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Which crisis strategies are (expectedly) effective among SMEs during COVID-19? [☆]

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ABSTRACT

We investigate COVID-19 as a disabling and an enabling mechanism for small and mid-size enterprises (SMEs), particularly how SMEs' crisis strategies might help them through the crisis. SMEs can follow a retrenchment strategy, a persevering strategy, or an innovation strategy, and they can do so narrowly or broadly. Using a representative sample of Danish SMEs, we test how crisis strategies are associated with turnover expectations. We find distinct differences in how effective crisis strategies are linked to turnover expectations, depending on how the crisis affected the SMEs in the first place (i.e., the SMEs were crisis victims, crisis immunes, or crisis exploiters).

1. Introduction

A crisis is both a threat and an opportunity to small and mid-size enterprises (SMEs).¹ As an external enabler or disabler, a crisis varies in its scope of change (spatial, temporal, etc.) and onset (predictability and suddenness), which determine how the external changes, through various mechanisms, shape the roles and effects of a crisis (Bendell et al., 2020; Davidsson et al., 2020; Kimjeon and Davidsson, 2021). The COVID-19 crisis can be characterized as a global, sudden, but not unpredictable crisis (although it was unpredicted by many businesses) with the future still to decide the heterogeneous outcomes (Bartik et al., 2020; Davidsson et al., 2021). In many ways, these outcomes depend on the SMEs' abilities to cope and strategically react in ways that turn the crisis-enforced changes into opportunities rather than threats (Kraus et al., 2020; Wenzel et al., 2020). As Davidsson et al. (2020, p. 314) noted, "Reaping the benefit usually requires action."

Business associations and business advisors, as well as SME owners, have therefore called for advice on what to do strategically—that is, which crisis strategies are most efficient? Although this question cannot be definitively answered before the crisis is again history, the urgency of answers for SMEs to survive and potentially turn the crisis into an opportunity necessitates temporary "best guesses". Countries are dealing differently with the pandemic and the economy (Born et al., 2021), with some imitative patterns (Sebhatu et al., 2020), and some countries are currently approaching a third wave of virus infection. Therefore, scholars have been working intensively to provide preliminary answers to what strategies SMEs *should* be doing. Most research has been conceptual (e.g.,

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¹ Abbreviations: Hypothesis 1a = H1a and so forth (i.e., H1a, H2a); SME = small and medium-sized enterprises.

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Chesbrough, 2020; Davidsson et al., 2021; Giones et al., 2020; Morgan et al., 2020; Ritter and Pedersen, 2020), but some also empirical (e.g., Björklund et al., 2020; Kuckertz et al., 2020; Thorgren and Williams, 2020).

However, so far, the empirical studies have predominantly been descriptive, with a focus on what SMEs have been doing. Ideally, the future will tell “what actually works.” In the meantime, this study provides a compromise between being “descriptive” and “waiting for the future”; that is, it combines available data with “acts of (disciplined) imagination” (Gümüşay and Reinecke, 2021, p. 1). In this study, we investigate how various broad and narrow crisis strategies (Kraus et al., 2020; Wenzel et al., 2020)—that is, retrenchment, persevering, and innovation—are associated with the expectation of getting through the first wave of the corona crisis in terms of turnover. Although this is not practically intuitive, it is certainly not theoretical, either. Many solutions have been suggested (e.g. Chesbrough, 2020; Morgan et al., 2020), and some—often conceptual and anecdotal—have not necessarily completely aligned. For instance, with some conceptual distinctiveness but certainly also overlap, Wenzel et al. (2020) argued that retrenchment is not effective, whereas Corsini et al. (2021) suggested that frugality is effective.

Therefore, this study aims to provide some preliminary empirical evidence on what are the most promising crisis strategies to manage the COVID-19 crisis. We combine different data sources to create a unique longitudinal dataset of a representative sample of young Danish firms with 2019 (i.e., administrative) and 2020 (e.g., survey) data. By combining the external enabler theory (e.g., Davidsson et al., 2020; Kimjeon and Davidsson, 2021) with crisis management particularly focused on SMEs during COVID-19 (e.g., Davidsson et al., 2021; Kraus et al., 2020; Wenzel et al., 2020), we provide new insights that extend understandings of SMEs in times of unpredictable and sudden societal crises, as well as crucial implications for practitioners.

2. Theory and hypotheses

2.1. External enabler

The premise of the external enabler theory is that external changes are distinct circumstances entirely external and independent to actors that influence entrepreneurial agency (Davidsson et al., 2020). That is, external influences such as the COVID-19 crisis may potentially, but not necessarily, enable entrepreneurial endeavors contingent on the action of individual actors. While their occurrence is objectively independent of actors, their potential value for entrepreneurial endeavors is actor dependent. Apart from distinguishing types of external enablers (e.g., technologies, regulations, demographics, and natural environments), Davidsson et al. (2020) also conceptually differentiated among the scope of a societal change (spatial, temporal, etc.), its onset (predictability and suddenness), its mechanisms (combination, expansion, etc.), and its role or effect (triggering, shaping, or outcome enhancing).

Given the recent emergence of the external enabler theory, empirical research that explicitly studied the theory is limited, whereas broader empirical support has been established through systematic literature review (Kimjeon and Davidsson, 2021) and has been conceptually discussed relative to COVID-19 (Davidsson, 2021). Although these prior studies have been insightful and provided initial validation of the external enabler theory (e.g., Chen et al., 2020; von Briel et al., 2018), at least two important limitations to the theory’s development remain. First, the theory has focused primarily on societal changes that occur in a relatively predictable manner and affect entrepreneurial endeavors in imaginable ways as a result. In these situations, the external enabler mechanisms may be different than the sudden and extreme crisis exposure situation with low probability of occurrence and complete disruption of existing logics and meaning structures (i.e., the onset of the external enabler). Second, the theory has not considered the other side of the coin. What creates competitive advantages for some creates disadvantages for others. Thus, the external enabler theory should equally explain external changes as a disabler. Whether a crisis functions as an enabler or disabler depends among other things on crisis management; that is, on the crisis strategies put into use.

2.2. COVID-19, SMEs, and crisis strategies

A range of solutions have been suggested for SMEs during the COVID-19 crisis, including business model adaption, innovation, and pivoting (Chesbrough, 2020; Morgan et al., 2020; Pedersen et al., 2020), (coping) strategies (Giones et al., 2020), learning (Lee et al., 2020), and technology solutions (Brem et al., 2021). We are particular interested in which crisis strategies work. In line with a categorization of the crisis reactions of nascent entrepreneurs (Davidsson and Gordon, 2016) but based in the strategy literature, Wenzel et al. (2020) provided a useful four-branch categorization. They discussed retrenchment strategies in which firms, including newly established businesses, reduce their costs, preserve ongoing activities with the aim of maintaining the status quo, and engage in innovative strategic renewal and explore opportunities that emerge because of the crisis. The strategies are complementary, and each has different advantages and disadvantages. Each strategy can be followed narrowly or broadly (e.g., Foss, 1999; Rotemberg and Saloner, 1994). The narrow approach is limited to a few focused measures; the broad approach broadens the scope of applied measures. Some evidence and speculation suggest that certain COVID-19 strategies are better than others (e.g., Osiyevskyy et al., 2020; Wenzel et al., 2020). Yet, how they effectively function, depending on whether the strategies are applied broadly or narrowly, is less understood. Wenzel et al. (2020) raised doubts about the effectiveness of the most common retrenchment strategy in the longer run and suggested perseverance or innovation as potentially more effective strategies over time.

Hypothesis 1 ab (H1ab). Use of (a) broad or (b) narrow retrenchment strategies is negatively associated with development in turnover.

Hypothesis 2 ab (H2ab). Use of (a) broad or (b) narrow persevering strategies is positively associated with development in turnover.

Hypothesis 3 ab (H3ab). Use of (a) broad or (b) narrow innovation strategies is positively associated with development in turnover.

3. Methods

3.1. Context

On March 11, 2020, 13 days after the first person was infected in Denmark, the Danish government implemented a lockdown. This early lockdown included a range of non-pharmaceutical interventions, most importantly closure of educational institutions, public workplaces, international borders, and a range of shops and restaurants together with disallowing any public gatherings of more than 10 people (Sebathu et al., 2020). The interventions were followed by substantial governmental support (Beneddsen et al., 2020), including furlough support subsidizing 75 percent of salary costs for otherwise laid off employees (subject to a cap), subsidies for revenue decline, and covering of a share of fixed costs. The lockdown interventions were eased by April 20, 2020, when retail and elementary schools reopened. In Denmark, the unemployed rate increased from 4.2% in March 2020 to 5.6% in May 2020 (Danmarks Statistik, 2020), but has since partly recovered. In the second quarter of 2020, Denmark's gross domestic product dropped approximately 7% (OECD, 2020). By global comparisons, Denmark has done fairly well economically.

3.2. Data and sample

We tested our idea on a unique pooled, longitudinal dataset of a representative sample of young Danish firms. The dataset included data from the period before the Danish lockdown in the first wave (i.e., before March 11, 2020) and after the lockdown was cancelled; yet, before the second wave. Specifically, we took advantage of an existing representative sample of young SMEs (Schlichter et al., 2020), which we supplemented with administrative financial data from 2019 and a survey in October 2020. The sample had been identified in 2015. It comprised all SMEs aged between 2 and 12 years with 1–250 employees (in total, 5582 young firms). From those SMEs, one of the largest Danish survey companies contacted 1255 by telephone in 2015, and 604 agreed to participate (48% response rate). These 604 firms covered 10.3% of the population of young SMEs. In 2020, 501 of those SMEs were still active. From them, we received 350 answers to the survey we sent in October 2020 (70% response rate). We then added administrative data for those 350 respondents.

3.3. Measures

3.3.1. Dependent variable

We measured the dependent variable, *Turnover expectation*, by a single survey item: “How is the SME's turnover expected to develop in 2021 compared to 2020?”

3.3.2. Independent variables

We followed Wenzel et al.'s (2020) conceptualization of crisis strategies, upon which Kraus et al. (2020) elaborated by focusing on only continuing firms. This left us with three strategies: Persevering, retrenchment, and innovation. For each *broad crisis strategy*, we created formative measures with representative items on a scale capturing the frequency of use, from 1 (*not at all*) to 5 (*as much as possible*). For each construct, we calculated the average score across items. Deducing from prior qualitative literature on small businesses during COVID-19 (Kraus et al., 2020; Thorgren and Williams, 2020), and contextualizing based on business reports in the Danish context (e.g. Business Kolding, 2020; Vejle Municipality, 2020) and bilateral discussions with two business associations—SME Denmark and Business Kolding—we developed survey items to address retrenchment and persevering. For the innovation measure, we also relied on Ansoff (1957).

Retrenchment (broad) was measured with five items describing the extent to which firms used dismissals, reduced hours, expenses, used temporary employment, or streamlined the firm. *Persevering (broad)* was measured with another six items concerning the extent to which firms completed employees' vacation, established home workplaces, reorganized (e.g., shifted teams, refurbished space, or instituted new hygiene procedures), obtained loans, negotiated contracts and terms with suppliers and stakeholders, and offered training and competence-development courses. *Innovation (broad)* was measured with five items describing the extent to which the SME changed sales strategies (e.g., changed sales channel or method or business models such as pricing), developed new products or services to existing or new customers, or obtained new customers for existing products or services as a consequence of COVID-19.

For *narrow crisis strategies*, we coded each strategy—that is, *Retrenchment (narrow)*, *Persevering (narrow)*, and *Innovation (narrow)*—with dummies measuring whether the strategy was followed (coded 1) or not (coded 0). Particularly, we measured whether the SME replied with “as much as possible” for one of the items characterizing the strategy.

3.3.3. Control variables

We controlled for *Firm age* (in 2020), measured as the number of years since the firm's formal registration, as well for as *Firm size* (in 2020), measured as the total number of employees. Both measures were standardized. We also controlled for *Industry* using the Danish Industrial Classification and Standard Industrial Groupings' 10 categories. Because some categories had few observations, we pooled the financial and insurance, real estate, and other business services categories. Each industry was a dummy. We also controlled for *Crisis impact*. Particularly, we categorized whether during the lockdown (March 11 to September 1, 2020) SMEs experienced a turnover decrease (*Crisis victim*, coded 0), unaffected turnover (*Crisis immune*, coded 1), or a turnover increase (*Crisis exploiter*, coded 2). Finally,

Table 1
Means, standard deviations, and Pearson's correlations.

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. Turnover expectation	8.12	20.56	1																				
2. Retrenchment (broad)	1.70	0.73	0.12	1																			
3. Persevering (broad)	1.83	0.65	0.21	0.42	1																		
4. Innovation (broad)	1.76	0.92	0.18	0.51	0.33	1																	
5. Retrenchment (Narrow)	0.14	0.35	0.09	0.57	0.26	0.28	1																
6. Persevering (Narrow)	0.30	0.46	0.10	0.28	0.66	0.20	0.34	1															
7. Innovation (Narrow)	0.15	0.36	0.17	0.45	0.30	0.55	0.50	0.24	1														
8. Firm age	12.68	2.26	-0.03	0.05	-0.10	0.02	0.00	-0.07	0.00	1													
9. Firm size	2.78	1.23	-0.11	0.05	0.20	-0.02	-0.03	0.07	-0.08	-0.03	1												
10. Agriculture, forestry, and fishing	0.03	0.18	0.04	-0.10	-0.06	-0.12	-0.08	-0.05	-0.08	0.03	0.02	1											
11. Manufacturing, mining, quarrying	0.15	0.35	-0.06	0.09	0.09	0.05	0.07	0.02	0.08	-0.03	0.12	-0.08	1										
12. Construction	0.14	0.35	-0.04	-0.20	-0.26	-0.24	-0.12	-0.19	-0.15	0.08	-0.04	-0.08	-0.17	1									
13. Trade and transport etc.	0.36	0.48	0.03	0.19	-0.04	0.13	0.07	-0.04	0.05	-0.03	-0.08	-0.14	-0.31	-0.30	1								
14. Information and communication	0.09	0.29	0.07	-0.03	0.06	0.05	-0.05	0.14	0.00	0.01	-0.06	-0.06	-0.13	-0.13	-0.24	1							
15. Business services	0.18	0.38	-0.01	-0.05	0.13	0.04	0.05	0.07	0.02	0.04	0.08	-0.09	-0.19	-0.19	-0.35	-0.15	1						
16. Public admin., education, health	0.05	0.21	-0.01	-0.04	0.10	-0.03	-0.05	0.12	0.02	-0.10	-0.04	-0.04	-0.09	-0.09	-0.17	-0.07	-0.10	1					
17. Crisis victim	0.39	0.49	0.09	0.35	0.20	0.22	0.15	0.14	0.13	0.03	0.03	-0.09	0.03	-0.12	0.10	0.00	-0.01	0.01	1				
18. Crisis immune	0.29	0.46	-0.11	-0.25	-0.14	-0.14	-0.10	-0.14	-0.09	-0.08	0.03	0.05	0.07	0.14	-0.16	-0.01	-0.03	0.03	-0.51	1			
19. Crisis exploiter	0.32	0.47	0.01	-0.12	-0.07	-0.09	-0.06	-0.01	-0.04	0.05	-0.06	0.04	-0.11	-0.01	0.05	0.01	0.04	-0.04	-0.55	-0.44	1		
14. Return on Investment (2019)	7.73	22.88	-0.10	-0.08	-0.15	-0.11	-0.03	-0.09	0.00	0.07	0.10	0.02	-0.05	0.08	0.01	-0.05	-0.03	0.03	-0.12	0.00	0.12	1	
15. Liquidity ratio (2019)	1137	17,301	0.03	-0.06	0.07	0.00	-0.04	0.06	-0.04	-0.09	-0.10	-0.02	-0.01	-0.03	0.06	0.00	-0.02	-0.03	-0.08	-0.03	0.12	0.03	1

Note. Means (*M*) and standard deviations (*SD*) are reported for unstandardized values.

All correlations above 0.105 are significant at $p = 0.05$ p-level, and correlations above 0.138 are significant at $p = 0.01$.

because financial preparedness matters, we controlled for *Liquidity ratio* and return on investment *ROI* (both in percentages and standardized), whose data we extracted from the Danish Register data, specifically “Navne & Numre.”

4. Results

4.1. Descriptive statistics

Table 1 shows the means, standard deviations, and Pearson’s correlations of the dependent, independent, and control variables. The highest correlation among variables used in same models was between *Retrenchment (broad)* and *Innovation (broad)*, at 0.51. From this correlation, together with variance inflation factors all below 2, it could be concluded there was no serious threat of multicollinearity. Fig. 1 graphically shows the distribution of the dependent variables, ranging from a 75% drop in turnover to a 125% increase in turnover during the lockdown period from March 11, 2020 to September 1, 2020.

4.2. Multivariate statistics

To test our hypotheses, we introduced first the control variables and then each independent variable separately, and finally all independent variables together. Table 2 shows results related to the broad crisis strategies, and Table 3 shows results for the narrow crisis strategies. Model 5 in Table 2 shows an insignificant association between *Retrenchment (broad)* and *Turnover expectation* ($\beta = -0.90$; $SE = 1.40$; $p = n. s.$). Further, *Persevering (broad)* ($\beta = 4.50$; $SE = 1.32$; $p < 0.001$) and *Innovation (broad)* ($\beta = 2.73$; $SE = 1.28$; $p < 0.05$) were significantly related to *Turnover expectation*, thus rejecting H1a while accepting H2a and H3a. Adding broad crisis strategies increased R^2 by 141% from 0.041 to 0.099.

Related to narrow crisis strategies, Model 4 in Table 3 shows an insignificant association between *Retrenchment (narrow)* ($\beta = -0.91$; $SE = 3.81$; $p = n. s.$) and *Persevering (narrow)* ($\beta = 2.10$; $SE = 2.68$; $p = n. s.$), respectively, and *Turnover expectations*, whereas *Innovation (narrow)* ($\beta = 9.53$; $SE = 3.53$; $p < 0.01$) was significantly related to *Turnover expectation*, thus rejecting H1b and H2b while supporting H3a. Adding narrow crisis strategies increased R^2 by 60% from 0.047 to 0.069.

4.3. Post hoc analysis – differences in crisis impact

We completed a post hoc analysis to provide further insight into our results, especially to explore the heterogenous crisis effects. We were particularly interested in whether applied crisis strategies function generically or depend on how the crisis influenced SMEs in the first place. The descriptive data (Table 1) shows that during the lockdown from March to September 2020, 39% of the SMEs were *Crisis victims* (i.e., experienced a drop in turnover), while 29% were *Crisis immunes*, and 32% were *Crisis exploiters* (experiencing a turnover increase during first COVID-19 wave). We tested the dependency by interacting the *Crisis impact* with the *Crisis strategies*, using *Crisis immune* as a reference (Table 4). We found that associations between broad strategies and turnover expectations were generic and not dependent on how the COVID-19 crisis originally affected the SMEs, whereas some narrow crisis strategies depended on the COVID-19 impact. Particularly, we found that compared to *Crisis immunes*, *Crisis exploiters* experienced a lower expected turnover if they followed a *Retrenchment (narrow)* crisis strategy ($\beta = -28.26$; $SE = 11.76$; $p < 0.05$) but a higher expected turnover if they followed an *Innovation*

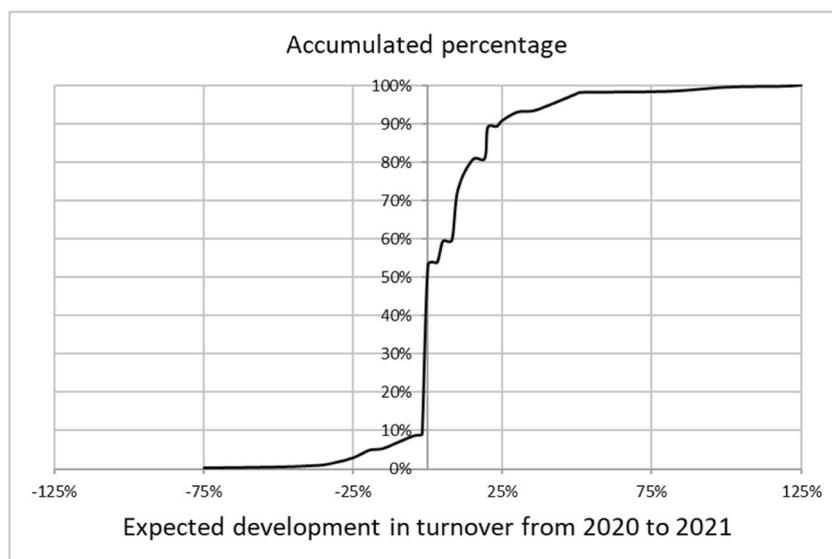


Fig. 1. Expected change in turnover from 2020 to 2021 (in percentages).

Table 2

Ordinary least squares predicting turnover expectation (2021 compared to 2020) with broad crisis strategies.

Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Constant	4.94 [†] (2.58)	5.24* (2.58)	6.37* (2.61)	4.86 [†] (2.58)	6.09* (2.65)
Firm age	-0.61 [†] (1.09)	-0.73 (1.09)	-0.38 (1.07)	-0.74 (1.08)	-0.44 (1.09)
Firm size	-1.70* (1.10)	-1.79 [†] (1.09)	-2.61* (1.09)	-1.66 (1.09)	-2.59* (1.12)
Industry (ref = Trade and transport, etc.)					
Agriculture, forestry, and fishing	5.13 (6.14)	6.40 (6.17)	6.60 (5.83)	8.14 (5.92)	7.37 (6.15)
Manufacturing, mining, quarrying	-2.57 (3.39)	-2.53 (3.38)	-3.38 (3.33)	-2.26 (3.37)	-3.23 (3.38)
Construction	-1.06 (3.46)	0.23 (3.52)	1.20 (3.45)	1.58 (3.52)	2.42 (3.56)
Information and communication	3.25 (3.89)	4.00 (3.91)	2.12 (3.89)	3.34 (3.86)	1.95 (3.96)
Business services	-0.87 (3.12)	-0.18 (3.14)	-2.22 (3.07)	-0.09 (3.10)	-2.17 (3.22)
Public administration, education, health	-1.58 (5.00)	-1.02 (4.99)	-3.93 (5.07)	-0.71 (5.07)	-3.34 (5.30)
Crisis impact (Ref = crisis immune)					
Crisis victim	5.72* (2.66)	4.16 (2.79)	3.66 (2.68)	4.49 [†] (2.69)	3.57 (2.82)
Crisis exploiter	3.80 (2.79)	3.35 (2.80)	2.93 (2.75)	3.50 (2.77)	3.10 (2.82)
Return on investment (2019)	-1.76 (1.09)	-1.67 (1.08)	-1.16 (1.07)	-1.60 (1.07)	-1.02 (1.09)
Liquidity ratio (2019)	0.39 (1.07)	0.47 (1.07)	-0.06 (1.06)	0.37 (1.06)	-0.09 (1.07)
Retrenchment (broad)		2.12 [†] (1.18)			-0.90 (1.40)
Persevering (broad)			4.88*** (1.17)		4.50*** (1.32)
Innovation (broad)				3.50*** (1.13)	2.73* (1.28)
R ²	0.041	0.050	0.087	0.069	0.099
R ² adjusted	0.008	0.014	0.053	0.033	0.058
R ² change		0.009 [†]	0.046***	0.026**	0.058***

Note. B coefficients are reported; standard errors in parentheses.

[†] $p < .10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ (two-tailed).

Table 3

Ordinary least squares predicting turnover expectations (2021 compared to 2020) with narrow crisis strategies.

Variable	Model 1	Model 2	Model 3	Model 4
Constant	5.24* (2.58)	6.37* (2.61)	4.86 [†] (2.58)	6.09* (2.65)
Control variables	Yes	Yes	Yes	Yes
Retrenchment (narrow)	4.70 (3.24)			-0.91 (3.81)
Persevering (narrow)		3.60 (2.54)		2.10 (2.68)
Innovation (narrow)			9.70**	9.53** (3.59)
R ²	0.047	0.047	0.068	0.069
R ² adjusted	0.010	0.010	0.032	0.028
R ² change	0.006	0.006	0.027*	0.028*

Note. B coefficients are reported; standard errors in parentheses.

[†] $p < .10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ (two-tailed).

Table 4

Ordinary least squares predicting turnover expectation (2021 compared to 2020): Dependencies on crisis impact.

Variable	Model 1 (Broad)	Model 2 (Narrow)
Constant	6.49* (2.87)	4.08 (2.85)
Control variables	Yes	Yes
Crisis impact * Crisis strategy (ref = Crisis immune)		
Crisis victim * Retrenchment	-4.50 (3.86)	-2.19 (9.89)
Crisis victim * Persevering	0.84 (3.15)	6.31 (6.72)
Crisis victim * Innovation	2.96 (2.99)	-5.51 (8.94)
Crisis exploiter * Retrenchment	-6.03 (4.26)	-28.26* (11.76)
Crisis exploiter * Persevering	5.41 (3.28)	7.64 (7.07)
Crisis exploiter * Innovation	4.62 (3.57)	33.98** (10.88)
R ²	0.117	0.127
R ² adjusted	0.060	0.071
R ² change	0.018	0.057**

Note. B coefficients are reported; standard errors in parentheses.

[†] $p < .10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$ (two-tailed).

(narrow) crisis strategy ($\beta = 33.98$; SE = 10.88; $p < 0.01$). Together, these posthoc results indicate that the heterogeneity in how SMEs are impacted by the crisis matter for which strategy are effective.

As another robustness test, we reran all models controlling for the expected health crisis length measured in months. Expected health crisis length was negatively correlated with expected turnover ($\beta = -0.32$; SE = 1.44; $p = 0.03$) but our remaining results stayed robust with all key associations being in similar directions and no change in associations being significant or not, with only one

exception. That is, controlling for expected health crisis length resulted in the interaction of *Crisis exploiter* and *Persevering* (*broad*) becoming marginal significant ($\beta = 5.71$; $SE = 3.26$; $p = 0.08$). We also checked whether effects of crisis strategy depend on *Firm age* or *Firm size*; however without any significant results except older SMEs that marginally significant expect higher turnover ($\beta = 7.30$; $SE = 3.76$; $p = 0.05$).

5. Discussion

Exogenous shocks such as the COVID-19 crisis hit societies broadly. Reduced spending, export, import, and decreased gross national product are typical indicators. However, businesses are hit heterogeneously; some experience growth (i.e., *crisis exploiters*), some are unaffected (i.e., *crisis immunes*), and others suffer (i.e., *crisis victims*). In many Western contexts, including the Danish, political measures unproportionally constrained businesses by locking down certain industries but not others (Born et al., 2021; Sebhatu et al., 2020). Yet, regardless how the political lockdown measures affected the SMEs, our study simultaneously shows that SMEs' strategic crisis strategy matters for optimistic-versus-pessimistic expectations for the future. Particularly, and consistent with Wenzel et al.'s (2020) predictions, we find that SMEs following a narrow retrenchment strategy expected decreasing turnover in 2021, whereas SMEs following broad persevering, broad innovation, or narrow innovation strategies expected increasing turnover in 2021.

Most importantly, we find distinctive differences between the broad and narrow strategies. That is, although broad use of retrenchment is not linked to expectations, narrow retrenchment strategies for SMEs experiencing growth during the crisis seem ineffective. Further, although persevering seems to work when implemented broadly, it appears to be ineffective when only certain focused measures are implemented. Our post hoc analysis further reveals that the effectiveness of narrow strategies (i.e., narrow retrenchment and narrow innovation) depends on the crisis impact that the SMEs experienced in the first place. Table 5 provides an overview of our results.

5.1. Theoretical contributions and practical implications

Our study makes one primary theoretical contribution. We extend the external enabler theory with the extreme, high-impact, and sudden external changes—in this situation, a pandemic—that until now have been less explored (Davidsson et al., 2020, 2021). We thus add to the prior insight, which had focused primarily on external changes that emerged more slowly. Interestingly, our study suggests that strategic reactions matter, and it leaves less to randomness, unluck, and determinism. Strategic crisis actions distinguish those SMEs that expected a positive rather than a negative development, emphasizing crisis as both a disabler and an enabler, as creating winners and losers, and, most importantly, as dependent on how SMEs react to the crisis.

However, our findings are also important for practice. First, an important distinction between narrow and broad crisis strategies matters for the effectiveness of the strategies. Even though both broad and narrow strategies may be effective—they vary in their resource requirements. Focused strategies do not necessary require the same resource slack (Agusti et al., 2020), which can be crucial for those SMEs constrained by liabilities of smallness and lacking liquidity (Cowling et al., 2020). SMEs should choose their crisis strategies also dependent on their available resource slack.

We also show that crisis strategies are not generic but depend on how SMEs were affected in the first place (Bartik et al., 2020). Thus, SME should strategically react according to the unique ways in which the crisis impacted the firm and not be imitative responses to competitors' reactions (Smith et al., 2001). There is no best way to organize or manage a SMEs through a crisis. Rather, crisis strategies—as with entrepreneurial actions in general—should be viewed not only as actions determined by the environment (Scott and Davis, 2015), but also as actions that shape the environment and provide new meanings and opportunities (Elfring et al., 2021). Crisis exploiters—that is, SMEs that experienced a growth in turnover during the first COVID-19 wave—especially seem to be in a position from which active engagement in innovative activities, rather than cost cutting, can generate further growth.

5.2. Limitations and avenues for future research

Some limitations and avenues for future research are associated with our study. First, we approached crisis strategies as though they were only a matter of choice, but they are not always so. Resources limits strategic options. Persevering and innovation are both strategies that require slack resources (Agusti et al., 2020). This implies that for firms without slack resources, the only possible solution in the short run would be retrenchment. Second, during a crisis that is constantly and unpredictably developing, temporality and timing obviously matter (Berends et al., 2021). Although we looked at different strategies, it is likely that their effectiveness depends on the sequence, temporality, and timing of their combinations. For instance, it may be that an early retrenchment strategy could generate the buffer and resource slack necessary for SMEs to innovate later during the crisis. Finally, despite the global nature of the COVID-19 crisis, the crisis did not hit countries simultaneously or equally, and countries reacted differently politically (e.g., Born et al.,

Table 5
Overview of results.

Strategy	(Broad)	(Narrow)
Retrenchment	No effect	Negative for crisis exploiter
Persevering	Positive	No effect
Innovation	Positive	Positive, especially for crisis exploiter

2021; Sebhatu et al., 2020). Denmark experienced its first infections after warning signals from Italy, Spain, and the United States. Denmark reacted promptly, being among the first European countries with lockdown measures less strict than countries in Southern Europe (e.g., Italy, Spain, and France) but stricter than those in Sweden. These measures were accompanied with various government aids to businesses (Bennedsen et al., 2020). The specific Danish context obviously shapes the competitive conditions that Danish SMEs experience and, thereby, which strategies that seems to be working. Our results are applicable to equivalent crisis situations. However, future research should look into contextual differences in the effectiveness of crisis strategies.

6. Conclusion

When an external crisis such as COVID-19 hits, it represents both a disabling and an enabling mechanism for SMEs. Importantly, whether it is disabling or enabling is not random but depends on how SMEs choose to react to the crisis considering the unique crisis exposure, market situation, and resources of the firm. SMEs can retrench and wait for the new normal, persevere with what seems to work, or innovate for the future. The former seems to be ineffective as a narrow strategy for SMEs experiencing growth during the crisis. The latter strategies seem to increase optimistic expectations for the future. Especially for those SMEs that experience growth during the crisis, a narrow innovation strategy is effective.

Credit author statement

Kim Klyver: Conceptualization, Methodology, Formal analysis, Investigation, Resources, Data curation, Writing – original draft, writing – reviewed draft, Visualization, Funding acquisition. Suna Løwe Nielsen: Conceptualization, Resources, Writing – original draft, writing – reviewed draft, Funding acquisition

Declaration of competing interest

We have no conflict of interest.

References

- Agusti, M., Galan, J.L., Acedo, F.J., 2020. Saving for the bad times: slack resources during an economic downturn. *J. Bus. Strat.* <https://doi.org/10.1108/JBS-05-2020-0099> online ahead of print.
- Ansoff, H., 1957. *Strategies for diversification*. *Harv. Bus. Rev.* 35 (5), 113–124.
- Bartik, A.W., Bertrand, M., Cullen, Z., Glaeser, E.L., Luca, M., Stanton, C., 2020. The impact of COVID-19 on small business outcomes and expectations. *Proc. Natl. Acad. Sci. Unit. States Am.* 117, 17656–17666. <https://doi.org/10.1073/pnas.2006911117>.
- Bendell, B., Sullivan, D.M., Ornstein, S., 2020. How fear of “looming megacatastrophes” alters entrepreneurial activity rates through psychological distance. *Acad. Manag. Perspect.* 34, 585–602. <https://doi.org/10.5465/amp.2019.0049>.
- Bennedsen, M., Larsen, B., Schmutte, I., Scur, D., 2020. Preserving Job Matches during the COVID-19 Pandemic: Firm-Level Evidence on the Role of Government Aid. <https://doi.org/10.13140/RG.2.2.15337.11366> [GLO Discussion Paper 588].
- Berends, H., van Burg, E., Garud, R., 2021. Pivoting or persevering with venture ideas: recalibrating temporal commitments. *J. Bus. Ventur.* 36, 106126. <https://doi.org/10.1016/j.jbusvent.2021.106126>.
- Björklund, T.A., Mikkonen, M., Mattila, P., van der Marel, F., 2020. Expanding entrepreneurial solution spaces in times of crisis: business model experimentation amongst packaged food and beverage ventures. *Journal of Business Venturing Insights* 14, e00197. <https://doi.org/10.1016/j.jbvi.2020.e00197>.
- Born, B., Dietrich, A.M., Müller, G.J., 2021. The lockdown effect: a counterfactual for Sweden. *PLoS One* 16 (4), e0249732. <https://doi.org/10.1371/journal.pone.0249732>.
- Brem, A., Viardot, E., Nylund, P.A., 2021. Implications of the coronavirus (COVID-19) outbreak for innovation: which technologies will improve our lives? *Technol. Forecast. Soc. Change* 163, 120451. <https://doi.org/10.1016/j.techfore.2020.120451>.
- Business Kolding, 2020. *Konsekvensanalyse Covid-19. Kolding*.
- Chen, J.J., Cui, C., Hunt, R.A., Li, L.S.-Z., 2020. External enablement of new venture creation: an exploratory, query-driven assessment of China's high-speed rail expansion. *J. Bus. Ventur.* 35, 106046 <https://doi.org/10.1016/j.jbusvent.2020.106046>.
- Chesbrough, H., 2020. To recover faster from Covid-19, open up: managerial implications from an open innovation perspective. *Ind. Market. Manag.* 88, 410–413. <https://doi.org/10.1016/j.indmarman.2020.04.010>.
- Corsini, L., Dammicco, V., Moultrie, J., 2021. Frugal innovation in a crisis: the digital fabrication maker response to COVID-19. *R. Manag.* 51, 195–210. <https://doi.org/10.1111/radm.12446>.
- Cowling, M., Brown, R., Rocha, A., 2020. Did you save some cash for a rainy COVID-19 day? The crisis and SMEs. *Int. Small Bus. J.* 38, 593–604 <https://doi.org/10.1177%2F0266242620945102>.
- Danmarks Statistik, 2020. Bruttoledigheden faldt lidt fra maj til juni. <https://www.dst.dk/da/Statistik/nyt/NytHtml?cid=30860#:~:text=Fra%20maj%20til%20juni%20faldt,af%20arbejdsstyrken.&text=af%20arbejdsstyrken%20i%20maj>.
- Davidsson, P., Gordon, S.R., 2016. Much ado about nothing? The surprising persistence of nascent entrepreneurs through macroeconomic crisis. *Enterpren. Theor. Pract.* 40, 915–941 <https://doi.org/10.1111%2Fetap.12152>.
- Davidsson, P., Recker, J., von Briel, F., 2020. External enablement of new venture creation: a framework. *Acad. Manag. Perspect.* 34, 311–332. <https://doi.org/10.5465/amp.2017.0163>.
- Davidsson, P., Recker, J., von Briel, F., 2021. COVID-19 as external enabler of entrepreneurship practice and research. *Business Research Quarterly* online ahead of print. <https://doi.org/10.1177%2F23409444211008902>.
- Elfring, T., Klyver, K., van Burg, E., 2021. *Entrepreneurship as Networking: Mechanisms, Dynamics, Practices, and Strategies*. Oxford University Press, Oxford.
- Foss, N., 1999. Research in the strategic theory of the firm: “Isolationism” and “integrationism”. *J. Manag. Stud.* 36, 725–755. <https://doi.org/10.1111/1467-6486.00156>.
- Giones, F., Brem, A., Pollack, J.M., Michaelis, T.L., Klyver, K., Brinckmann, J., 2020. Revising entrepreneurial action in response to exogenous shocks: considering the COVID-19 pandemic. *Journal of Business Venturing Insights* 14, e00186. <https://doi.org/10.1016/j.jbvi.2020.e00186>.
- Gümlüsay, A.A., Reinecke, J., 2021. Researching for desirable futures: from real utopias to imagining alternatives. *J. Manag. Stud.* <https://doi.org/10.1111/joms.12709> online ahead of print.
- Kimjeon, J., Davidsson, P., 2021. External enablers of entrepreneurship: a review and agenda for accumulation of strategically actionable knowledge. *Enterpren. Theor. Pract.* online ahead of print. <https://doi.org/10.1177%2F10422587211010673>.

- Kommune, Vejle, 2020. Virksomheder i Vejle Kommune – Konsekvensanalyse. Vejle.
- Kraus, S., Clauss, T., Breier, M., Gast, J., Zardini, A., Tiberius, V., 2020. The economics of COVID-19: initial empirical evidence on how family firms in five European countries cope with the corona crisis. *International Journal of Entrepreneurial Behavior & Research* 26, 1067–1092. <https://doi.org/10.1108/IJEBR-04-2020-0214>.
- Kuckertz, A., Brändle, L., Gaudig, A., Hinderer, S., Reyes, C.A.M., Prochotta, A., et al., 2020. Startups in times of crisis: a rapid response to the COVID-19 pandemic. *Journal of Business Venturing Insights* 13, e00169. <https://doi.org/10.1016/j.jbvi.2020.e00169>.
- Lee, G.K., Lampel, J., Shapira, Z., 2020. After the storm has passed: translating crisis experience into useful knowledge. *Organ. Sci.* 31, 1037–1051. <https://doi.org/10.1287/orsc.2020.1366>.
- Morgan, T., Anokhin, S., Ofstein, L., Friske, W., 2020. SME response to major exogenous shocks: the bright and dark sides of business model pivoting. *Int. Small Bus. J.* 38, 369–379 <https://doi.org/10.1177%2F0266242620936590>.
- OECD, 2020. Quarterly GDP. <https://data.oecd.org/gdp/quarterly-gdp.htm>.
- Osiyevskyy, O., Shirokova, G., Ritala, P., 2020. Exploration and exploitation in crisis environment: implications for level and variability of firm performance. *J. Bus. Res.* 114, 227–239. <https://doi.org/10.1016/j.jbusres.2020.04.015>.
- Ritter, T., Pedersen, C.L., 2020. Analyzing the impact of the coronavirus crisis on business models. *Ind. Market. Manag.* 88, 214–224. <https://doi.org/10.1016/j.indmarman.2020.05.014>.
- Rotemberg, J.J., Saloner, G., 1994. Benefits of narrow business strategies. *Am. Econ. Rev.* 85, 1330–1349.
- Schlichter, J., Klyver, K., Haug, A., 2020. The moderating effect of ERP system complexity on the growth–profitability relationship in young SMEs. *J. Small Bus. Manag.* <https://doi.org/10.1111/jsbm.12502> online ahead of print.
- Scott, W.R., Davis, G.F., 2015. *Organizations and Organizing: Rational, Natural and Open Systems Perspectives*. Routledge, London.
- Sebhatu, A., Wennberg, K., Arora-Jonsson, S., Lindberg, S.I., 2020. Explaining the homogeneous diffusion of COVID-19 nonpharmaceutical interventions across heterogeneous countries. *Proc. Natl. Acad. Sci. Unit. States Am.* 117, 21201–221208. <https://doi.org/10.1073/pnas.2010625117>.
- Smith, K.G., Ferrier, W.J., Ndofor, H., 2001. Competitive dynamics research: critique and future directions. In: Hitt, M.A., Freeman, E., Harrison, J.S. (Eds.), *Handbook of Strategic Management*. Blackwell Publishers, London, pp. 309–354.
- Thorgren, S., Williams, T.A., 2020. Staying alive during an unfolding crisis: how SMEs ward off impending disaster. *Journal of Business Venturing Insights* 14, e00187. <https://doi.org/10.1016/j.jbvi.2020.e00187>.
- von Briel, F., Davidsson, P., Recker, J., 2018. Digital technologies as external enablers of new venture creation in the IT hardware sector. *Enterpren. Theor. Pract.* 42 (1), 47–69.
- Wenzel, M., Stanske, S., Lieberman, M.B., 2020. Strategic responses to crisis. *Strat. Manag. J.* 42 (2), 16–27. <https://doi.org/10.1002/smj.3161>.