Economics Letters 243 (2024) 111904

Contents lists available at ScienceDirect

Economics Letters

journal homepage: www.elsevier.com/locate/ecolet

Exit routes, investor type, and the Covid-19 crisis: Insights from UK equity-funded companies

Marek Kacer, Nicholas Wilson *, Sana Zouari

University of Leeds, Leeds LS2 9JT, UK

ARTICLE INFO

JEL classification:
G33
G34
L26

Keywords:
Equity funded companies
Investor type
Industry sector
Exit strategy
Covid-19 crisis

ABSTRACT

Using a sample of UK equity funded companies, we examine differences in the exit strategy of companies funded by distinct investor types and operating in various technology intensive sectors during a period of crisis. Our results corroborate the hypothesis that investor involvement through oversight and imparting expertise augments the likelihood of favourable outcomes. This is particularly evident in high technology sectors. We observe increased exit activity amidst the crisis and notable disparities, contingent upon investor type, concerning chosen exit pathways.

1. Introduction

Entrepreneurial finance is an important catalyst of innovation and economic growth. A successful exit by the investors is a critical part of the lifecycle of companies funded by external equity as it represents a return on capital for investors and increases their ability and willingness to identify new investment opportunities. The extant literature has explored the determinants influencing exit strategies including company, investor, and country characteristics (Lerner, 1994; Buehler et al., 2006; Giot and Schwienbacher, 2007; Cumming and Dai, 2010; Cumming and Johan, 2010; Espenlaub et al., 2015). Nonetheless, these analyses predominantly pertain to ventures backed by venture capital or private equity investors while leaving other investor types' impact on exits largely unexamined. Moreover, studies in relation to developing or emerging technology-intensive sectors are absent. The advent of the Covid pandemic precipitated unprecedented uncertainty among entrepreneurs and financiers alike, prompting an inquiry into how exit strategies adapted to this exogenous economic shock.

To fill these research gaps, we analyse a spectrum of equity investors, including public and overseas investors. We consider all exit routes: IPO, acquisition, distressed-acquisition and liquidation. We hypothesize that companies funded by active investors who can exploit portfolio firm synergies and provide additional value to their investees in the form of expertise, mentoring, and monitoring are more likely to exit successfully. Furthermore, in our study we examine different technology-related emerging industry sectors. We conjecture that operating in these sectors increases the probability of successful exit.

2. Data and methodology

The dataset covers equity funded companies in the UK during the period from 2012 to 2023 and the estimation sample includes 4202 exits of equity financed companies. We distinguish four types of exits – IPOs, M&As, distressed acquisition[1] and bankruptcy. Our main explanatory variables are related to investor type, industry sector and the Covid period. We distinguish seven specific investor types – private equity and venture capital funds (PE/VC), angel, foreign, government, crowdfunding, corporate venture capital (Corporate VC), and accelerator. Moreover, we look at five industry sectors – high technology manufacturing and knowledge-intensive services (HT/KIS), life

This work was supported by the Department for Business, Energy and Industrial Strategy [grant number 01/21]; and the Economic and Social Research Council (ESRC) [grant number ES/W010259/1].

* Corresponding author.
E-mail addresses: m.kacer@leeds.ac.uk (M. Kacer), n.wilson@lubs.leeds.ac.uk (N. Wilson), s.zouari@leeds.ac.uk (S. Zouari).

[1] The distressed acquisitions refer to companies that were acquired during an insolvency process.

https://doi.org/10.1016/j.econlet.2024.111904
Received 17 May 2024; Received in revised form 29 July 2024; Accepted 8 August 2024
Available online 13 August 2024

Table 1
Descriptive statistics.

	Whole (estimation) sample ($N = 4202$)					IPO ($N = 126$)	M&A ($N = 2102$)	Dis. Acq. ($N = 120$)	Bankrupt ($N = 1854$)
	Mean	SD	p25	p50	p75	Mean	Mean	Mean	Mean
PE/VC	0.31	0.46	0.00	0.00	1.00	0.55***	0.37***	0.33***	0.22
Angel	0.17	0.38	0.00	0.00	0.00	0.18	0.17	0.23*	0.17
Foreign	0.13	0.34	0.00	0.00	0.00	0.37***	0.17***	0.15***	0.07
Government	0.11	0.31	0.00	0.00	0.00	0.07	0.10*	0.12	0.12
Crowdfunding	0.10	0.30	0.00	0.00	0.00	0.06***	0.06***	0.16	0.15
Corporate VC	0.07	0.26	0.00	0.00	0.00	0.16***	0.09***	0.06	0.05
Accelerator	0.01	0.12	0.00	0.00	0.00	0.00	0.02***	0.00	0.01
HT/KIS	0.63	0.48	0.00	1.00	1.00	0.77***	0.75***	0.59**	0.50
Life sciences	0.03	0.17	0.00	0.00	0.00	0.11***	0.03**	0.03	0.02
FinTech	0.08	0.27	0.00	0.00	0.00	0.08	0.10***	0.08	0.05
DeepTech	0.10	0.30	0.00	0.00	0.00	0.10	0.12***	0.09	0.07
CleanTech	0.01	0.11	0.00	0.00	0.00	0.01	0.01	0.01	0.01
Cash position	0.24	0.26	0.02	0.14	0.42	0.33***	0.28***	0.20	0.20
Leverage	0.33	0.46	0.00	0.08	0.49	0.29***	0.24***	0.42	0.42
Intangibility	0.10	0.18	0.00	0.00	0.09	0.17***	0.10**	0.10	0.09
Investor reputation	0.37	0.88	0.00	0.00	0.30	0.73***	0.40***	0.55***	0.31
Time from last deal (quarters)	10.12	8.54	4.00	8.00	14.00	6.58***	10.93***	9.27	9.49
Value of patents (£)	706.91	17,910.96	0.00	0.00	0.00	1793.00**	898.06	201.06	449.12
Value of patents (log)	0.99	2.29	0.00	0.00	0.00	2.46***	1.04***	0.76	0.84
Company age (years)	8.77	6.24	5.00	7.00	11.00	8.71	9.38***	8.80	8.07
Company age (log)	2.13	0.54	1.79	2.08	2.48	2.01	2.19***	2.15*	2.07
Total assets (growth)	0.12	0.66	−0.18	0.04	0.40	0.23*	0.12	0.10	0.11
London region	0.33	0.47	0.00	0.00	1.00	0.33	0.35***	0.30	0.30

Asterisks denote means that are statistically different relative to bankrupted companies (* $p < 10\%$, ** $p < 5\%$, *** $p < 1\%$).

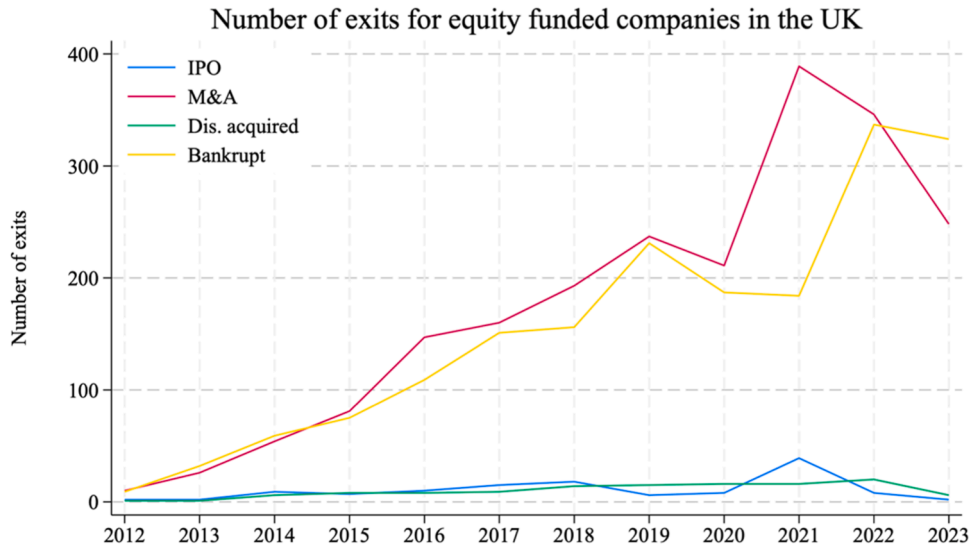

Fig. 1. Time series plot.

sciences, FinTech, DeepTech and CleanTech. The Covid period years include 2020 and 2021.[2] Control variables include accounting ratios, previous equity deals, investor reputation, intellectual property, age, growth, and region. The variables are defined in Appendix A. The frequencies of exit outcomes by investor type and industry sector are reported in Appendix B.

Multinomial logistic regression is our main method of analysis (Espenlaub et al., 2015). The approach allows us to model probability of successful exits (IPO, M&A, distressed acquisition) relative to bankruptcy. The probability of successful exit types is given by the equation:

$$P(y_i = j|\mathrm{X_i}) = \frac{e^{X^T\beta^{(j)}}}{1 + e^{X^T\beta^{(1)}} + e^{X^T\beta^{(2)}} + e^{X^T\beta^{(3)}}} \quad (1)$$

where $\mathrm{X_i}$ represents the company-specific information, $\beta^{(j)}$ is the vector of estimated coefficients for the for successful exit j (for $j = 1, 2, 3$).

3. Results

Table 1 displays descriptive statistics of the explanatory variables used in our exit analysis and Fig. 1 shows the time series plot for different exit types for equity funded companies in the UK in our sample. The main estimation results are reported in Table 2.

[2] In the UK, the Covid-related restrictions were gradually phased-out since the beginning of 2022.

Table 2
Estimation results.

	(1)			(2)			(3)			(4)		
	IPO	M&A	Dis. Acq.	IPO	M&A	Dis. Acq.	IPO	M&A	Dis. Acq.	IPO	M&A	Dis. Acq.
PE/VC	2.364***	1.704***	1.405	2.351***	1.768***	1.402	1.467	1.528***	1.122	1.452	1.577***	1.117
	(3.79)	(6.34)	(1.47)	(3.74)	(6.61)	(1.46)	(1.48)	(4.59)	(0.45)	(1.44)	(4.80)	(0.43)
Angel	0.605*	0.779**	1.184	0.536**	0.692***	1.188	0.706	0.836*	1.263	0.630*	0.744***	1.265
	(−1.91)	(−2.56)	(0.69)	(−2.35)	(−3.64)	(0.70)	(−1.28)	(−1.80)	(0.94)	(−1.69)	(−2.88)	(0.94)
Foreign	4.191***	1.616***	1.821*	3.944***	1.564***	1.844*	4.200***	1.626***	1.899*	4.026***	1.572***	1.942**
	(5.31)	(3.62)	(1.81)	(5.05)	(3.29)	(1.84)	(4.99)	(3.62)	(1.93)	(4.83)	(3.28)	(1.98)
Government	0.545*	0.812*	0.970	0.520*	0.849	0.971	0.542	0.860	0.948	0.503*	0.894	0.950
	(−1.66)	(−1.87)	(−0.11)	(−1.78)	(−1.43)	(−0.10)	(−1.61)	(−1.31)	(−0.18)	(−1.79)	(−0.95)	(−0.17)
Crowdfunding	0.472*	0.382***	1.092	0.416**	0.365***	1.091	0.381**	0.339***	0.809	0.342***	0.325***	0.818
	(−1.95)	(−7.77)	(0.33)	(−2.26)	(−7.94)	(0.33)	(−2.43)	(−7.96)	(−0.74)	(−2.67)	(−8.07)	(−0.70)
Corporate VC	1.225	1.311*	0.735	1.189	1.308*	0.741	0.908	1.426**	0.785	0.927	1.438**	0.784
	(0.65)	(1.73)	(−0.69)	(0.55)	(1.67)	(−0.67)	(−0.28)	(2.23)	(−0.54)	(−0.22)	(2.23)	(−0.54)
Accelerator	0.00000165	1.360	0.00000118	0.000000714	1.259	0.000000528	0.00000194	1.537	0.000000806	0.000000639	1.401	0.000000278
	(−0.03)	(1.03)	(−0.02)	(−0.02)	(0.75)	(−0.01)	(−0.03)	(1.43)	(−0.02)	(−0.02)	(1.09)	(−0.01)
HT/KIS	2.672***	2.592***	1.366	2.396***	2.517***	1.348	2.446***	2.695***	1.416*	2.191***	2.621***	1.399*
	(4.34)	(13.07)	(1.56)	(3.82)	(12.31)	(1.48)	(3.83)	(13.32)	(1.72)	(3.33)	(12.58)	(1.65)
Life sciences	3.306***	1.133	1.302	2.787***	0.956	1.312	2.727***	1.299	1.517	2.464**	1.082	1.525
	(3.36)	(0.58)	(0.49)	(2.82)	(−0.21)	(0.50)	(2.61)	(1.20)	(0.76)	(2.34)	(0.35)	(0.77)
FinTech	0.984	1.339**	1.268	0.848	1.254	1.282	1.051	1.416**	1.320	0.968	1.355**	1.338
	(−0.04)	(2.17)	(0.67)	(−0.45)	(1.63)	(0.69)	(0.13)	(2.54)	(0.77)	(−0.09)	(2.14)	(0.80)
DeepTech	0.859	1.228*	1.136	0.797	1.155	1.119	0.836	1.312**	1.196	0.794	1.228*	1.168
	(−0.46)	(1.71)	(0.38)	(−0.69)	(1.18)	(0.33)	(−0.52)	(2.24)	(0.53)	(−0.67)	(1.66)	(0.46)
CleanTech	0.694	0.814	0.664	0.911	0.906	0.678	0.685	0.825	0.675	0.957	0.902	0.705
	(−0.35)	(−0.64)	(−0.40)	(−0.09)	(−0.30)	(−0.38)	(−0.34)	(−0.59)	(−0.38)	(−0.04)	(−0.30)	(−0.34)
Covid (2020)	0.905	1.158	1.470	0.885	1.134	1.460	1.080	1.121	1.473	1.006	1.092	1.444
	(−0.26)	(1.29)	(1.36)	(−0.32)	(1.08)	(1.33)	(0.20)	(0.99)	(1.36)	(0.02)	(0.75)	(1.29)
Covid (2021)	3.553***	2.002***	1.404	3.176***	1.857***	1.400	4.171***	1.902***	1.362	3.791***	1.749***	1.346
	(5.79)	(6.81)	(1.20)	(5.21)	(5.96)	(1.18)	(6.24)	(6.22)	(1.08)	(5.77)	(5.30)	(1.04)
Cash position				5.921***	2.467***	0.883				5.119***	2.691***	0.919
				(4.45)	(6.28)	(−0.30)				(3.94)	(6.74)	(−0.20)
Leverage				0.568**	0.414***	0.994				0.644*	0.405***	1.001
				(−2.50)	(−11.22)	(−0.03)				(−1.90)	(−11.26)	(0.00)
Intangibility				13.20***	1.589**	1.387				11.55***	1.605**	1.408
				(5.35)	(2.31)	(0.62)				(4.92)	(2.32)	(0.64)
Investor reputation							1.387***	1.219***	1.365***	1.373***	1.229***	1.351***
							(3.42)	(3.59)	(2.97)	(3.34)	(3.74)	(2.90)
Time from last deal							0.944***	1.017***	0.994	0.945***	1.022***	0.993
							(−3.17)	(3.84)	(−0.48)	(−3.07)	(4.67)	(−0.50)
Value of patents (log)							1.137***	0.979	0.931	1.121***	0.972*	0.929
							(3.67)	(−1.28)	(−1.43)	(3.26)	(−1.68)	(−1.45)
Company age (log)							0.0142***	0.485*	1.078	0.0164***	0.599	1.125
							(−6.68)	(−1.78)	(0.06)	(−6.33)	(−1.24)	(0.10)
Company age (log) squared							2.710***	1.294***	1.069	2.660***	1.231**	1.058
							(6.83)	(2.80)	(0.26)	(6.61)	(2.23)	(0.22)
Total assets (growth)							1.278*	1.120**	1.012	1.136	1.016	1.011
							(1.65)	(2.14)	(0.08)	(0.83)	(0.29)	(0.07)
London region							1.267	1.266***	0.935	1.222	1.226***	0.935
							(1.09)	(3.09)	(−0.32)	(0.92)	(2.61)	(−0.32)
Intercept	0.0190***	0.494***	0.0410***	0.0124***	0.538***	0.0411***	1.559	0.484	0.0275***	0.848	0.413**	0.0263***
	(−17.68)	(−10.91)	(−17.98)	(−16.13)	(−8.05)	(−15.27)	(0.63)	(−1.66)	(−2.84)	(−0.22)	(−1.98)	(−2.89)
Observations	4202			4202			4202			4202		
Pseudo R^2	0.0826			0.111			0.109			0.138		

t-statistics are in parentheses. The statistical significance is denoted by asterisks (* $p < 10\%$, ** $p < 5\%$, *** $p < 1\%$).

Table 3
Estimation results - interactions for the investor type.

Panel A: PE/VC			
	IPO	M&A	Dis. Acq.
PE/VC	1.247	1.489***	1.149
	(0.74)	(3.83)	(0.49)
Covid (2020)	0.915	1.004	1.450
	(−0.16)	(0.03)	(1.08)
Covid (2021)	2.991***	1.651***	1.454
	(3.27)	(4.03)	(1.09)
PE/VC x 2020	1.352	1.359	1.053
	(0.38)	(1.15)	(0.08)
PE/VC x 2021	1.697	1.235	0.834
	(1.12)	(0.90)	(−0.30)
Panel B: Angel			
	IPO	M&A	Dis. Acq.
Angel	0.529*	0.765**	1.201
	(−1.81)	(−2.32)	(0.63)
Covid (2020)	0.429	1.066	1.496
	(−1.39)	(0.50)	(1.27)
Covid (2021)	4.027***	1.848***	1.162
	(5.51)	(5.27)	(0.43)
Angel x 2020	11.23***	1.158	0.860
	(2.81)	(0.47)	(−0.21)
Angel x 2021	0.713	0.734	1.525
	(−0.55)	(−1.13)	(0.68)
Panel C: Foreign			
	IPO	M&A	Dis. Acq.
Foreign	2.994***	1.492***	1.649
	(3.25)	(2.67)	(1.31)
Covid (2020)	0.893	1.051	1.381
	(−0.25)	(0.41)	(1.06)
Covid (2021)	2.850***	1.734***	1.194
	(3.57)	(4.94)	(0.55)
Foreign x 2020	1.995	1.662	1.718
	(0.71)	(1.11)	(0.59)
Foreign x 2021	2.434*	1.177	2.055
	(1.67)	(0.47)	(1.00)
Panel D: Government			
	IPO	M&A	Dis. Acq.
Government	0.444*	0.821	0.942
	(−1.66)	(−1.50)	(−0.18)
Covid (2020)	0.820	1.073	1.407
	(−0.44)	(0.57)	(1.12)
Covid (2021)	3.726***	1.654***	1.358
	(5.51)	(4.57)	(1.03)
Government x 2020	3.855	1.197	1.274
	(1.30)	(0.45)	(0.28)
Government x 2021	1.135	1.897	0.895
	(0.13)	(1.64)	(−0.10)
Panel E: Crowdfunding			
	IPO	M&A	Dis. Acq.
Crowdfunding	0.235**	0.339***	0.861
	(−2.37)	(−6.87)	(−0.47)
Covid (2020)	1.062	1.111	1.519
	(0.15)	(0.85)	(1.37)
Covid (2021)	3.512***	1.765***	1.362
	(5.14)	(5.09)	(0.98)
Crowdfunding x 2020	0.00000175	0.844	0.695
	(−0.01)	(−0.41)	(−0.43)
Crowdfunding x 2021	2.445	0.881	0.929
	(1.09)	(−0.37)	(−0.10)
Panel F: Corporate VC			
	IPO	M&A	Dis. Acq.
Corporate VC	0.717	1.341*	0.851
	(−0.80)	(1.65)	(−0.33)
Covid (2020)	1.012	1.036	1.478
	(0.03)	(0.29)	(1.36)
Covid (2021)	3.409***	1.759***	1.363
	(4.88)	(5.20)	(1.05)
Corporate VC x 2020	0.00000274	3.878*	0.000000856
	(−0.01)	(1.92)	(−0.01)

(*continued on next page*)

Table 3 (*continued*)

Panel F: Corporate VC			
	IPO	M&A	Dis. Acq.
Corporate VC x 2021	1.924	0.935	0.816
	(0.95)	(−0.15)	(−0.17)
Panel G: Accelerator			
	IPO	M&A	Dis. Acq.
Accelerator	0.000000700	1.363	0.000000260
	(−0.01)	(0.85)	(−0.01)
Covid (2020)	1.000	1.081	1.437
	(0.00)	(0.66)	(1.27)
Covid (2021)	3.804***	1.758***	1.350
	(5.78)	(5.31)	(1.05)
Accelerator x 2020	1.477	2.074	1.804
	(0.00)	(0.64)	(0.00)
Accelerator x 2021	0.554	0.769	1.057
	(−0.00)	(−0.33)	(0.00)

In addition to specification in model 4, Table 2, the models include specific interactions between investor types and the Covid period years. The full set of control variables is included in each model but their estimated coefficients are not reported for the sake of brevity. t-statistics are in parentheses. The statistical significance is denoted by asterisks (* $p < 10\%$, ** $p < 5\%$, *** $p < 1\%$).

With respect to the investor types, the exponentiated coefficient for PE/VC in M&A equation is greater than unity and significant at the 1% level (model 4 in Table 2).[3] In economic terms, this means that for PE/VC companies, all else equal, the likelihood of M&A exit is 1.58 times more likely than insolvent exit via bankruptcy.[4] Similarly, being funded by corporate VC increases significantly exit via M&A. These results are in line with our first hypothesis assuming that bringing more expertise, guidance, and networks to investee firms increases the likelihood of exiting successfully.[5] On the other hand, being funded by an angel is associated with lower relative probability of exit both via IPO and M&A. This evidence is consistent with Cumming and Zhang (2019) who show that investee firms funded by angels are less likely to exit successfully either through an IPO or an M&A. Similar to PE/VC and corporate VC, companies funded by foreign investors are more likely to exit successfully via M&A. However, they are much more likely to exit via IPO or distressed acquisition, as well. This may be because foreign investors prefer funding more information-transparent companies[6] (Dai et al., 2012) which are more likely to exit successfully. Surprisingly, the presence of government or accelerator does not seem to impact exit strategy during the period under examination. Finally, investments via crowdfunding platforms are associated with the significantly decreased likelihood of exit through IPO and M&A. It seems that firms backed by crowdfunding platforms are less likely to exit successfully. These firms have dispersed and less active investors[7]; and/or may be lower quality (adverse selection) than other equity funded firms and therefore less likely to exit through IPO or M&A.

In terms of the industry sectors, the results provide evidence that companies operating in HT/KIS sectors are more likely to exit via IPO, M&A or distressed acquisition. Interestingly, companies operating in life sciences sector are more likely to exit via IPO than those that do not operate in this sector. On the other hand, operating in FinTech or DeepTech industry is associated with higher relative probability of M&A, while operating in CleanTech sector does not seem to impact the exit strategy.

The results show that in 2020, during the first year of the Covid period, the relative risk of exiting via IPO, M&A, or distressed acquisition was comparable to the likelihood of bankruptcy. However, in 2021, the probability of exit via IPO and M&A significantly surpassed the risk of insolvency through bankruptcy. This suggests that companies and investors held off on exits for a year, waiting for a clearer economic landscape whilst a wave of liquidations materialised after 2021.

Regarding the control variables, we find strong evidence that equity funded companies with stronger cash position, higher intangibility, higher value of patents, and lower leverage are more likely to exit successfully through an IPO or M&A. Companies with stronger investor reputation are more likely to exit successfully via IPO, M&A or distressed acquisition. The results also show that there is a U-shaped effect of company age on the relative risks of exit through IPO and M&A, and being located in London is associated with higher probability of exit through M&A.

In Table 3, we examine whether specific investor types moderate or strengthen the impact of the Covid crisis on exit type. The results show that previous funding from an angel or corporate VC has a significant strengthening impact on the relative risk of IPO[8] or M&A in the first year of the pandemic, respectively. Similarly, the results confirm that being funded by a foreign investor increases the relative risk of exit through IPO during the second year of the crisis. For other investor types, we did not find evidence for significantly different impact on exit route during the crisis period.

In Table 4, the results show that operating in HT/KIS sector is associated with higher relative probability of M&A during the first year of the pandemic. However, this effect reverses during the second year. Further, operating in life sciences and FinTech sectors increases the relative risk of exit through IPO and M&A during the first year of the covid crisis, respectively.

We performed several robustness checks. Firstly, we used alternative estimation methods. We utilised binary logit, thus contrasting more successful exit routes with bankruptcies, and ordered logistic regression, employing the fact that the outcomes can be ranked in terms of the "success". Secondly, we applied different definition of the dependent variable where we pooled distressed acquisitions and bankruptcies. The results presented in the Appendix indicate that our main findings in Table 2 are robust to alternative estimation methods and definition of dependent variable.

[3] The relevant figures are presented in Table 2. In all estimation tables the coefficients are exponentiated to allow for relative risk ratio interpretation.

[4] All other coefficients are interpreted in the same way, but we refrain from doing it for the sake of brevity.

[5] In models 1 and 2 the coefficients for PE/VC in IPO equations are significantly higher than 1. However, after controlling for investor reputation in models 3 and 4 the significance disappears.

[6] Foreign investors may undertake more due diligence pre investment.

[7] Crowdfunding allows a large number of individuals to invest small amounts of money in exchange for equity, resulting in a wide distribution of shareholders.

[8] We note that IPOs involving angel investors had an increased likelihood in the first year of Covid (Table 3 Panel B), suggesting that economic uncertainty brought forward the decision to realise their investment.

Table 4
Estimation results - interactions for the industry sectors.

Panel A: HT/KIS			
	IPO	M&A	Dis. Acq.
HT/KIS	1.943**	2.626***	1.216
	(2.34)	(11.10)	(0.84)
Covid (2020)	0.375	0.816	0.873
	(−0.94)	(−1.04)	(−0.28)
Covid (2021)	3.736***	2.237***	1.141
	(2.88)	(4.62)	(0.27)
HT/KIS x 2020	3.863	1.648**	2.424
	(1.19)	(2.00)	(1.46)
HT/KIS x 2021	0.971	0.686*	1.271
	(−0.06)	(−1.74)	(0.40)
Panel B: Life sciences			
	IPO	M&A	Dis. Acq.
Life Sciences	1.605	0.912	1.014
	(0.90)	(−0.37)	(0.02)
Covid (2020)	0.786	1.081	1.382
	(−0.54)	(0.65)	(1.10)
Covid (2021)	3.661***	1.708***	1.295
	(5.37)	(5.01)	(0.88)
Life Sciences x 2020	11.92**	1.632	3.668
	(2.04)	(0.62)	(0.92)
Life Sciences x 2021	2.869	2.470	3.583
	(1.11)	(1.29)	(0.91)
Panel C: FinTech			
	IPO	M&A	Dis. Acq.
FinTech	0.933	1.201	1.267
	(−0.15)	(1.12)	(0.55)
Covid (2020)	0.913	1.028	1.446
	(−0.22)	(0.23)	(1.25)
Covid (2021)	3.860***	1.723***	1.302
	(5.60)	(4.95)	(0.87)
FinTech x 2020	3.298	2.208*	1.105
	(0.97)	(1.69)	(0.08)
FinTech x 2021	0.858	1.222	1.400
	(−0.18)	(0.51)	(0.37)
Panel D: DeepTech			
	IPO	M&A	Dis. Acq.
DeepTech	0.939	1.282*	1.715
	(−0.15)	(1.77)	(1.55)
Covid (2020)	1.094	1.104	1.651*
	(0.23)	(0.81)	(1.73)
Covid (2021)	3.948***	1.785***	1.578
	(5.65)	(5.21)	(1.57)
DeepTech x 2020	0.000000744	0.850	0.000000133
	(−0.01)	(−0.37)	(−0.01)
DeepTech x 2021	0.641	0.793	0.000000177
	(−0.59)	(−0.67)	(−0.01)
Panel E: CleanTech			
	IPO	M&A	Dis. Acq.
CleanTech	1.350	0.960	0.000000516
	(0.27)	(−0.11)	(−0.01)
Covid (2020)	1.037	1.099	1.458
	(0.09)	(0.80)	(1.32)
Covid (2021)	3.807***	1.748***	1.241
	(5.77)	(5.29)	(0.74)
CleanTech x 2020	0.00000114	0.638	0.0200
	(−0.01)	(−0.43)	(−0.00)
CleanTech x 2021	0.0000142	0.0000675	1.842
	(−0.00)	(−0.00)	(0.00)

In addition to specification in model 4, Table 2, the models include specific interactions between industry sectors and the Covid period years. The full set of independent and control variables is included in each model but their estimated coefficients are not reported for the sake of brevity. t-statistics are in parentheses. The statistical significance is denoted by asterisks (* $p < 10\%$, ** $p < 5\%$, *** $p < 1\%$).

4. Conclusion

The study provides novel and robust evidence that the investor type and industry sector are important factors determining the exit strategy of UK equity funded companies. Our findings are consistent with the hypothesis that active investors providing additional services and expertise to the portfolio companies are more likely to exit successfully. Furthermore, we find evidence for our second hypothesis in that the companies operating in nascent industries seem to experience more successful exit. We find that the onset of the crisis precipitated increased exit activity by investors, aiming to secure returns, amidst the prevailing uncertainty. One limitation of our study is that some of the results may be affected by selection bias. Future studies could consider methods that model the selection of investor types using Heckman correction.

Data availability

The authors do not have permission to share data.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.econlet.2024.111904.

References

Buehler, S., Kaiser, C., Jaeger, F., 2006. Merge or fail? The determinants of mergers and bankruptcies in Switzerland. Econ. Lett. 90, 88–95.
Cumming, D., Dai, N., 2010. Local bias in venture capital investments. J. Empir. Finance 17, 362–380.
Cumming, D., Johan, S., 2010. Venture capital investment duration. J. Small Bus. Manag. 48, 228–258.
Cumming, D., Zhang, M., 2019. Angel investors around the world. J. Int. Bus. Stud. 50 (5), 692–719.
Dai, N., Jo, H., Kassicieh, S., 2012. Cross-border venture capital investments in Asia: selection and exit performance. J. Bus. Ventur. 27 (6), 666–684.
Espenlaub, S., Khurshed, A., Mohamed, A., 2015. Venture capital exits in domestic and cross border investments. J. Bank. Finance 53, 215–232.
Giot, P., Schwienbacher, A., 2007. IPOs, trade sales and liquidation: modelling venture capital exits using survival analysis. J. Bank. Finance 31, 697–702.
Lerner, J., 1994. Venture capitalists and the decision to go public. J. Financ. Econ. 35, 293–316.