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Masters of disasters? Challenges and opportunities for SMEs in times of crisis

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ABSTRACT

Small and medium-sized enterprises (SMEs) are the backbone of every economy. So, when an external crisis jeopardizes markets, such as the recent COVID-19 outbreak, SMEs are hit with great force. Their so-called liability of smallness, a lack of resources that would shield them from outside shocks, worsens the situation. This manuscript conducts a literature study on 69 manuscripts that studied SMEs in previous crises and proposes ways to overcome economic downturns in the areas of finance, strategy and the institutional environment. The paper finds a “strategy/funding chicken-and-egg-problem” and proposes an effectual world view when dealing with situations of great uncertainty.

1. Introduction

The COVID-19 crisis, only a few months old at the time of preparing this manuscript, already has had a devastating effect on the global economy. As of April 23, 2020, 26.5 million jobs were lost in the US alone (Lambert, 2020). So far, global stocks have seen a downturn of at least 25%. Goldman Sachs predicts the US Gross Domestic Product to shrink 24% in the second quarter of 2020 and forecasts a major contraction in manufacturing, with reduced domestic demand for non-food goods, reduced foreign demand for US goods exports, supply-chain disruptions and plant closures (Reinicke, 2020). In response, governments around the world released massive stimulus packages. The US so far approved \$2 trillion to combat the economic downturn (Emma & Scholtes, 2020) and EU finance ministers recently approved €500 billion in stimulus measures (Riley, 2020).

Small and medium sized companies (SMEs), in most countries defined as organizations with less than 250 employees (OECD, 2005), are the backbone of every economy across the globe. In the US, SMEs make up 99.7 percent of U.S. employer firms and create 49.2 percent of jobs in the private sector (US Small Business Administration, 2012). SMEs drive innovation and competitiveness and account for 44 percent of U.S. economic activity (US Small Business Administration 2019). So, a suffering economy largely means suffering SMEs and their employees.

This manuscript attempts to outline a way for SMEs to overcome the current COVID-19 crisis. It is researched what tactics and strategies can be applied and how these are impacted by other market players, in particular financing institutions and governments. In order to achieve this goal, a literature study is conducted that identifies 69 manuscripts and covers how SMEs dealt with previous crises and disasters.

In the next section, common characteristics of SMEs are discussed

that make them particularly vulnerable to external shocks and at the same time can be advantageous in such situations. Thereafter, the literature study is introduced, and the findings presented. The paper concludes with a discussion section that interprets the results and proposes avenues for future research.

2. Characteristics of SMEs

SMEs face a liability of smallness (Freeman, Carroll, & Hannan, 1983). This means that the smaller the firm the less resources it typically controls, which makes it more vulnerable to internal and external events, such as a critical employee quitting his/her job, a decline of financing options, a reduction of demand due to a competitor entering the market, or, in the case of this manuscript, a crisis hitting the global economy.

The liability of smallness often coincides with a liability of newness (Freeman et al., 1983). According to Stinchcombe (1965), new organizations suffer a greater risk of failure than older organizations, because they lack established business models, depend on the cooperation of strangers and have low levels of legitimacy. The liability of newness points to startup companies as a special form of SMEs.

Despite these liabilities, SMEs also have certain characteristics that could help them in times of crisis. Given their smaller size, they tend to be rather flexible when opportunities or threats arise in their environment. Further, the smaller the organization, the closer the decision-makers are to their customers and other stakeholders (Eggers, Hansen, & Davis, 2012). This in turn can provide them with valuable market information that can be helpful when reacting to crises.

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Table 1
Business Area, Crisis and Continents Covered.

Business Area	Crisis	Continent*
Finance (50.7%)	2007–08 Global Financial Crisis (81.2%)	Europe (75.4%)
Strategy and Strategic Orientations (40.6%)	1997 Asian Financial Crisis (5.8%)	Asia (18.8%)
Institutional Environment (8.7%)	2010 and 2011 Christchurch Earthquakes (1.4%)	North America (4.4%)
	2011 Thailand Floods (1.4%)	Oceania (4.4%)
	2015–16 Russian Financial Crisis (1.4%)	Global (2.9%)
	Variety of crises and disasters (8.7%)	

* total exceeds 100% since some studies cover several countries and continents

3. Literature study

In order to shed more light on how SMEs deal with times of crisis, a literature study was performed. Google Scholar was searched for the following keywords and their combinations: 1) SME(s), small firm(s), 2) crisis, hard economic times, disaster(s). Paper must have been published in peer reviewed journals. In total, the search revealed 93 manuscripts. After excluding papers that interpret crisis as organizational, internal crisis, for example caused by succession in family firms, 69 papers remained in the pool and were further analyzed.

Table 1 shows the business area covered, type of crisis and geographic scope of the manuscripts. Most of the papers (50.7%) cover financial aspects for SMEs during crises. By far the most studies deal with the 2007–08 Global Financial Crisis (81.2%) and are focused on European countries (75.4%). A full list of papers can be found in the appendix of this manuscript.

The section below is organized in the three business areas discovered in the literature study: finance, strategy and strategic orientations and the institutional environment.

3.1. Finance

The first area, finance, deals with the most obvious consequence of a crisis: the lack of funding, typically caused by lower revenues and/or stricter investment policies. Manuscripts in this area investigate how financial indicators of SMEs such as asset structure, debt ratio, leverage, profitability, liquidity and creditworthiness change during a crisis (e.g., Balios, Daskalakis, Eriotis, & Vasiliou, 2016; Lisboa, 2017; Duarte, Gama, & Gulamhussen, 2018). Further differences of such financial indicators between small and large firms (Kudlyak & Sanchez, 2017; Lisboa, 2017) as well as between younger and older SMEs (Lisboa, 2017; Serrasqueiro et al. 2018) are studied.

In addition, authors analyze change in debt financing before, during and after crises (e.g., Kim, Tesar, & Zhang, 2015; Brown & Lee, 2019). Along these lines, usage and effects of trade credits are studied quite extensively as well (e.g., Carbo-Valverde et al. 2016; McGuinness & Hogan, 2016; Bussoli & Marino, 2018). Another area covers different effects of financing programs in SMEs (Briozzo & Cardone-Riportella, 2016), also in developed and developing countries (Harrison & Baldock, 2015).

Regarding the latter, a study by Piette and Zachary (2015) shows that banks perceive SMEs as presenting a higher risk during crises, which in turn explains tighter credit conditions. This, however, seems to apply mainly to SMEs which were not part of the existing corporate clientele pre-crisis. Risk perceptions can be triggered by innovative moves. In this regard Lee, Sameen, and Cowling (2015) find that innovative SMEs have more problems accessing finance during crises. They show that while financing worsened in the crisis for innovative and non-innovative SMEs, innovative firms have done relatively worse and are particularly likely to face absolute credit rationing.

3.2. Strategic Orientations and Strategy

Simón-Moya, Revuelto-Taboada, and Ribeiro-Soriano (2016) find

that ventures that are based on market opportunity have better survival chances during times of crisis than those that were started out of necessity. Opportunity based management is associated with the concept of entrepreneurial orientation (EO), which consists of the dimensions innovativeness, proactiveness and consequently the willingness to take risks (e.g., Covin & Lumpkin, 2011). Sojininen, Puumalainen, Sjögrén, and Syrjä (2012) find that SMEs with higher EO have better survival chances during and after a crisis. Whereas innovativeness and proactiveness have a positive effect on performance, risk-taking has a negative effect. However, the authors interpret risk-taking as dependency on financial investors and do not tie it to innovative and proactive moves per se. Several authors find positive performance effects of innovative or proactive postures or a combination of both in times of crisis (Le Nguyen & Kock, 2011; Vargo & Seville, 2011; Hong, Huang, & Li, 2012; Bourletidis & Triantafyllopoulos, 2014; Cioppi, Musso, Pencarelli, & Savelli, 2014; Meutia, Ismail, & Ummi, 2018; Dias et al., 2020). Petzold, Barbat, Pons, and Zins (2019) show positive effects of SMEs' market orientation (MO) during economic downturns. They analyze MO as a mix of responsive approaches that cater towards a customer's immediate needs and proactive approaches that go beyond these needs.

Several authors research how a combination of both EO and MO helps during times of crisis. Beliaeva, Shirokova, Wales, and Gafforova (2018) reveal a positive influence of EO, also because of the effect that entrepreneurial firms may observe market opportunities during crisis. At the same time, SMEs with a responsive MO, that is those intensely considering what competitors are doing and how to best address immediate customer needs, appear to experience limited gains. In consequence, the effect of MO on performance is not significant. Eggers and Kraus (2011) reveal that a combination of EO and responsive MO can lead to lean and flexible marketing efforts that are particularly valuable in times of crisis. Morris and Jones (2020) combine EO and MO into an Entrepreneurial Marketing Post-Disaster Business Recovery Framework that highlights that opportunity-seeking, resource-organizing, creating customer value and accepting risk are markedly different in a post-disaster context. Interestingly, Beliaeva et al. (2018) as well as Eggers and Kraus (2011) show that executing EO and MO are resource intensive endeavors. Along these lines, Marino, Lohrke, Hill, Weaver, and Tambunan (2008) find that higher levels of uncommitted resources help stimulate innovation in times of crisis.

EO has the potential to transform an organization in times of crisis and lead to efficient processes and operations, which in turn increase overall performance (Lekmat & Chelliah, 2011). The effects of diversification, transformational initiatives, restructuring and outsourcing are discussed in several manuscripts (Pal, Andersson, & Torstensson, 2012; Vrečko & Širec, 2013; Edvardsson & Teitsdóttir, 2015).

In addition, authors cover the effects of a manager's/entrepreneur's expertise on crisis management (Giannacourou, Kantarakis, & Christopoulou, 2015; Auzzir, Haigh, & Amaratunga, 2018). Whereas expertise helps in navigating challenging times, Cowling, Liu, and Zhang (2018) make the point that given the newness and severity of a crisis, previous entrepreneurial experiences cannot be applied. Thus, they find that entrepreneurial experience did not have any substantive effects on small business performance.

Interestingly, Simón-Moya et al. (2016) find that young firms have a

Table A1
Literature Study.

Author(s), Year	Business area	Crisis	Country	Findings
Anghele et al. 2013	Strategy	2007–08 Global Financial Crisis	Romania	Change in marketing objectives, shift of customers' focus from quality and technology to price, adaptation of the marketing mix to the current competitive environment.
Armstrong et al. 2013	Finance	2007–08 Global Financial Crisis	UK	Still in 2012, SMEs faced ongoing restrictions on the availability of bank financing. Macro data shows that economic uncertainty impacts these finance shortages.
Auzzir et al. 2018	Strategy	Variety of crises and disasters	Malaysia	Results show the impacts of natural disaster are severe for SMEs in Malaysia and flood was identified as the main natural disaster. Many of the affected SMEs failed to cope and manage the risks of natural disasters because of their limited financial capability and expertise. Business Continuity Management (BCM) could be used as disaster management approach.
Balios et al. 2016	Finance	2007–08 Global Financial Crisis	Greece	The effect of capital structure determinants on leverage does not change in an environment of economic crisis. Larger SMEs continued to show higher debt ratios, the relationship between profitability and tangibility of assets with leverage continued to be negative, and growth was positively related to leverage.
Barron et al. 2012	Strategy	2007–08 Global Financial Crisis	France, Sweden, UK	The monitoring of political initiatives by SMEs in response to the recession varied in accordance with the extent to which their countries are affected by the recession. Small business managers considered it more important, despite the international nature of the crisis, to monitor political responses in national rather than supranational political settings. SMEs across all three countries drew on similarly wide sources of information when monitoring policy responses to the crisis. SME managers in the UK relied heavily on official government sources when gathering intelligence on attempts to alleviate the recession's effects.
Beliaeva et al. 2018	Strategic Orientations	2015–16 Russian Financial Crisis	Russia	Results reveal a positive effect of entrepreneurial orientation and a non-significant effect of market orientation on performance. While financial capital availability improves performance during economic crisis, it does so most strongly when EO as opposed to MO is the firm's dominant strategic orientation. When operating during economic crisis, firms might constrain their strategic options and devote resources to less risky activities rather than resource-intensive strategic behaviors such as EO and MO.
Berg and Kirschenmann 2015	Finance	2007–08 Global Financial Crisis	Azerbaijan	Findings disentangle the effects of a funding shock from the effects of a real shock. Funding shocks work through reduced prospecting - as opposed to tightened lending standards - and leads to fewer loan applications among new applicants in particular, which improves the borrower pool. The real economy shock instead works through loan approval and affects SMEs rather than micro borrowers.
Boutetidis and Triantafyllopoulos 2014	Strategic Orientations	2007–08 Global Financial Crisis	Greece	SMEs develop alternative marketing strategies, innovative tactics and new concepts in order to survive.
Briozzo and Cardone-Riportella 2016	Finance	Variety of crises and disasters	Spain	Effects of SME financing programs differ in normal times and during economic crisis. During stable periods, these programs affect the growth of assets, sales and the sales to assets ratio. During recession, the effects extend to the growth of employment and the sales to employee ratio.
Brown and Lee 2019	Finance	2007–08 Global Financial Crisis	UK	The vast majority of high growth SMEs rely strongly on debt-based finance for their funding, not equity finance. High growth SMEs are much less likely to seek finance for working capital purposes but are no more likely to seek finance to invest in R&D than less rapidly growing SMEs.
Bussoli and Marino 2018	Finance	2007–08 Global Financial Crisis	Europe	SMEs with a high probability of insolvency use trade credit more extensively. Distressed and weaker SMEs are less able to match accounts receivable to accounts payable. Results suggest that during the financial crises, the substitution hypothesis is weakened and liquidity shocks are propagated through trade credit channels.
Carbo-Valverde et al. 2016	Finance	2007–08 Global Financial Crisis	Spain	Credit constrained SMEs depend on trade credit, but not bank loans. The intensity of this dependency increased during the financial crisis. Unconstrained firms, in contrast, are dependent on bank loans but not on trade credit.
Casey and O'Toole 2014	Finance	2007–08 Global Financial Crisis	Europe	Credit-ratified firms are more likely to use, and apply for, trade credit. This increases with firm size and age. Constrained firms are more likely to use informal lending or loans from other companies but there is no evidence that bank-constrained SMEs apply for, or use, market finance. Smaller, self-ratifying borrowers are more likely to apply for grant finance. Firms denied credit for working capital tend to turn to trade credit, while informal and inter-company lending tends to act as a substitute for bank investment loans.
Castellani 2018	Finance	2007–08 Global Financial Crisis	Italy	The less deposit-funded, less profitable and less capitalized cooperative banks are, the more likely they are to securitize and the more likely it is that they will securitize to a larger extent. Securitization has not directly affected the supply of new SME loans. There is strong evidence of a risk-rebalancing effect of securitization on the balance sheet, especially in the period 2010–2014.
Cioppi et al., 2014	Strategic Orientations	2007–08 Global Financial Crisis	Italy	Important is an SME's ability to react with proactive strategies to a crisis.
Cohen et al., 2014	Strategy	2007–08 Global Financial Crisis	Greece	SMEs' strategic position seems to affect the composition of their IC portfolio. While SMEs seem to care about their IC, they do not manage it in a coherent and strategically beneficial way.
Corazza et al., 2016	Finance	2007–08 Global Financial Crisis	Italy	A Multi-Criteria Decision Analysis (MCDA) approach is developed to evaluate the creditworthiness of SMEs. This approach is able to consider simultaneously different factors affecting the firms' solvency level. The

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Table A1 (continued)

Author(s), Year	Business area	Crisis	Country	Findings
Cornille et al., 2019	Strategy	2007–08 Global Financial Crisis	Belgium	results obtained in terms of classification into homogeneous rating classes, scoring and migration probabilities show that the proposed approach is able to unveil early signals of recession in the Italian SME sector. SMEs borrowing money from pre-crisis financially less healthy banks were significantly more likely to be affected by a credit constraint and, in turn, to adjust their labor input downwards than pre-crisis clients of more healthy banks. Credit constraints have been essentially detrimental for employment among SMEs experiencing a negative demand shock or facing strong product market competition. In terms of human resources management, credit constraints are not only found to foster employment adjustment at the extensive margin but also to increase the use of temporary layoff allowances for economic reasons. For the time period 2009–2011 an increasing trend on the average debt maturity is found. Intermediate quality firms choose to issue more long-term debt while high quality firms tend to issue more short-term debt. Smaller firms tend to use debt of shorter maturities. Firms affected by higher tax rates have longer debt maturities. Firms with more growth opportunities are using more short-term debt. Older firms and those with a higher risk rating, and a record of financial delinquency, were more likely to have a demand for external finance. The opposite was true for women-led businesses and firms with positive profits. In general finance was more readily available to older firms post-GFC, but banks were very unwilling to advance money to firms with a high-risk rating or a record of any financial delinquency. Entrepreneurial experience did not have any substantive effects on small business performance. The severity of the crisis meant that previous entrepreneurial experiences had little value in this unique and uncertain environment. However, young firms still accounted for a disproportionately high share of growth, especially among the fastest growing firms. The financial crisis has negatively affected SMEs' financial leverage, as the total debt ratio significantly declines in the sample period. Also, the financial crisis negatively impacted trade credit, given that it does not substitute for the reduction of credit from financial institutions. Finally, the impact of capital structure determinants significantly changed during and after the crisis compared to the pre-crisis levels. Compared to the pre-crisis period, profitability, profit volatility and liquidity are the main determinants of the total debt ratio during and after the crisis. Credit supply shocks negatively impacted SMEs' leverage. During and after the crisis, SMEs significantly decreased their leverage, particularly their short-term debt exposure, relative to the pre-crisis period. As a result, the short-term debt channel is more sensitive to credit conditions than the long-term debt channel. Trade credit does not compensate for the reduction in bank credit. Riskier and more profitable firms reduced their leverage more during the crisis than during the pre-crisis period. The study finds reluctance to undertake a search for external equity and shows evidence of discouraged borrowing and discouraged grant-based applications on the demand-side. The comparatively stable economic environment in New Zealand has not operated in favor of technology-based small firms. Before the crisis, banks' local financial conditions did not influence credit availability irrespective of the functional distance (i.e., the distance between bank branch and bank headquarters). However, during the crisis, SMEs with banks that have stronger financial conditions faced greater credit availability when the functional distance is close. Results point to a "flight to headquarters" effect during the financial crisis. Deleveraging and maturity reduction were particularly significant for non-listed firms, including both SMEs as well as large non-listed companies. For SMEs, these effects were larger in countries with less efficient legal systems, weaker information sharing mechanisms, less developed financial sectors, and with more restrictions on bank entry. In contrast, there is weaker evidence of a significant decline in leverage and debt maturity among listed companies which are typically much larger than other firms and likely to benefit from the "spare tire" of easier access to capital market financing. During the crisis SMEs were more objective and effective in the use of their resources and capabilities. During the crisis entrepreneurship, innovation capacity, accumulation of knowledge and partnerships have an impact on the capability of developing new products. Before the crisis only entrepreneurship and knowledge accumulation have affected this capability. The study finds a positive relation between collateral and default, and a negative relation between guarantees and default. Further, a negative relation between the joint influence of collateral and high credit score, and a positive relation between the joint influence of collateral and low credit score and default. There is a negative relation between the joint influence of guarantees and high credit score. Findings are relevant for SME policies aimed at facilitating access to credit, reducing the cost of borrowing, and decreasing default; risk
Costa et al., 2014	Finance	2007–08 Global Financial Crisis	Portugal	
Cowling et al., 2016	Finance	2007–08 Global Financial Crisis	UK	
Cowling et al., 2018	Strategy	2007–08 Global Financial Crisis	UK	
D'Amato, 2019b	Finance	2007–08 Global Financial Crisis	Italy	
D'Amato, 2019a	Finance	2007–08 Global Financial Crisis	Italy	
Deakins et al., 2015	Finance	2007–08 Global Financial Crisis	New Zealand	
Degryse et al., 2018	Finance	2007–08 Global Financial Crisis	UK	
Demirgüç-Kunt et al., 2020	Finance	2007–08 Global Financial Crisis	Global	
Dias et al., 2020	Strategic Orientations	2007–08 Global Financial Crisis	Portugal	
Duarte et al., 2018	Finance	2007–08 Global Financial Crisis	Portugal	

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Author(s), Year	Business area	Crisis	Country	Findings
Edvardsson and Teitssdóttir, 2015	Strategy	2007–08 Global Financial Crisis	Iceland	management of banks; and the application of theories of financial economics in the context of a financial crisis.
Eggers and Kraus, 2011	Strategic Orientations	2007–08 Global Financial Crisis	USA	SMEs had extended their outsourcing in almost every area of operation, such as human resource management (HRM), IT and peripheral tasks. More SMEs gave cost-reduction as a reason for outsourcing and more respondents expressed a positive experience of outsourcing. A combination of entrepreneurial orientation and customer orientation is especially valuable in times of crisis since turbulent market environments and a limited availability of financial resources favor lean and flexible marketing efforts. Combining both orientations, however, requires at least a certain amount of resources, a challenge in hard economic times.
Giannacourou et al., 2015	Strategy	2007–08 Global Financial Crisis	Greece	Financial strength and competitive advantage of companies as well as managers' perceptions regarding environmental uncertainty and expectations about the future of the crisis influence understanding and shape courses of action.
Harrison and Baldock, 2015	Finance	2007–08 Global Financial Crisis	UK	Any continued constraint in the supply of and effective demand for finance for the SME sector will have significant implications for the overall performance of economies in both developed and developing countries.
Hong et al., 2012	Strategic Orientations	Variety of crises and disasters	US and Asia	SMEs, in spite of their resource constraints and relatively weak market positions, display resilient market responsiveness. Effective crisis management of SMEs involve proactive business mindsets for sustainable growth and continuous expansions.
Kapitsinis, 2017	Institutional Environment	2007–08 Global Financial Crisis	Greece and Bulgaria	Entrepreneurs perceived firm relocation as a necessity, while, contrary to the existing literature, labor cost does not appear to have significantly influenced firm exit from Greece. Demand and access to external finance emerged as major factors. Important among elements that attracted businesspeople to Bulgaria were low taxation and geographical proximity to Greece.
Kapitsinis, 2019	Institutional Environment	2007–08 Global Financial Crisis	Greece and Bulgaria	While in the pre-crisis period many Greek businesspeople viewed relocation to Bulgaria as an entrepreneurial opportunity for firm expansion, since 2007 relocation has been perceived as a necessity for the vast majority of Greek entrepreneurs in order to stay in business. Evidence is provided for a clear division between businesspeople, managing strong, and medium-sized firms and seeking business growth and improved competitiveness, and entrepreneurs who own small, unproductive enterprises and who made efforts to maintain business without seeking quality improvement.
Kim et al., 2015	Finance	1997 Asian Financial Crisis	South Korea	Holdings of foreign-currency denominated debt negatively affected the economic performance of small firms. Small firms with more short-term foreign debt were more likely to declare bankruptcy. Conditional on surviving the crisis, small firms that had more short-term foreign debt experienced larger declines in sales.
Kremp and Sevestre, 2013	Finance	2007–08 Global Financial Crisis	France	The exit (bankruptcy) margin accounts for a large fraction of small firms' adjustment during the crisis. Despite the stronger standards used by banks when granting credit, French SMEs do not appear to have been strongly affected by credit rationing since 2008. This result goes against the common view that SMEs suffered from a strong credit restriction during the crisis.
Kudlyak and Sanchez, 2017	Finance	2007–08 Global Financial Crisis	US	Large firms' short-term debt and sales contracted relatively more than those of small firms. During 2007–09 low financially dependent firms suffered more than high financially dependent firms. These results favor the view that a tightening of a financial or collateral constraint might not be a good representation of the 2007–09 crisis.
Lawless et al., 2015	Finance	2007–08 Global Financial Crisis	Ireland	Higher debt burdens have significant negative effects on all measures of firm performance, in particular investment, employment and indicators of financial distress. The effects are greatest for sectors and enterprises most reliant on domestic demand which collapsed following the crisis. The effects are also strongest for enterprises that were in the mid-lifecycle, gearing phase, prior to the crisis.
Le Nguyen and Kock, 2011	Strategic Orientations	2007–08 Global Financial Crisis	Vietnam	In order to survive in turbulent environments, SMEs are required to quickly shift their businesses and strategic focuses, become involved in new businesses, be flexible and make innovative moves.
Lee et al., 2015	Finance	2007–08 Global Financial Crisis	UK	Innovative firms find it harder to access finance than other firms during crisis. When considering absolute credit rationing, innovative firms started at an absolute disadvantage compared to their non-innovative peers. While financing worsened in the crisis for both types of firms, innovative firms have done relatively worse in this respect and are particularly likely to face absolute credit rationing.
Lekmat and Chelliah, 2011	Strategic Orientations	1997 Asian Financial Crisis	Thailand	Environmental and organizational factors impact corporate entrepreneurship which in turn influences firm performance in terms of both financial and non-financial aspects. Significantly, non-financial performance was found to influence financial outcomes. Corporate entrepreneurship is important not only for wealth creation but also for efficient processes and operations, all of which reflect on overall performance.
Li et al., 2011	Finance	2007–08 Global Financial Crisis	Spain	The study confirms the vulnerability of the furniture and agricultural sectors to the crisis. Trends in terms of firms' cost, asset and return are identified.

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Author(s), Year	Business area	Crisis	Country	Findings
Lisboa, 2017	Finance	2007–08 Global Financial Crisis	Portugal	Size, profitability, asset structure, non-debt tax shields, growth, liquidity, and age are important determinants for explaining firms' capital structure. Export intensity and crisis effect do not impact a firm's indebtedness. Exporter SMEs hold more short-term debt, especially small-sized firms.
Marino et al., 2008	Strategic Orientations	1997 Asian Financial Crisis	Indonesia	Environmental shock type, a firm's EO, and its slack resources influence alliance intentions, although not always in ways that were consistent with previous research findings in more mature markets. The results reveal insights into emerging market firms' strategic actions, particularly related to key managerial motivations for SME alliance formation. Higher levels of uncommitted resources help stimulate innovation in firms facing declining performance, and the present results suggest these innovative behaviors may include seeking alliances following environmental shocks.
McGuinness and Hogan, 2016	Finance	2007–08 Global Financial Crisis	Ireland	Trade credit eased the burden of the financial crisis for some SMEs. The relative importance of trade credit increased for financially vulnerable SMEs that were less liquid, highly dependent on short-term bank finance, and with greater levels of intangible assets when entering the crisis. In terms of a redistribution effect, financially stronger firms extended relatively more trade credit, to financially vulnerable SMEs in the aftermath of the financial crisis. The financial position of SMEs entering the crisis was more important in determining the impact of the financial crisis on trade credit use than company characteristics of age and size.
Meutia et al., 2018	Strategic Orientations	2007–08 Global Financial Crisis	Indonesia	Proactive personality positively influences SME performance in financial crisis by improving creativity, innovation and cost cutting. Cost cutting and innovativeness ultimately improve SME performance.
Mihai-Yiannaki et al., 2012	Finance	2007–08 Global Financial Crisis	Romania and Cyprus	Usage of a balanced scorecard that models risk and crisis management shows a significant improvement of the financial performance of SMEs.
Mora and Akhter, 2012	Strategy	2007–08 Global Financial Crisis	France	Wine producers (with real estate) are more affected than merchants of diversified wineries. The wine sector seems to have better resistance than similar French SMEs outside the wine sector. Inside the wine sector, some groups had a better turn over and showed significant differences in recruitment. Four business models are revealed that were more resistant to the crisis in terms of export performance. The authors find three different marketing approaches followed by the firms under study.
Morrish and Jones, 2020	Strategic Orientations	2010 and 2011 Christchurch Earthquakes	New Zealand	The paper investigates how Entrepreneurial Marketing (EM) is enacted in post-disaster settings to facilitate speedy business recovery. An EM Post-Disaster Business Recovery Framework is developed that highlights opportunity-seeking, resource-organizing, creating customer value and accepting risk as concepts that are markedly different in the post-disaster context.
Pal et al., 2012	Strategy	2007–08 Global Financial Crisis	Sweden	The study categorizes resilient and less resilient SMEs in terms of their financial performance and identifies what strategies differentiate them. Resilient firms showed better short-term crisis management through higher operational flexibility, while the less resilient firms lacked strategic readiness. Resilient firms showed more long-term strategies through business continuity planning and growth strategies through market penetration, diversification and transformational initiatives.
Pal et al., 2013	Strategy	2007–08 Global Financial Crisis	Sweden	A crisis strategic planning framework for SMEs is developed by identifying environmental turbulences, developing leadership and capability analyses and multiple strategy development phases. The framework helps with simple strategic tools to improve responsiveness and preparedness.
Pathak and Ahmad, 2018	Institutional Environment	2011 Thailand Floods	Thailand	Inter-department miscommunication, mismanagement of available resources, and lack of transparency in the government's action plans, lack of interest to provide sustainability at the ground level and lack of transportation facilities worsened the situation in the flood affected area. The study provides recommendations to enhance sustainability among SMEs in the industrialized province of Pathumthani.
Petzold et al., 2019	Strategic Orientations	2007–08 Global Financial Crisis	Canada and France	SMEs that are confronted with an economic downturn use an MO approach that is both proactive and responsive. A moderator effect of the SME manager's perception of an economic crisis on PMO/RMO performance is revealed.
Piette and Zachary, 2015	Finance	2007–08 Global Financial Crisis	Belgium	Banks perceive SMEs as presenting a higher risk, so that they apply tighter credit conditions to this firm type. Firm-level data suggest that the increase in credit risk was mostly concentrated within a relatively small fraction of Belgian SMEs whose financial health deteriorated somewhat faster after the onset of the crisis. Belgian banks did not become more risk-averse after the onset of the crisis as far as existing lender-borrower relationships are concerned. However, they tended to favor lower risk profiles when granting loans to SMEs which were not part of their existing corporate clientele.
Pronça et al., 2014	Finance	2007–08 Global Financial Crisis	Portugal	Liquidity, asset structure and profitability are the most important determinants explaining the capital structure of Portuguese SMEs. The study finds a downward tendency on companies' debt ratio levels during the financial crisis.
Sainis et al., 2016	Strategy	2007–08 Global Financial Crisis	Greece	

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Table A1 (continued)

Author(s), Year	Business area	Crisis	Country	Findings
Serrasqueiro et al., 2018	Finance	2007–08 Global Financial Crisis	Portugal	Greek SMEs continue their quality journey giving greater emphasis on cultural dimensions. The low rates recognized for quality tools and processes implemented support the perception that ISO certified SMEs reinforce TQM implementation but not in such a level as to contribute to a 'continuous improvement' process. SME growth is stimulated by cash flow and gross domestic product and restricted by debt, firm size, age of the firm and interest rate. In the period of 2008–12, cash flow had less importance, while debt was found to have a stronger negative effect on SME growth, compared with the pre-crisis period.
Setyawan et al., 2017	Institutional Environment	Variety of crises and disasters	Indonesia	Financial institutions, local governance and SMEs are interconnected in the disaster risk management model. Each party has obligations in conducting preparedness of disaster and risk protection procedures for disaster risk management. There is still very low risk perception among SMEs.
Simón-Moya et al., 2016	Strategy	2007–08 Global Financial Crisis	Spain	New firms have a greater likelihood of surviving during crisis periods than they do during growth periods. Gaps in survival likelihood between opportunity and necessity entrepreneurship are bigger during times of crisis than they are during growth periods.
Soiminen et al., 2012	Strategic Orientations	2007–08 Global Financial Crisis	Finland	Firms with higher EO have better survival chances during a recession. Innovativeness and proactiveness have a positive effect on performance. Risk-taking, here interpreted as a dependency on financial investors, has a negative effect.
Ter Wengel and Rodriguez, 2006	Institutional Environment	1997 Asian Financial Crisis	Indonesia	Small firms with higher use of machinery and higher use of domestic inputs displayed a higher likelihood to increase the share of their output exported. SMEs show rising productivity with access and use of appropriate production inputs. Decades of protective size-specific policies, such as the reservation scheme for SMEs still in place in Indonesia's manufacturing may have distorted adoption of appropriate technologies among SMEs.
Vargo and Seville, 2011	Strategic Orientations	Variety of crises and disasters	New Zealand	To be resilient in times of crises, organizations need to navigate a set of apparent contradictions that juxtapose effective planning with adaptability to changing circumstances including: (1) have leaders able to inspire people with a sense of hope and direction whilst being grounded about the situation they are in, (2) have an organizational culture that values disciplined planning whilst fostering innovation, (3) plan and make decisions carefully and structured effectively yet be responsive and bold, and (4) have teams able to recognize patterns and integrate information to make sense of a chaotic situation, yet be alert to subtle changes as the situation evolves.
Vermoesen et al., 2013	Finance	2007–08 Global Financial Crisis	Belgium	The study finds a substantial variation in the maturity structure of long-term debt. Firms which at the start of the crisis had a larger part of their long-term debt maturing within the next year experienced a significantly larger drop in investments in 2009. This effect is driven by firms which are ex ante more likely to be financially constrained.
Vrečko and Širec, 2013	Strategy	2007–08 Global Financial Crisis	Slovenia	The study reveals seven types of restructuring projects to help SMEs navigate through crisis. A conceptual framework is proposed.
Yamori, 2015	Finance	2007–08 Global Financial Crisis	Japan	The credit guarantee system was effective in protecting the economy from collapsing. The system was so generous that most SMEs want it to remain unchanged.
Yazdanfar et al., 2019	Finance	2007–08 Global Financial Crisis	Sweden	Results indicate that the independent variables - financial crisis, profitability, size, tangibility and industry affiliation - to various degrees explain changes in short-term debt (STD) and long-term debt (LTD) ratios. The findings indicate that the sampled SMEs tended to rely more on STD and LTD during (2008–09) than after (2010–15) the financial crisis.
Zubair et al., 2020	Finance	2007–08 Global Financial Crisis	The Netherlands	Investments of private SMEs declined significantly both during and after the financial crisis. Investments become less dependent on internal finance than on external finance during the crisis period. However, the impacts of the two financing sources on firm investment during the post-crisis period do not differ. The findings suggest that borrowing from banks remained critical in determining the investments of private SMEs during the crisis.
Zwikaramba et al., 2020	Institutional Environment	Variety of crises and disasters	Global	A framework for SMEs and technologies for use in a disaster response supply chain (DRSC) is crafted. Findings show that despite their vulnerability, SMEs have a greater, active ancillary role to play today in disaster recovery than before. SMEs can now either donate material, information, finance and personnel or offer these at a price in DRSC to promote business continuity and a quick return to normalcy.

greater likelihood of surviving during crisis periods than they do during growth periods. Cowling et al. (2018) show that among all firms studied, young firms account for a disproportionately high share of growth during a crisis.

3.3. Institutional environment

Finally, a few manuscripts take a macro-economic viewpoint. These papers analyze how governments can assist SMEs during crises (Ter Wengel & Rodriguez, 2006; Pathak & Ahmad, 2018) and potential benefits of an interplay of financial institutions, local governance and SMEs (Setyawan, Isa, Wajdi, & Syamsudin, 2017; Zvikaramba, Kruglikov, Zimucha, & Chinakidzwa, 2020). Kapitsinis (2017; 2019) analyzes the effects of SME relocations during economic downturns.

4. Discussion

In general, small firms face a liability of smallness whereas crises and disasters create additional resource availability and liquidity problems for SMEs. Customers reduce or completely stop spending and financiers become more careful in terms of their investments. Some manuscripts discuss ways out of this problem, for example by using trade credits and analyzing different financing programs. At the same time, a time of crisis can create market opportunities that can best be addressed with innovative and proactive postures. An SME's potential for more flexible decision-making and closeness to its customer base is beneficial in this regard.

Several studies reveal an interconnectedness between finance and strategy, in particular EO and MO. Being innovative and creating new offerings that go beyond expressed customers' needs demands the availability of financial resources. This is either because of the higher costs associated with creating such offerings or because a limited amount of resources increases the risk perception of managers and entrepreneurs. If only a limited amount of resources is available, they might consider it even more risky to invest those into projects with an uncertain outcome. The same is true for finance institutions that seem to prefer less risky, that is less innovative investments, in times of crisis (Lee et al., 2015). The positive effects of financial resource availability on EO and ultimately firm performance has been analyzed in additional manuscripts that did not have a crisis focus (Eggers, Kraus, Hughes, Laraway, & Snycerski, 2013; Hughes, Eggers, Kraus, & Hughes, 2015). Consequently, SMEs face the dilemma that EO and MO have the potential to increase performance and help survival in times of crisis, but that crises and disasters limit the amount of resources needed to execute such strategies. For SMEs, there apparently is a *strategy/funding chicken-and-egg-problem* that calls for additional research. After all, crises can create opportunities for SMEs.

Appendix

(See Table A1)

References

- Anghel, L.-D., Constantinescu, M., & Caescu, Ş. C. (2013). Innovation within the Strategic Marketing Management of Industrial Smes as a Response to the Economic Crisis. *Transformations in Business & Economics*, 12(1), 412–428.
- Armstrong, A., Davis, E. P., Liadze, I., & Rienzo, C. (2013). An assessment of bank lending to UK SMEs in the wake of the crisis. *National Institute Economic Review*, 225(1), 39–51.
- Auzzir, Z., Haigh, R., & Amaratunga, D. (2018). Impacts of disaster to SMEs in Malaysia. *Procedia engineering*, 212, 1131–1138.
- Balios, D., Daskalakis, N., Eriotis, N., & Vasiliou, D. (2016). SMEs capital structure determinants during severe economic crisis: The case of Greece. *Cogent Economics & Finance*, 4(1), 1–11.
- Barron, A., Hultén, P., & Hudson, S. (2012). The financial crisis and the gathering of political intelligence: A cross-country comparison of SMEs in France, Sweden and the UK. *International Small Business Journal*, 30(4), 345–366.
- Beliaeva, T., Shirokova, G., Wales, W., & Gafforova, E. (2018). Benefiting from economic crisis? Strategic orientation effects, trade-offs, and configurations with resource availability on SME performance. *International Entrepreneurship and Management Journal*, 16, 165–194.
- Berg, G., & Kirschenmann, K. (2015). Funding Versus Real Economy Shock: The Impact of the 2007–09 Crisis on Small Firms' Credit Availability. *Review of Finance*, 19(3), 951–990.
- Bourletidis, K., & Triantafyllopoulos, Y. (2014). SMEs survival in time of crisis: Strategies, tactics and commercial success stories. *Procedia-Social and Behavioral Sciences*, 148, 639–644.
- Briozzo, A., & Cardone-Riportella, C. (2016). Spanish SMEs' subsidized and guaranteed credit during economic crisis: A regional perspective. *Regional Studies*, 50(3), 496–512.
- Brown, R., & Lee, N. (2019). Strapped for cash? Funding for UK high growth SMEs since the global financial crisis. *Journal of Business Research*, 99, 37–45.

The literature study points to another interesting concept that potentially is helpful for overcoming crises and disasters: Expertise. Although Cowling et al. (2018) find that a manager's expertise does not help in overcoming crises, expertise has proven to be a useful concept of overcoming situations of high uncertainty. According to Sarasvathy (2001), entrepreneurial expertise supports effectual thinking and behavior. Effectual reasoning tries to overcome highly uncertain situations by applying five principles. These principles forego any planning attempts that try to predict the future. Instead, they suggest that working in the present with currently available means will create some sort of future for the organization. This is supported by only investing limited amounts of resources in a trial-and-error style to figure out the best course of action, working closely with partners and having a mindset that turns negative outcomes into something positive for the company. Applying the concept of effectuation to managing the outcomes of crises and disasters seems to be a fruitful avenue for future research.

Although Simón-Moya et al. (2016) and Cowling et al. (2018) found positive effects for startups in economic downturns, no additional manuscripts were found that deal with new firms. This is not surprising, given the search criteria used in the literature study. The same applies to another firm type that is often discussed in SME research: the family firm. Family firms are organizations where the majority of the capital is held by several members of a family, which intends to hold this for more than one generation, and which controls the management of the company irrespective of a family member or an external being the CEO of the company (Rößl, Fink, & Kraus, 2010). Research has shown that family firms often behave differently than non-family firms. Compared to non-family firms, family firms are typically more long-term oriented and less risk-taking, that is more conservative and less focused on growth (Habbershon, Williams, & MacMillan, 2003; Lubatkin, Ling, & Schulze, 2007; Xi, Kraus, Filser, & Kellermanns, 2015). Although there is research available how startups and family firms react to crises (e.g., D'Aurizio, Oliviero, & Romano, 2015), additional studies are needed that investigate special challenges of and according reactions to the current COVID-19 crisis.

Currently, articles published in the popular press or on social media discuss how the COVID-19 crisis will change the way we live and work (e.g., Sullivan, 2020). This change will be largely driven by small and medium sized organizations (either for or non-for-profit) that create innovative solutions for problems in their environment (US Small Business Administration 2019). These problems were either created by the COVID-19 crisis or even made this crisis possible, for example through the overpopulation in areas or the destruction of natural resources. Representing more than 99% of all companies, SMEs have a special role in the macro environment when it comes to creating a path forward.

- Bussoli, C., & Marino, F. (2018). Trade credit in times of crisis: Evidence from European SMEs. *Journal of Small Business and Enterprise Development*, 25(2), 277–293.
- Carbo-Valverde, S., Rodriguez-Fernandez, F., & Udell, G. F. (2016). Trade credit, the financial crisis, and SME access to finance. *Journal of Money, Credit and Banking*, 48(1), 113–143.
- Casey, E., & O'Toole, C. M. (2014). Bank lending constraints, trade credit and alternative financing during the financial crisis: Evidence from European SMEs. *Journal of Corporate Finance*, 27, 173–193.
- Castellani, D. (2018). Mortgage-backed Securitization and SME Lending During the Financial and Economic Crisis: Evidence from the Italian Cooperative Banking System. *Economic Notes: Review of Banking, Finance and Monetary Economics*, 47(1), 187–222.
- Cioppi, M., Musso, F., Pencarelli, T., & Savelli, E. (2014). Economic Crisis and SMEs' Behavior: An Analysis on the Furniture Sector in Italy. *International Journal of Economic Behavior*, 4(1), 115–126.
- Cohen, S., Naoum, V.-C., & Vlismas, O. (2014). Intellectual capital, strategy and financial crisis from a SMEs perspective. *Journal of Intellectual Capital*, 15(2), 294–315.
- Corazza, M., Funari, S., & Gusso, R. (2016). Creditworthiness evaluation of Italian SMEs at the beginning of the 2007–2008 crisis: An MCDA approach. *The North American Journal of Economics and Finance*, 38, 1–26.
- Cornille, D., Rycx, F., & Tojerow, I. (2019). Heterogeneous effects of credit constraints on SMEs' employment: Evidence from the European sovereign debt crisis. *Journal of Financial Stability*, 41, 1–13.
- Costa, S., Laureano, L. M., & Laureano, R. M. (2014). The debt maturity of Portuguese SMEs: The aftermath of the 2008 financial crisis. *Procedia-Social and Behavioral Sciences*, 150, 172–181.
- Covin, J. G., & Lumpkin, G. T. (2011). Entrepreneurial Orientation Theory and Research: Reflections on a Needed Construct. *Entrepreneurship Theory and Practice*, 35(5), 855–872.
- Cowling, M., Liu, W., & Zhang, N. (2016). Access to bank finance for UK SMEs in the wake of the recent financial crisis. *International Journal of Entrepreneurial Behavior & Research*, 22(6), 903–932.
- Cowling, M., Liu, W., & Zhang, N. (2018). Did firm age, experience, and access to finance count? SME performance after the global financial crisis. *Journal of Evolutionary Economics*, 28(1), 77–100.
- D'Aurizio, L., Oliviero, T., & Romano, L. (2015). Family firms, soft information and bank lending in a financial crisis. *Journal of Corporate Finance*, 33, 279–292.
- D'Amato, A. (2019a). Capital structure, debt maturity, and financial crisis: Empirical evidence from SMEs. *Small Business Economics* in press.
- D'Amato, A. (2019b). How did the global financial crisis impact the determinants of SMEs' capital structure? *International Journal of Globalisation and Small Business*, 10(3), 210–232.
- Deakins, D., North, D., & Bensemann, J. (2015). Paradise lost? The case of technology-based small firms in New Zealand in the post-global financial crisis economic environment. *Venture Capital*, 17(1–2), 129–150.
- Degrise, H., Matthews, K., & Zhao, T. (2018). SMEs and access to bank credit: Evidence on the regional propagation of the financial crisis in the UK. *Journal of Financial Stability*, 38, 53–70.
- Demirgüç-Kunt, A., Peria, M. S. M., & Tresselt, T. (2020). The global financial crisis and the capital structure of firms: Was the impact more severe among SMEs and non-listed firms? *Journal of Corporate Finance* in press.
- Dias, Á., Manuel, E. C., Dutschke, G., Pereira, L. F., Pereira, L., Dias, Á., ... Dutschke, G. (2020). Economic crisis effects on SME dynamic capabilities. *International Journal of Learning and Change* in press.
- Duarte, F. D., Gama, A. P. M., & Gulamhussen, M. A. (2018). Defaults in bank loans to SMEs during the financial crisis. *Small Business Economics*, 51(3), 591–608.
- Edvardsson, I. R., & Teitsdóttir, U. D. (2015). Outsourcing and financial crisis: Evidence from Icelandic service SMEs. *Employee Relations*, 37(1), 30–47.
- Eggers, F., Hansen, D. J., & Davis, A. E. (2012). Examining the relationship between customer and entrepreneurial orientation on nascent firms' marketing strategy. *International Entrepreneurship and Management Journal*, 8(2), 203–222.
- Eggers, F., & Kraus, S. (2011). Growing young SMEs in hard economic times: The impact of entrepreneurial and customer orientations—a qualitative study from Silicon Valley. *Journal of Small Business & Entrepreneurship*, 24(1), 99–111.
- Eggers, F., Kraus, S., Hughes, M., Laraway, S., & Snyckerski, S. (2013). Implications of customer and entrepreneurial orientations for SME growth. *Management Decision*, 51(3), 524–546.
- Emma, C., Scholtes, J. (2020). Here's what's in the \$2 trillion stimulus package - and what's next. Retrieved from <https://www.politico.com/news/2020/03/25/whats-in-stimulus-package-coronavirus-149282> (April 29, 2020).
- Freeman, J., Carroll, G. R., & Hannan, M. T. (1983). The Liability of Newness: Age Dependence in Organizational Death Rates. *American Sociological Review*, 48(5), 692–710.
- Giannacourou, M., Kantarakis, M., & Christopoulou, V. (2015). The perception of crisis by Greek SMEs and its impact on managerial practices. *Procedia-Social and Behavioral Sciences*, 175, 546–551.
- Habbershon, T. G., Williams, M., & MacMillan, I. (2003). A Unified systems perspective of family firm performance. *Journal of Business Venturing*, 18(4), 451–465.
- Harrison, R. T., & Baldock, R. (2015). Financing SME growth in the UK: Meeting the challenges after the global financial crisis. *Venture Capital*, 17(1–2), 1–6.
- Hong, P., Huang, C., & Li, B. (2012). Crisis management for SMEs: Insights from a multiple-case study. *International Journal of Business Excellence*, 5(5), 535–553.
- Hughes, M., Eggers, F., Kraus, S., & Hughes, P. (2015). The relevance of slack resource availability and networking effectiveness for entrepreneurial orientation. *International Journal of Entrepreneurship and Small Business*, 26(1), 116–138.
- Kapitsinis, N. (2017). Firm relocation in times of economic crisis: Evidence from Greek small and medium enterprises' movement to Bulgaria, 2007–2014. *European Planning Studies*, 25(4), 703–725.
- Kapitsinis, N. (2019). The impact of economic crisis on firm relocation: Greek SME movement to Bulgaria and its effects on business performance. *GeoJournal*, 84(2), 321–343.
- Kim, Y. J., Tesar, L. L., & Zhang, J. (2015). The impact of foreign liabilities on small firms: Firm-level evidence from the Korean crisis. *Journal of International Economics*, 97(2), 209–230.
- Kremp, E., & Sevestre, P. (2013). Did the crisis induce credit rationing for French SMEs? *Journal of Banking & Finance*, 37(10), 3757–3772.
- Kudlyak, M., & Sanchez, J. M. (2017). Revisiting the behavior of small and large firms during the 2008 financial crisis. *Journal of Economic Dynamics and Control*, 77, 48–69.
- Lambert, L. (2020). Real unemployment rate soars past 20% - and the U.S. has now lost 26.5 million jobs. Retrieved from <https://fortune.com/2020/04/23/us-unemployment-rate-numbers-claims-this-week-total-job-losses-april-23-2020-benefits-claims> (April 29, 2020).
- Lawless, M., O'Connell, B., & O'Toole, C. (2015). SME recovery following a financial crisis: Does debt overhang matter? *Journal of Financial Stability*, 19, 45–59.
- Le Nguyen, H., & Kock, S. (2011). Managing SMEs' survival from financial crisis in a transition economy: A Chaos Theory approach. *Journal of General Management*, 37(1), 31–45.
- Lee, N., Sameen, H., & Cowling, M. (2015). Access to finance for innovative SMEs since the financial crisis. *Research Policy*, 44(2), 370–380.
- Lekmat, L., & Chelliah, J. (2011). Surviving the next economic crisis: Corporate entrepreneurship strategies of Thai Automotive SMEs. *Journal of International Management Studies*, 6(3), 18–35.
- Li, X., Segarra Roca, P., & Papaioannou, E. (2011). SMEs' responses to the financial and economic crisis and policy implications: An analysis of agricultural and furniture sectors in Catalonia. *Spain. Policy Studies*, 32(4), 397–412.
- Lisboa, I. (2017). Capital structure of exporter SMEs during the financial crisis: Evidence from Portugal. *European Journal of Management Studies*, 22(1), 25–49.
- Lubatkin, M. H., Ling, Y., & Schulze, W. S. (2007). An Organizational Justice-Based View of Self-Control and Agency Costs in Family Firms. *Journal of Management Studies*, 44(6), 955–971.
- Marino, L. D., Lohrke, F. T., Hill, J. S., Weaver, K. M., & Tambunan, T. (2008). Environmental shocks and SME alliance formation intentions in an emerging economy: Evidence from the Asian financial crisis in Indonesia. *Entrepreneurship Theory and Practice*, 32(1), 157–183.
- McGuinness, G., & Hogan, T. (2016). Bank credit and trade credit: Evidence from SMEs over the financial crisis. *International Small Business Journal*, 34(4), 412–445.
- Meutia, M., Ismail, T., & Ummi, N. (2018). Leadership issue and SME performance during crisis. *International Journal of Civil Engineering and Technology*, 9(4), 424–435.
- Mihai-Yiannaki, S., Stokes, P., & Yiannaki, S. M. (2012). A systemic risk management model for SMEs under financial crisis. *International Journal of Organizational Analysis*, 20(4), 406–422.
- Mora, P., & Akhter, M. (2012). Why and how some wine SMEs resist to the crisis? *International Journal of Business and Globalisation*, 8(1), 95–111.
- Morrish, S. C., & Jones, R. (2020). Post-disaster business recovery: An entrepreneurial marketing perspective. *Journal of Business Research*, 113, 83–92.
- OECD (2005). OECD SME and Entrepreneurship Outlook: 2005. Retrieved from <https://stats.oecd.org/glossary/detail.asp?ID=3123> (April 29, 2020).
- Pal, R., Andersson, R., & Torstensson, H. (2012). Organisational resilience through crisis strategic planning: A study of Swedish textile SMEs in financial crises of 2007–2011. *International Journal of Decision Sciences, Risk and Management*, 4(3–4), 314–341.
- Pal, R., Westerlind, R., & Torstensson, H. (2013). Exploring the resilience development process by implementing the crisis strategic planning framework: A Swedish textile SME perspective. *International Journal of Decision Sciences, Risk and Management*, 5(1), 1–34.
- Pathak, S., & Ahmad, M. (2018). Role of government in flood disaster recovery for SMEs in Pathumthani province. *Thailand. Natural Hazards*, 93(2), 957–966.
- Petzold, S., Barbat, V., Pons, F., & Zins, M. (2019). Impact of responsive and proactive market orientation on SME performance: The moderating role of economic crisis perception. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 36(4), 459–472.
- Piette, C., & Zachary, M.-D. (2015). Sensitivity to the crisis of SME financing in Belgium. *Economic Review*, 3, 31–45.
- Proença, P., Laureano, R. M., & Laureano, L. M. (2014). Determinants of capital structure and the 2008 financial crisis: Evidence from Portuguese SMEs. *Procedia-Social and Behavioral Sciences*, 150(1), 182–191.
- Reinicke, C. (2020). Goldman Sachs now says US GDP will shrink 24% next quarter amid the coronavirus pandemic - which would be 2.5 times bigger than any decline in history. Retrieved from <https://markets.businessinsider.com/news/stocks/us-gdp-drop-record-2q-amid-coronavirus-recession-goldman-sachs-2020-3-1029018308> (April 29, 2020).
- Riley, C. (2020). Europe has a rescue package. But who's going to pay for its coronavirus recovery? Retrieved from <https://www.cnn.com/2020/04/10/business/europe-coronavirus-stimulus/index.html> (April 29, 2020).
- Röbl, D., Fink, M., & Kraus, S. (2010). Are family firms fit for innovation? Towards an agenda for empirical research. *International Journal of Entrepreneurial Venturing*, 2(3–4), 366–380.
- Sainis, G., Haritos, G., Kriemadis, A., & Fowler, M. (2016). The willingness of ISO certified Greek SMEs to continue their quality journey to TQM under crisis conditions: A systemic approach. *International Journal of Applied Systemic Studies*, 6(4), 327–348.
- Sarasvathy, S. D. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, 26(2), 243–263.

- Serrasqueiro, Z., Leitão, J., Smallbone, D. (2018). Small-and medium-sized enterprises (SME) growth and financing sources: Before and after the financial crisis. *Journal of Management and Organization*, in press.
- Setyawan, A. A., Isa, M., Wajdi, F., & Syamsudin, S. (2017). Disaster as business Risk in SME: An exploratory study. *International Journal of Research in Business and Social Science*, 6(6), 52–63.
- Simón-Moya, V., Revuelto-Taboada, L., & Ribeiro-Soriano, D. (2016). Influence of economic crisis on new SME survival: Reality or fiction? *Entrepreneurship & Regional Development*, 28(1–2), 157–176.
- Soininen, J., Puumalainen, K., Sjögrén, H., & Syrjä, P. (2012). The impact of global economic crisis on SMEs: Does entrepreneurial orientation matter? *Management Research Review*, 35(10), 927–944.
- Stinchcombe, A. L. (1965). Social structure and Organizations. In J. G. March (Ed.), *Handbook of organizations* (pp. 142–193). Chicago: Rand McNally.
- Sullivan, M. (2020). All the things COVID-19 will change forever, according to 30 top experts. Retrieved from <https://www.fastcompany.com/90486053/all-the-things-covid-19-will-change-forever-according-to-30-top-experts> (April 29, 2020).
- Ter Wengel, J., & Rodriguez, E. (2006). SME export performance in Indonesia after the crisis. *Small Business Economics*, 26(1), 25–37.
- US Small Business Administration (2012). Small Business GDP: Update 2002-2010. Retrieved from www.sba.gov/advocacy/7540/42371 (April 29, 2020).
- US Small Business Administration (2019). Small Businesses Generate 44 Percent Of U.S. Economic Activity. Retrieved from <https://advocacy.sba.gov/2019/01/30/small-businesses-generate-44-percent-of-u-s-economic-activity/> (April 29, 2020).
- Vargo, J., & Seville, E. (2011). Crisis strategic planning for SMEs: Finding the silver lining. *International Journal of Production Research*, 49(18), 5619–5635.
- Vermoesen, V., Deloof, M., & Laveren, E. (2013). Long-term debt maturity and financing constraints of SMEs during the global financial crisis. *Small Business Economics*, 41(2), 433–448.
- Vrečko, I., & Širec, K. (2013). Managing crisis of SMEs with restructuring projects. *Business Management Dynamics*, 2(8), 54–62.
- Xi, J. M., Kraus, S., Filser, M., & Kellermanns, F. W. (2015). Mapping the field of family business research: Past trends and future directions. *International Entrepreneurship and Management Journal*, 11(1), 113–132.
- Yamori, N. (2015). Japanese SMEs and the credit guarantee system after the global financial crisis. *Cogent Economics & Finance*, 3(1), 1–18.
- Yazdanfar, D., Öhman, P., & Homayoun, S. (2019). Financial crisis and SME capital structure: Swedish empirical evidence. *Journal of Economic Studies*, 46(4), 925–941.
- Zubair, S., Kabir, R., & Huang, X. (2020). Does the financial crisis change the effect of financing on investment? Evidence from private SMEs. *Journal of Business Research*, 110, 456–463.
- Zvikaramba, A., Kruglikov, S. V., Zimucha, T., & Chinakidzwa, M. (2020). Disaster response supply chain in a city: The role of SMEs. *International Journal of Supply Chain and Operations Resilience*, 4(1), 85–101.

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