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# Crisis Management Practices in Tourism SMEs During COVID-19 - An Integrated Model Based on SMEs and Managers' Characteristics

## Abstract

This study examines the influence of tourism micro, small, and medium-sized enterprises' (SMEs) business characteristics and liquidity and their managers' demographic characteristics and expectations for assistance regarding crisis management practices (CMP) during the COVID-19 pandemic. The survey was conducted in the Republic of Slovenia, where the majority of businesses are classified as SMEs. This study focuses on tourist agencies, lodging, and food and beverage facilities. Overall, 572 valid online questionnaires have been obtained from SME managers. The research model included five research constructs: CMPs, SMEs business characteristics, liquidity, managers' demographic characteristics, and their expectations for assistance. Results show that managers primarily rely on labour CMPs; liquidity, assistance from stakeholders, and governmental aid in dealing with the crisis. Results also indicate that SMEs' business characteristics, managers' demographic characteristics, and liquidity do not influence CMPs. The amount of provided governmental aid positively influences managers' expectations for assistance from other stakeholders of the business ecosystem, while the amount of SMEs' liquid assets negatively influences managers' expectations for governmental aid. The use of selected indicators enables an internationally comparable benchmarking process and facilitates the improvement of crisis management in tourism SMEs. The conclusion provides recommendations and useful information for researchers, policymakers, and managers.

**Keywords:** COVID-19, crisis management, managers, SMEs, tourism, Slovenia

## 1. Introduction

In January 2020, the World Health Organisation (WHO) declared the outbreak of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which led to the spread of the COVID-19 disease and a global pandemic (World Health Organization, 2020). To limit the advancement of the virus, governments worldwide implemented various restrictions, which have transformed the globally connected world into a 'stay at home' economy. In light of these events, the impact of the pandemic has resulted in a global economic crisis, with much worse impacts than those of the previous global financial crisis (GFC) of 2008 (Nummela et al., 2020).

The present crisis has revealed the vulnerability of the global economic system. Many economies have been devastated, as they heavily relied on international markets. In particular, the tourism sector has suffered from this restriction. According to United Nations World Tourism Organization (UNWTO), in 2020, the global tourism industry faced reductions of activity up to 78% in comparison to 2019, leading to a potential loss of US \$1.2 trillion in international tourism receipts (World Tourism Organization, 2020).

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The global tourism industry is mostly composed of micro, small, and medium-sized enterprises (SMEs). According to UNWTO, SMEs represent around 80% of all tourism businesses globally. In the EU, SMEs represent 99% of all business entities (European Commission, 2020). Similarly, in Slovenia, SMEs constitute 98.8% of all business entities (Statistical office of the Republic of Slovenia, 2018). The ongoing crisis has severely hampered SMEs' operations, as they are highly dependent on their daily sales, which have been adversely affected by the pandemics (Shafi et al., 2020). Although SMEs are the business entities most affected by the crisis, they are also important stimulants for future economic recovery (Portuguez & Gómez, 2021). SMEs' importance for the global economy has triggered an unprecedented range of government aid programmes. In March 2020, the EU Commission issued the Temporary Framework to Support the EU Economy in the context of the coronavirus outbreak. Based on this legal basis, EU Member States can implement supportive measures to their most affected economic sectors (European Commission, 2020). Following the EU guidelines on state aid measures, the government of the Republic of Slovenia has issued eight stimulus aid packages with a special focus on supporting the tourism sector. The tourism sector in Slovenia is expecting to face a decline in tourist overnights up to 60% in comparison to 2019 (Statistical office of the Republic of Slovenia, 2020).

Apart from the laudable governmental support for SMEs, Thams et al. (2020) state that SMEs can accelerate their resilience and recovery process by implementing a crisis management plan. This study focuses on operational crisis management practices (CMPs) implemented by tourism SMEs after their reopening in the summer of 2020 (the first epidemic wave).

The theory of crisis management offers different guidelines on how to cope with the various crises situations. However, the 2020 health-related crisis concept is novel in modern history (Fernandes, 2020), as all prior crises in the last century were caused either by environmental hazards, financial issues, political instability, war conflicts, or terrorist acts. Given the fast and ongoing disease development, much of the research is still under construction, and the number of studies focusing specifically on tourism SMEs is still relatively scarce (Kukanja et al., 2020).

In our literature review, we found no empirical studies investigating CMPs in tourism SMEs in relation to basic SMEs' and managers' characteristics, although based on the literature review, we might assume that SMEs' business characteristics (Cowling et al., 2020), their liquidity assets (Thorgren & Williams, 2020), managers' demographic characteristics (Portuguez & Gómez, 2021), and their expectations for assistance (Juergensen et al., 2020) influence SMEs' implementation of different CMPs (Radwan, 2017) during the COVID-19 pandemic. To fill this gap, the main purpose of this study was to empirically investigate how the different factors related to SMEs and managers' characteristics influenced SMEs' crisis management behaviour. The specific objectives of this study were to: (1) determine if SMEs' business characteristics and (2) the amount of SMEs liquidity assets influence the implementation of CMPs, and to establish whether (3) managers' demographic characteristics and (4) their expectations for assistance influence CMPs in tourism SMEs (see Figure 1).

This paper is based on a mixed methodological approach. First, the literature reviewed was summarised to understand the theoretical background of the study. Next, a research instrument was developed, and primary data were collected using an online questionnaire. Exploratory (EFA) and confirmatory (CFA) factor analyses were performed to investigate the usage of CMPs, and structural modelling of equations (SEM) was applied to investigate the relationships among the observed variables. In the conclusion, suggestions for future research and information for practitioners and policymakers are provided.

## 2. Literature review

### 2.1. Crisis management

In the literature, many definitions of ‘crisis’ have been proposed. For example, Williams et al. (2017) defined a crisis as a process that can culminate in an event that disrupts a firm’s normal functioning, while according to Doern et al. (2019), the concept of crisis is mainly related to an unexpected, unpredictable, and extreme event that requires the response from the organization. Based on the cause, crises are most often classified as economic, environmental, geopolitical, social, or technological (Portuguez & Gómez, 2021).

Consequently, different crisis situations demand different approaches to crisis management. Crisis management is a process by which an organization copes with an unpredictable and destructive occurrence that threatens to damage the organization and/or its stakeholders. In this view, McCool (2012) suggested three sets of steps that are essential to the survival of a company in times of crisis: pre-crisis preparation, a rapid response during the crisis, and a post-crisis recovery plan. According to Alonso-Almeida et al. (2015), the definition of crisis management consists of three areas: crisis identifications, responsive actions, and proactive strategies. Kukanja et al. (2020) report that, in practice, crisis management most often consists of a mix of different proactive and reactive approaches.

Tourism crises are most frequently triggered by external factors and may contribute to further crises situations. At this point, it is difficult to foresee the progress of any further situations, since there is no direct (health-related) historical benchmark that can be used explicitly to predict the development of future events. Because the current crisis does not emanate directly from the financial sector, as the GFC did, finding solutions will be significantly more challenging. Nevertheless, appropriate recovery and resilience approaches will have to be based on experience, lessons, and knowledge gained from previous scenarios (CMPs during the GFC are presented in subchapter 1.5). However, it is relatively difficult to compare the various crisis situations.

### 2.2. SMEs characteristics and CMPs

SMEs face a liability of ‘smallness’, as they possess fewer resources in comparison to large enterprises, which makes them more vulnerable to different shocks. Moreover, new SMEs suffer from the liability of ‘newness’ because they lack experience and established partnerships. SMEs have also disadvantages in terms of external restrictions such as access to capital markets and internal restrictions, such as management expertise and limitations on the development of financial resources (Kottika et al., 2020). Overall, SMEs are generally less resilient to crises than large firms, meaning that they take longer (if at all) to return to their daily operations (Juergensen et al., 2020). Despite these liabilities, SMEs also possess characteristics that might help them in crisis situations. Paradoxically, the liability of smallness might also present an advantage, as SMEs tend to be more flexible and innovative, have flat organizational structures, and have a personal relationship with their stakeholders (Eggers, 2020).

In the context of tourism SMEs, crises are specific to the tourism sector, which amplifies the impact of crises on SMEs. These characteristics are related to the specifics of the tourism industry, such as labour intensive-ness, the prevailing percentage of family-owned SMEs, the seasonality of demand, low-profit margins, and the multiplying effects of tourism on other sectors of the economy (Bulin & Tenie, 2020). Therefore, governmental support is crucial for preventing tourism SMEs from bankrupting (Al-Fadly, 2020).

### 2.3. Governmental support to SMEs

In contrast to the GFC, SMEs have become the centre of EU policy attention in the present crisis (Fernandes, 2020). EU governments immediately supported SMEs through different interventions. Specifically, these

measures included wage support schemes and financial interventions that enabled SMEs to postpone their payments and offered new finance lines to protect SMEs liquidity (Organisation for Economic Co-operation and Development [OECD], 2020).

In the case of Slovenia, important state measures included covering employees' wages and taxes, state purchase of receivables from domestic providers, favourable national loans, deferral of payment of taxes, and issuing vouchers to all Slovenian citizens in order to stimulate domestic tourism consumption (Slovenian Government Communication Office, 2020).

## 2.4. SMEs during the COVID-19 pandemic

The impact of the pandemic on the economy remains under investigation. At the time of preparing this manuscript, only a few studies (presented below) had investigated the influence of the pandemic in relation to the tourism SME segment.

Alves et al. (2020) conducted a qualitative analysis of Chinese SMEs and found that the crisis had the strongest effect on the smallest businesses. This finding was also supported by (Portuguez & Gómez, 2021). In terms of market and productions disruptions, Lu et al. (2020) found that most SMEs were unable to resume work because of a shortage of materials, the inability of employees to return to work, disrupted supply chains, and reduced demand. Moreover, due to high fixed costs, many SMEs were facing serious liquidity problems. Liquidity was also emphasized in the study by Senz (2020), who reported that 65% of US SMEs had financial resources only for up to four months. Similarly, Cowling et al. (2020) found that more than 60% of SMEs in the UK had not retained any cash holdings for times of crisis.

In terms of CMPs, Alves et al. (2020) reported that Chinese SMEs mainly adopted flexible human resources practices, while other survival strategies included product diversification, market research, and increased learning. In their study, Duarte Alonso et al. (2020) found that key ways of coping consisted of three steps: preparing for the new regime and applying for aid, self-reliance, and the inoperative dimension (discontinued operations and waiting for protocols). In the case of Swedish SMEs, Thorgren and Williams (2020) found that SMEs immediately deferred investments, applied for funded work allowances, reduced expenses, renegotiated contracts, and reduced stock. Shafi et al. (2020) reported that the majority of Pakistan SMEs choose to lay off employees, reduce salaries, and limit their business operations. Practices focusing on labour-related CMPs were also reported by Kukanja et al. (2020). According to Portuguez and Gómez (2021), it is vital for SMEs to adjust their marketing strategies, especially by focusing on their main competencies and offering high-quality products.

The implementation of CMPs in SMEs is mainly based upon the manager's decision. In this view, Varelas and Apostolopoulos (2020) reported that a large percentage of Greek tourism SMEs were completely unaware of crisis management approaches. According to Nummela et al. (2020), entrepreneurs have simply entered into a 'survival mode' and are doing their best to secure the continuity of their businesses. Overall, SMEs had not experienced a global crisis such as the COVID-19 before. Therefore, from the research perspective, we can only base our observations on knowledge gained in previous research.

## 2.5. CMPs during the GFC

During the GFC, SMEs experienced a sharp decline in demands and financial distress. Kimes (2009) reported that revenue managers pointed to the difficulty in maintaining pricing positioning because of the sudden drop in demand. This is critical because a substantial reduction in rates could have a destructive long-term effect on a firm's performance after the crisis. Alonso-Almeida and Bremser (2013) suggested that tourism firms should create a loyal customer base to overcome this situation.

Another commonly reported CMP during the GFC was cost reduction. Due to the labour intensiveness of the tourism industry, reductions in the labour force are common practices (Smallbone et al., 2012). Alonso-Almeida and Bremser (2013) reported that excessive cost-cutting measures characterized the worst performers during the GFC in Spain. In this view, Kottika et al. (2020) also found that Greek SMEs that survived the GFC implemented image and quality improvement rather than a blindly cost-cutting approach.

In terms of marketing-related CMPs, Kukanja and Planinc (2013) found that restaurant managers in Slovenia increased the number of their marketing activities to minimize the impact of the crisis. Similarly, Campiranon and Scott (2014) identified key success factors for crisis recovery management in Thai hotels, such as the creation of a crisis management strategy, market segmentation, intensive promotion, and staff management plan. Radwan (2017) examined how hotel managers in Egypt mitigated the influence of the GFC and proposed a list of 32 CMPs, focusing on four dimensions: marketing, cost control, human resources, and support by responsible bodies. Similarly, Kottika et al. (2020) reported that the reasons that led to the survival of Greek SMEs during GFC consisted of a mix of operational CMPs.

## 2.6. Research questions and theoretical relationship model

While previous studies provided empirical support for many indicators included in our research model, none of them attempted to integrate the specifics of tourism SMEs' and managers' characteristics to CMPs into a comprehensive research model. Based on the research model presented in Figure 1, we formulated the following RQs:

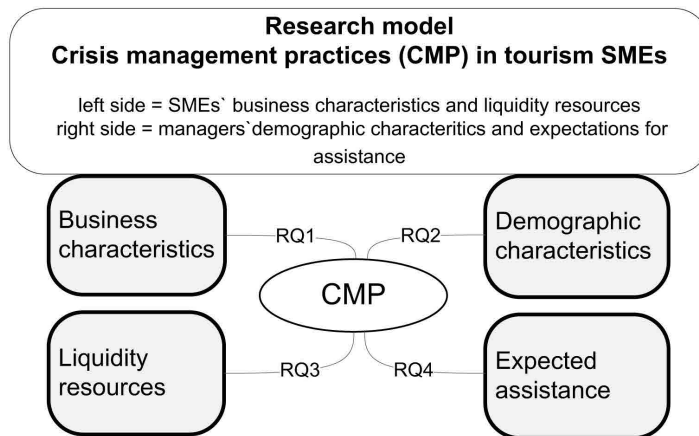
RQ1: Cowling et al. (2020) reported that smaller, younger, and more agile SMEs coped with GFC better than bigger and more established SMEs did. Moreover, according to Juergensen et al. (2020), the present crisis will have substantially varying effects across different industries and types of SMEs. Differences in SMEs' response to the crisis were also reported by Kukanja et al. (2020). Accordingly, we posed RQ1: Do tourism SMEs' business characteristics have a statistically significant influence on the implementation of CMPs?

RQ2: According to Etemad (2020), managers had not learned fully from the past, although Portuguez and Gómez (2021) critically note that various crises require different responses. Previous research (Orens & Reheul, 2013; Portuguez & Gómez, 2021) indicates that managers' characteristics influence actions to manage the crisis. While there are boundless practices, according to Amankwah-Amoah et al. (2021), crisis management research should focus on those factors that might aid in coping SMEs with the present situation. Based on these assumptions, we formulated RQ2: Do managers' demographic characteristics influence CMPs in tourism SMEs during the pandemic?

RQ3: Results of studies presented in the literature review indicate that during both crises (GFC and COVID-19), liquidity was one of the biggest problems for SMEs. Interestingly, no empirical findings related to the importance of liquidity for the selection of CMPs in tourism SMEs were found. Accordingly, we formulated RQ3: Is there a statistically significant correlation between the amount of SMEs' liquidity assets and the implementation of CMPs?

RQ4: Previous research indicates that managers develop different relationships with institutions and other actors of the business ecosystem. Radwan (2017) reported that managers relied on governmental support and collaboration with other stakeholders during the GFC hotel. SMEs collaboration with other providers was also reported by Kukanja et al. (2020), while Juergensen et al. (2020) emphasized the importance of the EU policy mix to support SMEs. Based on previous research, we formulated RQ4: Is there a statistically significant correlation between managers' expectations for external support and the implementation of CMPs in tourism SMEs?

**Figure 1**  
**Research model of the study**



Source: Authors' own research.

### 3. Methodology

#### 3.1. Research process and instrument design

This study was designed as exploratory quantitative research applying an online questionnaire. In the planning stage, we reviewed recent literature related to CMPs. To carry out the research process for articles, we defined the relevant keywords for the study 'crisis management', 'tourism', 'COVID', and 'SME'. We performed searches in the best-known academic databases. Initially, more than 2,000 works were identified. Only peer-reviewed, empirical studies published in English, issued after 2010, related to our RQs were selected to narrow the search context.

Next, a structured questionnaire was pre-designed by using scales and variables used in previous research: SMEs' characteristics (Cowling et al., 2020); managers' characteristics (Orens & Reheul, 2013); finance-liquidity (Thorgren & Williams, 2020); expectations from different stakeholders of the business ecosystem and expectations regarding the type of assistance provided (Juergensen et al., 2020); and CMPs (Radwan, 2017). A relevant pre-testing took place with ten entrepreneurs and scholars that helped us refine the instrument in terms of comprehensibility. Accordingly, the questionnaire was composed of two parts. The first part captured information about SMEs' business characteristics (type of business; age of business activity, number of employees, proportion of domestic and foreign guests); managers' demographic characteristics (gender, age, years of experience, level of education); and liquidity (financial resources for covering fixed costs, wages, and taxes in months). All indicators included in the first part (11 items) were measured as open-ended questions.

In the second part, respondents had to rate which CMPs they implemented as a direct response to the crisis (27 items), indicate which form of assistance they expect to receive (12 items), and indicate from whom they expect to receive assistance (3 items). The construct 'external support' was measured on two scales: expected forms of assistance and expectations from different types of stakeholders. All indicators included in the second part ranged from 1 (not used/no expectations) to 5 (extensively used/very-high expectations) on a five-point Likert-type ordinal scale (see Table 1).

#### 3.2. Sample description and data analyses

The sampling unit of this survey was SME managers operating in the field of tourism in the Republic of Slovenia. SMEs' data were obtained from the official business register. In June 2020, 13,258 enterprises (N) were registered as tourism SMEs, of which the vast majority were registered as Food and Beverage - F&B (63.46%), followed

by Lodging Facilities - LF (28.74%), and Tourist Agencies - TA (7.80%) SMEs. Surveys were emailed to all tourism SMEs with publicly available email addresses (2,875 units), and the response rate with fully answered questions was 21.68% (n=572). Accordingly, the sample structure for this study was in line with the population sample and consisted of the following types of SMEs: 58.4% F&B, 29.4% LA, and 12.2% TA SMEs. The data collection took place between June and September 2020, after the reopening of all tourism facilities.

The collected data were analyzed using the SPSS 25.0 statistical software with the AMOS plug-in. Descriptive statistics and correlation analysis have been calculated in order to collect basic information on variables. Next, EFA was used to formulate factors. Following the normality distribution tests, the factor analysis with maximum likelihood and varimax rotation was conducted to examine which factors formed coherent groups of items. The maximum likelihood method was also used for CFA. The Kaiser criterion was used to select the number of factors, and the Kaiser-Meyer-Olkin (KMO) test and the Bartlett sphericity test were used to measure the sampling adequacy. To ensure internal consistency, Cronbach's alpha ( $\alpha$ ) was calculated for each scale.

Finally, SEM was used as the interaction between the manifest and the latent variables and their impacts were analyzed simultaneously.

## 4. Results

### 4.1. Descriptive statistics and correlation analysis

Results indicate that the majority of respondents were male (53%) and that the average age of respondents was slightly less than 47 years of age. The majority of managers (51.3%) had completed professional or secondary education, 39.2% had acquired a high school diploma, 8.9% had obtained a master's degree, and 0.6% had finished elementary school. The results show that most managers (87%) were entrepreneurs as they also owned the firms they managed. Most SMEs (70.4%) employed up to five workers, 27.5% SMEs employed up to ten workers, and 2.1% SMEs employed more than 30 workers. On average, managers reported having a high proportion of foreign guests (56%) and possessing liquidity resources for slightly less (2.91) than three months.

The results presented in Table 1 show that all indicators were evaluated relatively highly (average mean  $M=3.56$ ). In terms of expectations from stakeholders, the highest-rated indicator was E1 ( $M=4.37$ ), and the lowest was E2 ( $M=4.11$ ). Regarding the expected forms of assistance, managers had the highest expectations from A5 ( $M=3.89$ ) and the lowest from A10 ( $M=2.26$ ). Analysis reveals that the highest-rated dimension was Cooperation, with P42 as its highest-rated indicator ( $M=4.35$ ) and the lowest rated dimension was CMP-HR ( $M=3.68$ ), with P31 as its lowest-rated indicator ( $M=3.19$ ). To ensure internal consistency of the scale, Cronbach's alpha was calculated ( $\alpha=0.78$ ).

**Table 1**  
*Managers' expectations regarding assistance and usage of CMPs*

Indicators		M	SD
Expectations from stakeholders - (E)			
E1	Government	4.37	0.97
E2	Banks	4.11	1.14
E3	Tourism & research organisations	4.12	1.07
Expected forms of assistance - (A)			
A4	Tax write-offs	3.67	0.89
A5	Tax reductions	3.89	0.96
A6	Extension of payment deadlines	2.72	1.07
A7	Covering wages	3.51	1.36
A8	Covering fixed costs	2.94	1.06
A9	Rebalance of the state budget	2.47	0.86
A10	Budget lines for direct financing of SMEs	2.26	0.89

**Table 1 (continued)**

A11	Lower interest rates	2.95	1.06
A12	Favourable loans	3.02	1.14
A13	Loan modifications	2.56	1.71
A14	Intense promotion	2.78	1.14
A15	Education and research	2.41	1.21
CMP Marketing - (P)			
P16	Target new market segments	3.69	1.36
P17	Enlarge marketing campaigns	3.71	1.09
P18	Provide highly discounted rates and special offers	3.28	1.20
P19	Study and understand the needs of the target customer segments	4.10	0.90
P20	Focus on loyal customers	4.11	0.95
P22	Make use of electronic marketing and opaque distribution channels	4.10	1.01
P21	Increase marketing budget	3.09	1.21
P23	Keep up with the competitors to take advantage of any developments that arise	3.50	1.15
P24	Improve the quality of our offerings	3.89	1.10
CMP-HR			
P25	Reduce wages and pay rates	3.79	1.91
P26	Give employees mandatory unpaid vacations	4.20	1.59
P27	Reduce the number of employees	3.80	1.65
P28	Increase productivity	4.21	1.41
P29	Require staff to take additional duties that are not in their job descriptions	3.54	1.81
P30	Make changes in the organizational structure	3.60	1.51
P31	Extend staff working hours	3.21	1.82
P32	Replace permanent employees with part-time employees	3.30	1.89
CMP Cost control			
P33	Emphasise cost control and reduce operating costs	3.99	1.11
P34	Postpone some of the firm's due costs and/or reschedule payments	3.71	1.19
P35	Develop additional avenues for revenues	3.79	1.09
P36	Close some non-profitable departments and/or business operations	3.90	1.51
P37	When purchasing, use less expensive substitutes	3.79	1.39
P38	Use new IT technologies for reducing operating costs	3.92	1.40
P39	Shrink all planned investments	3.85	1.29
CMP Cooperation			
P40	Cooperate with other tourism providers	4.21	0.99
P41	Cooperate with different organizations (e.g. business associations)	3.61	1.31
P42	Cooperate on different activities that could improve the image of the tourist destination	4.41	0.89

Source: Authors' own research.

Next, Pearson's correlation ( $r$ ) test was employed to measure the interrelations between the observed variables. Together, there were 53 indicators included in the analysis. The results show that only 15 pairs of indicators correlate ( $p < 0.05$ ) (F1, F2, F3, E1, E2, E3, A10, A11, P25, P26, P27, P28, P29, P31, and P32), indicating that neither SMEs' business characteristics (RQ1) nor the managers' demographic characteristics (RQ2) influence CMPs. Another interesting finding is that only one dimension (CMP-HR) was almost entirely (seven indicators out of eight) statistically correlated to the observed indicators belonging to the constructs expectations (five indicators) and liquidity (three indicators).

## 4.2. EFA and CFA

Next, EFA was performed to formulate factors. As we could not confirm a normal distribution of the dataset, the Principal Axis Factoring method was employed. The values of the KMO indicator (0.838) and the Bartlett test ( $\chi^2=4857.425$ ; DF=105) confirmed the suitability of the data. All indicators had adequate communalities



( $\geq 0.50$ ); therefore, we decided to keep the model with the initial fifteen indicators. After performing a rotated factor solution, we decided to include the four-factor groups in the final EFA model.

**Table 2**  
*Final factor solution (EFA)*

Indicators	Factors			
	CMP-HR	Liquidity	Expectations from stakeholders	Expected forms of assistance
P29	0.882			
P32	0.864			
P31	0.824			
P26	0.806			
P28	0.785			
P25	0.696			
P27	0.681			
F2		0.926		
F3		0.767		
F1		0.752		
E1			0.768	
E2			0.758	
E3			0.716	
A9				0.916
A10				0.604
Variance %	29.54	14.18	12.31	8.49

Source: Authors' own research.

Based on the values of variances presented in Table 2, it is evident that when dealing with the crisis, managers primarily relate to four factors (constructs): HR-related CMPs (29.54%), Liquidity (14.18%), *Assistance from the stakeholders* (14.18%), and *Expected assistance in forms of financial aid and rebalance of the state budget* (8.49%).

Next, CFA was performed to verify whether the measurement model in which multiple indicators of latent constructs are used to reduce measurement error demonstrates an acceptable fit to the data. All factors were retained (see Table 3), as all factor loadings ( $\lambda$ ) were higher than 0.5. The latent variables were allowed to correlate freely with each other. The maximum likelihood method and the item-level covariance matrices were used to estimate all the parameters and fit indices. The results of the CFA measurement model are presented in Table 3. Indicators of composite reliability ( $CR > 0.80$ ) and convergent validity ( $AVE > 0.50$ ) were achieved in all cases. Internal consistency was identified with Cronbach's alpha coefficient ( $\alpha > 0.75$ ).

**Table 3**  
*Convergent validity (AVE), composite reliability (CR), and Cronbach's  $\alpha$*

Factors	CR	AVE	$\alpha$
CMP HR	0.954	0.631	0.919
Expected forms of assistance	0.827	0.578	0.759
Expectations from stakeholders	0.928	0.702	0.871
Liquidity	0.884	0.592	0.809

Source: Authors' own research.

Additionally, discriminant validity was calculated to determine whether the constructs in the model are highly correlated among them. Results of the inter-construct correlation matrix with the square root of the average variance extracted on the diagonal demonstrated good discriminant validity because all four factors were greater than their corresponding off-diagonal elements.

### 4.3. SEM

Finally, SEM was performed for testing the relationships among the interrelated casual constructs. First, we evaluated if the measurement model fits the data well. As can be seen from Table 4, our measurement model achieved a desired level of validity since all indices exceeded their recommended values (Hair et al., 2012).

**Table 4**  
*Model fit values*

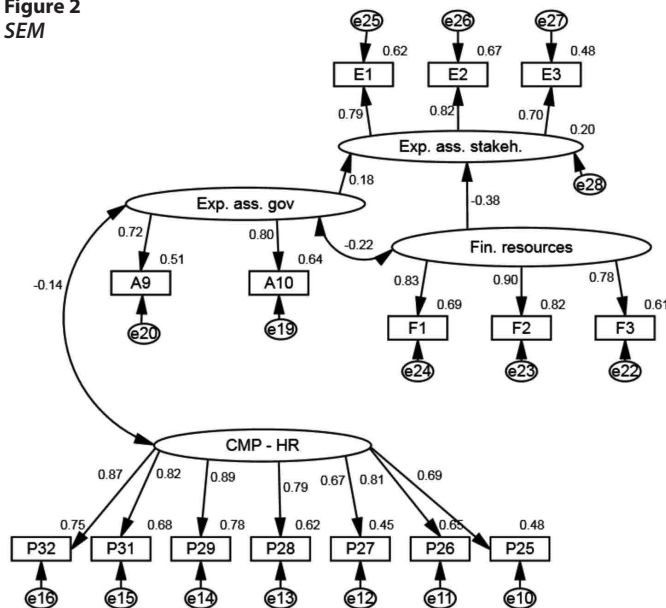
Indicators	Recommended value	Value (our model)
CMIN ( $\chi^2$ )		456.379
Degrees of Freedom (DF)		86
p value	> 0.05	0.161
RMSEA	< 0.05 or 0.1	0.087
NFI	> 0.90	0.907
CFI	> 0.90	0.923
TLI or NNFI	> 0.90	0.906
PNFI	> 0.60	0.743

Source: Authors' own research.

Note: CMIN (with DF and p) is not reliable given the large sample size.

Next, we moved on to the estimation of the research model. SEM presented in Figure 2 includes four constructs: *CMP-HR*, *Financial resources* (liquidity), *Expected forms of assistance* (Exp. ass), and *Expected assistance from stakeholders* (Exp. Ass. Stakeh.), and 15 observed variables. The results show that the construct *Expected forms of assistance* mediates the relation between the constructs *CMP-HR* and *Expectations from stakeholders*. There are two exogenous constructs with negative mutual correlations: *Financial resources* and *Expected forms of assistance* (-0.22), and *Expected forms of assistance* and *CMP-HR* (-0.14). *Liquidity* has no direct correlation with *CMP-HR*. Interestingly, *CMP-HR* indirectly affects the endogenous construct *Expected assistance from stakeholders* through *Expected forms of assistance*, with a negative correlation (-0.14). The strongest negative effect is from *Liquidity* to *Expected assistance from stakeholders* (-0.38), and a weaker positive association is from the construct *Expected forms of assistance* to the construct *Expected assistance from stakeholders* (0.18).

**Figure 2**  
*SEM*



Source: Authors' own research.

## 5. Discussion and conclusion

The main goal of the current study was to empirically investigate how SMEs business characteristics and liquidity and their managers' demographic characteristics and expectations for assistance influence SMEs' CMPs. Based on the literature review, we formulated a research model consisting of four RQs related to the five constructs above (see Figure 2).

The first RQ sought to determine if SMEs business characteristics influence the implementation of CMPs. This study shows that none of the selected business characteristics has a statistically significant influence on CMPs. Moreover, this study confirmed the statistical importance of only one (CMP-HR) dimension for SMEs crisis management. This finding is not consistent with previous findings (Kottika et al., 2020), which have stressed the importance of mixed usage of CMPs. It is relatively difficult to explain this result, as managers evaluated the implementation of all CMPs relatively highly (average  $M=3.77$ ). This finding was rather unexpected and contradictory to previous research (Portuguez & Gómez, 2021), in which business characteristics proved to influence crisis management behaviour. Considering all of this evidence, it seems that, in general, tourism SME managers were quite unified in their internal response to the crisis.

The second RQ was formulated to investigate if managers' demographic characteristics influence SMEs' CMPs. In contrast to earlier findings (Orens & Reheul, 2013), no evidence of the importance of managers' demographic characteristics for SMEs crisis management was detected. The results also indicate that managers did not build a resilience capability based on experience, as Shafi et al. (2020) suggested. This is a rather unexpected result, suggesting that managers were relatively united in their response to the crisis. Another interesting finding was that neither SMEs' business characteristics nor managers' demographic characteristics proved to be statistically correlated to any of the observed constructs in the research model. Although it is difficult to explain these results, the presented findings might be somehow explained by the fact that this was an unexpected external shock, which has left managers with limited or no possibilities of response regardless of SMEs' business or their demographic characteristics. Another possible explanation for CMP-HR might be related to the industry's labour (and cost) intensiveness and managers' impulsive reaction to the crisis.

In terms of RQ3, the results show that SMEs' liquidity assets are indirectly correlated to only one CMP-HR dimension. Moreover, the results show that liquidity has a positive statistical correlation to two specific forms of governmental assistance (A9 and A10) and to three indicators belonging to dimension Expectations from stakeholders (E1, E2, and E3). One of the most surprising results is related to the identified importance of the two governmental forms of assistance, as both indicators were initially evaluated relatively lowly (see Table 1). The results of EFA also indicate the managers have expectations from banks, as well as tourism and research organizations, although it seems that apart from the direct financial aid from the government, managers do not know which other forms of assistance they want to receive.

The fourth RQ was created to investigate the importance of managers' expectations for external support in relation to the implementation of operational CMPs. The construct Expectations was composed of two sub-constructs: forms of assistance and expectations from stakeholders. SEM has been used to investigate the relationships between the observed indicators. As shown in Figure 2, CMP-HR has only an indirect impact on Expectations from stakeholders through the Expected forms of assistance.

Managers' expectations for governmental assistance have a direct and statistically positive correlation (.18) to Expectations from stakeholders, which means that direct aid from the government boost managers' expectations from other stakeholders. Interestingly, expectations related to governmental support are negatively correlated with CMP-HR (-.14), meaning that, paradoxically, the more managers rely on internal-labour related CMPs, the less assistance they expect from the government. Liquidity resources have direct and negative correlations with expected forms of assistance (-.22) and Expectations from stakeholders (-.38), indicating that the more

liquidity resources SMEs pose, the lower expectations managers have from governmental support and the other stakeholders. Interestingly, liquidity has no direct statistical correlation to CMP-HR, which means that regardless of the amount of SMEs liquidity resources, all managers focused on CMP-HR. This finding is not in line with previous research (Thorgren & Williams, 2020), indicating the importance of liquidity for SMEs' crisis management. This result might be somehow related to the labour intensiveness of the tourism sector, although according to Alonso-Almeida and Bremser (2013), labour-related CMPs should first be replaced by practices resulting in SMEs' productivity improvement.

This study's empirical findings contribute to existing knowledge by providing a new understanding of CMPs in tourism SMEs. Accordingly, the presented findings suggest several courses of action for policymakers. As managers solely rely on financial support from the government, and governmental support boosts managers' expectations from stakeholders, aid from the government should be conditioned with managers' proactive involvement in activities that include some other forms of assistance (e.g., education and research) and SMEs' implementation of different CMPs that do not exclusively focus on the labour force. The government should also consider offering targeted grants to those SMEs who wish to take new (e.g., greener and sustainable) activities that consider the strategic EU agendas (Al-Fadly, 2020).

For SMEs, we extrapolate the following suggestions. First, apart from focusing on labour-related CMPs, managers should also keep in mind the possibility of implementing other CMPs, which proved to be successful in previous crises, such as increasing operational efficiency and competitiveness (Kottika et al., 2020), boosting innovativeness (Thorgren & Williams, 2020), and focusing on customer relationship management (Portuguez & Gómez, 2021). These CMPs focus on increasing revenues rather than reducing operational costs, which is more likely to have a positive psychological outcome in the long term. Second, continuous monitoring and dissemination of information should also help managers to cope with the crisis. These lessons could also be applied proactively in the post-Covid era.

The major limitation of this study is the relatively small geographical area in which it was performed. Another source of weakness is the time of research. This study only gives a snapshot of SMEs' ongoing crisis management, as it was performed after the first wave of the pandemic.

The main recommendation for further research work is, therefore, to extend the study to other countries. A further study could assess the long-term effects of pandemics using longitudinal data. SMEs' financial reports could also provide useful information for a better understanding of crisis management. In addition, there are many unanswered questions about the predictions of future tourism development. In this view, interviews with managers and experts could contribute to a deeper understanding of crisis management patterns and future development directions for tourism SMEs.

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