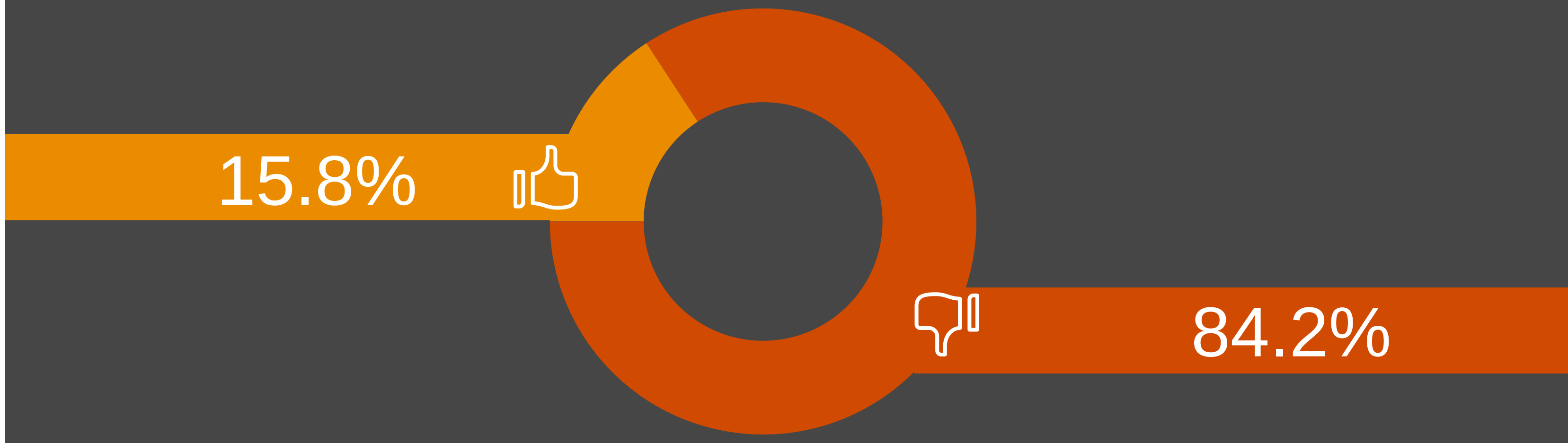
10.2

Although investors are sticking to enforcing existing anti-dilution regulations despite COVID-19, there is no overall trend towards stricter anti-dilution clauses or tougher calculation methods.

What changes in anti-dilution clauses have occurred due to the COVID-19 crisis? (n=38) (Percentage frequency)



Are you agreeing stricter anti-dilution clauses (e.g. full ratchet)? (n=38) (Percentage frequency)

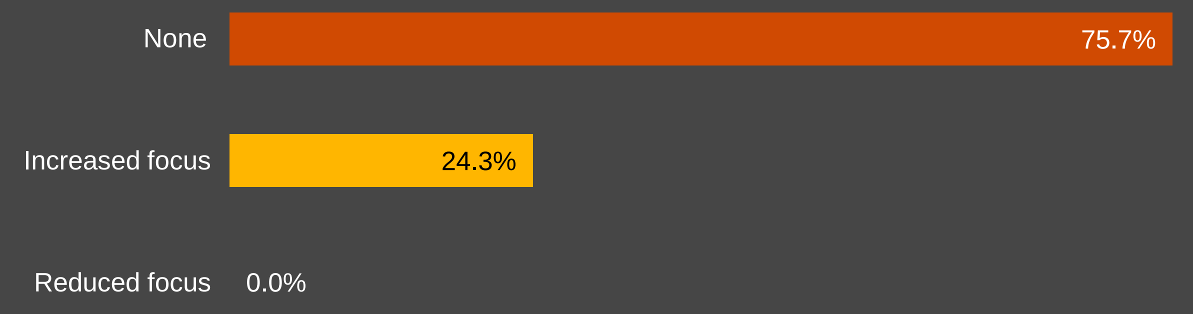


Appendix – data on COVID-19

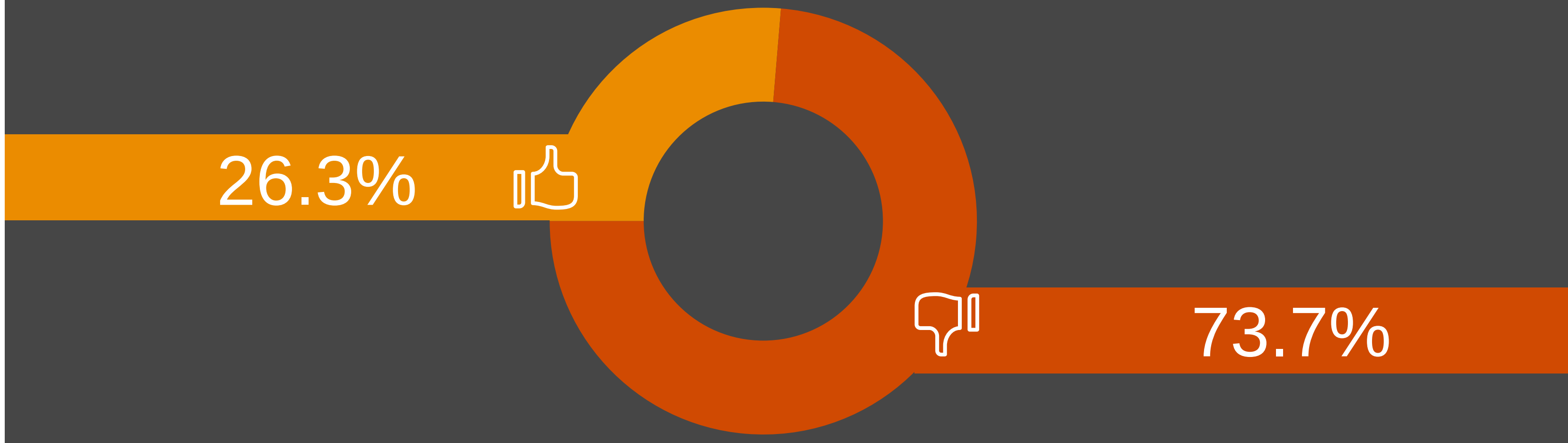
10.3

COVID-19 has generally not led either to a change in focus on control rights or to agreement of revaluation clauses.

How is the focus on control rights changing? (n=37)
(Percentage frequency)



Do you now agree revaluation clauses for future milestones or tranche payments? (n=38)
(Percentage frequency)

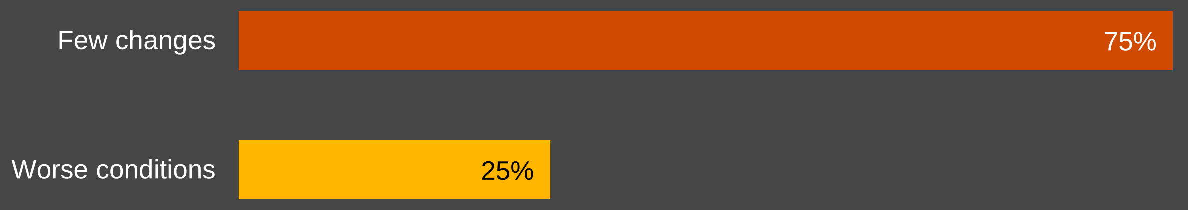


Appendix – data on COVID-19

10.4

In the case of both equity and convertible loan financing, few changes in conditions have occurred that would be to the disadvantage of founders.

When implementing follow-up financing in your existing portfolio, do you mainly use equity or convertible loans, and have the conditions changed noticeably (to the disadvantage of founders)? (n=36) (Diagram shows percentage frequency for equity)



When implementing follow-up financing in your existing portfolio, do you mainly use equity or convertible loans, and have the conditions changed noticeably (to the disadvantage of founders)? (n=33) (Diagram shows percentage frequency for convertible loans)

Contacts

Prof Dirk **Honold**

TECHNISCHE HOCHSCHULE NÜRNBERG
GEORG SIMON OHM

Dirk.honold@th-nuernberg.de

Patrick **Hümmer**

VENTURY ANALYTICS

Patrick@ventury-analytics.de

Enrico **Reiche**

pwc

Enrico.reiche@pwc.com

Gerhard **Wacker**

pwc

Gerhard.wacker@pwc.com

© December 2020 Honold, Ventury Analytics GmbH and PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft. All rights reserved. In this document, “PwC” refers to PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft, which is a member firm of PricewaterhouseCoopers International Limited (PwCIL). Each member firm of PwCIL is a separate and independent legal entity.