The TQM J

Facing COVID-19 challenges. What's so special in family businesses?

Journal:	*The TQM Journal*
Manuscript ID	TQM-09-2021-0251
Manuscript Type:	Research Paper
Keywords:	Family Business, Quantitative methods, Innovation

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Abstract

Purpose – This study aims to explore the main drivers that family businesses possess to strength their resilience during the COVID-19 crisis.
Design/methodology/approach – This study followed a quantitative method analysis through a multiple regression analysis based on a sample of 570 Italian family firms.
Findings – The results showed that job quality and innovation significantly stimulate family firms' resilience during the COVID-19 crisis.
Research limitations/implications – The study has several academic implications. First, the study contributes to family firm research by extending the studies on factors that significantly influence the concept of resilience; second, the work contributes to crisis management, offering suggestions to help other firms exceed COVID-19 crisis.
Practical implications – The findings of this study provide important implications for business owners and managers because family businesses can be a good model to follow by taking advantage of short-term opportunities and adapting new business models.
Originality/value – The present study clarifies the role of family firms' resilience, and it reveals how job quality and innovation play a meaningful role during the COVID-19 crisis.

Keywords Family business, Quantitative methods, Innovation, Job quality, Resilience, COVID-19

Paper type Research paper

1. Introduction

The COVID-19 pandemic has led us to an emergency that has revolutionised our lives, our way of working and living daily life. There is no shortage of people and firms that offer, in this climate of uncertainty, time, skills, and experience to develop new solutions and meet unique needs.

Today more than ever we have understood how the surprise and the unexpected are just around the corner and how we live in an unpredictable world, where technology, innovation, social and political events, environmental and market changes produce continuous and unexpected challenges in the global scenario. In such an unstable reality, people and organisations have to change their behaviours by improving their ability to adapt continually and generate effective strategies to answer the upcoming situations, and firms must deal with unknown contingencies that delineate new paths affecting their survival.

Resilience, here defined as the ability to adapt to change (Salisu *et al.*, 2020), becomes the key to overcoming crises for individuals, organisations and society (Liu *et al.*, 2020). Resilient businesses demonstrate a high degree of tolerance to ambiguity, adapt quickly to changes, take advantage of those situations and learn from their mistakes (Ayala and Manzano, 2014).

Recent studies have claimed that family-run businesses, here defined as firms owned and managed by members of the founding family, pervaded by family beliefs and values and with a clear intention to pass on the business to their offspring (Aronoff and Ward, 2001), are resilient in their nature because more focused on resilience than on performance, renouncing to take full advantage of the returns available in favourable economic times to increase their chances of survival in less good times (Conz *et al.*, 2020). Moreover, with their long-term vision, the attention toward reputation, and the interest in preserving the affective endowments of family owners, family firms tend to focus more on business continuity and not on mere profit, allowing a future not only for the incumbents but also for successors (Gomez-Mejia *et al.*, 2011). Besides, family firms' resilience emerges also concerning financial concerns. Scholars have underlined that family firms experience higher growth than non-family businesses, with a lower degree of debts than their counterparts, demonstrating a higher ability in resisting market shocks (Corbetta *et al.*, 2014). These assumptions underline the extraordinarily family firms' ability to deal with a crisis and deserve to be deeply analysed to understand how and why family firms behave in this sense, showing resilience, flexibility and adaptability in uncertain conditions.

However, agreeing with Duchek (2018), despite the importance resilience has for firms' success and ability to respond quickly to change, there is a lack of studies on which factors can strengthen resilience on family businesses that, playing a relevant role worldwide and dominating the economic landscape (Chrisman *et al.*, 2007), not only from the point of view of the number but also in terms of wealth produced and of the employed workforce (Astrachan and Shanker, 2003), deserve to be deeply studied as wealth creators and innovators (Kraus *et al.*, 2016).

Some scholars (Muñoz de Bustillo *et al.*, 2016) argued that innovation and job quality are connected by different mechanisms, such as productivity increase, changes in the type of tasks performed with direct implication on job quality and innovation driven structural change, but few studies explore the link of these factors with the concept of resilience on family businesses.

This work intends to contribute to filling this gap, problematising the topic (Alvesson and Sandberg, 2011), and examining whether and how two specific factors – job quality and innovation - can lead towards the resilience in family firms during the COVID-19 crisis, by answering the following research question:

Do job quality and innovation strengthen family firms' resilience during the COVID-19 crisis?

This study adopts a quantitative approach, gathering data from a random sample of 570 Italian family firms. Findings show that job quality and innovation play a relevant role in family businesses' resilience, allowing them to quickly manage and adapt their business models during the COVID-19 pandemic. The scholar contributions are twofold, shedding new lights on both family business and crisis management literature, while, for practitioners, findings suggest practical ways to face contingent difficulties and adapt business models during crisis periods.

2. The COVID-19 crisis: a global phenomenon

The beginning of 2020 was marked by the COVID-19 pandemic which, starting from China, invaded the whole world, hitting and putting numerous states in health and economic difficulties.

Coronavirus was first identified by health authorities in Wuhan (Hubei province in China) on December 31, 2019, in a seafood market, which was closed by local authorities on January 1, 2020 (Huang *et al.*, 2020; Zhu *et al.*, 2020), immediately after their epidemiological alert statement. By that time, 41 people had already been infected (Huang *et al.*, 2020). Early investigations concluded that the diseases were caused by a new virus transmitted from person to person (Chan *et al.*, 2020).

In the following months, the virus spread worldwide, first hitting Europe, then the United States and finally Latin America and exponentially increasing the number of infected people. As of March 11, 2020, 118,319 cases had been confirmed worldwide, and the WHO Director-General declared COVID-19 a "pandemic" (World Health Organization, 2020), which is a worldwide epidemic affecting large numbers of people across borders (Last *et al.*, 2001).

This utterly unexpected pandemic has surprised all the world states which, finding themselves unprepared, have had to make critical and complicated decisions in a short time. European business activity collapsed more than at the end of the Second World War (Badkar and Greeley, 2020). In Italy, around 2.2 million firms have due lockdown their activities, leading to an unprecedented fall in consumption and income for 7.4 million employees (Rapaccini *et al.*, 2020); and industrial production decreased by 28.4% (29.3% when compared with March 2019), which was the worst data in any EU country (Eurostat, 2020). Moreover, in the first quarter of 2020, Italy's stock exchange experienced a high-low decline of 42% (Ding *et al.*, 2020).

This crisis has a powerful impact on many sectors, from catering to tourism, transport, and manufacturing (Chinn *et al.*, 2020). Other sectors, on the other hand, have benefited from this pandemic and have increased their turnover, one of these is undoubtedly the one linked to hygiene and cleaning, due to the stringent regulations passed by the WHO, for the cleaning of all public spaces and shops and restaurants (Chinn *et al.*, 2020).

However, even in this devastating crisis, the family business continues to present itself stronger than all others with different corporate structures. The yield data for the first six months of the year confirm that family businesses tend to have above-average defensive characteristics that allow for a good holding, especially in times of market stress, considering the year-to-date figure, which expresses an outperformance of around 300 basis points compared to non-family businesses (Global ESG Research Product di Credit Suisse, 2020).

In general, COVID-19 pandemic has caused a crisis that promises to become one of the most important in history since it has affected the world economy and has caused many victims worldwide.

3. Theoretical background

3.1 Resilience in family firms

Resilience refers to the entrepreneur's ability to adapt to change (Salisu *et al.*, 2020), and help individuals, organisations and society to face challenges and new economic and social effects (Liu *et al.*, 2020). In addition, resilience represents the ability to overcome a difficult situation, finding a new equilibrium (Folke *et al.*, 2002; Plummer and Armitage, 2007; Walker *et al.*, 2004), and depends on the context, the situations, and the entrepreneur and his experiences (Conz *et al.*, 2020). According to this perspective, firms have to develop and strengthen their adaptation to survive. The resources and capabilities that firms exploit to build responses and their inherent characteristics, lead to better performance when the balance changes (Ates *et al.*, 2011; Pal *et al.*, 2014).

Several scholars show that family firms are in a privileged position to strengthen their resilience because they mobilise their resources to keep their businesses more prone to adapt to change (Amann and Jaussaud, 2012) and tend to outperform non-family businesses financially (Van Essen *et al.*, 2015; Minichilli *et al.*, 2016).

Periods of crises are accompanied by unexpected challenges that generally require rapid and decisive strategic decision-making (Ritchie, 2004), and family businesses have always been particularly good at reacting quickly, decisively and creatively (Ward, 1997) to acute situations. Arising from the centralised decision making of family businesses and their owners' simultaneous ownership stock (O'Brien *et al.*, 2018), family and business information, procedures and processes are less complicated, and decision-makers can react quickly focusing on both the company and family interests (Tagiuri and Davis, 1996; Leenders and Waarts, 2003). Moreover, owning families influences and controls key decision-making processes (Carney, 2005; De Massis *et al.*, 2013), leading to increased strategic flexibility through fewer formalisations and procedures (Carney, 2005).

In this sense, family firms appear to be suitable to deepen the analysis of factors that stimulate resilience. Specifically, we focus on whether and how job quality and innovation influence family firms' resilience.

3.2 Job quality

Over the past two decades, the factors affecting job quality in firms have been the object of growing attention in academic studies (Burchell *et al.*, 2014; Eurofound, 2012).

According to Burchell et al. (2014), the origin of this important area of research can be traced back to the notion labelled "quality of working life", and later studies addressed productivity by skill level, the degree of job control, participation at work and job security.

This evolution was driven by the multidimensional nature of job quality analysis (Burchell *et al.*, 2014; Eurofound, 2012). "Quality of working life "is defined as individuals' subjective perception of their jobs. Its subsequent corollaries, "job quality" and "quality of work "assess objective job content and the work environment.

In family businesses the job quality can be considered a means to sustain the firm in the long term and sustain the family over generations (Nordqvist and Melin, 2010), ensuring the preservation of family socioemotional wealth (Gomez-Mejia *et al.*, 2011). This factor is crucial (Cruz and Nordqvist, 2012) because it influences governance, processes, resources, and decision-making, limiting conflicts (Lumpkin and Brigham, 2011).

In general, several authors assert that job quality improves the satisfaction of employees (Muse *et al.*, 2008) because they positively influence and modify work autonomy, social support (Morgeson and Humphrey, 2006), and work-family as well as work-life interfaces (Casper and Buffardi, 2004).

Thus, we posit that job quality is a fundamental element to sustain the desired competitive advantage to address the crisis (Slater and Olson, 2000; Ireland *et al.*, 2001) and improve resilience (Sulphey, 2020; Salvato *et al.*, 2020).

3.3 Innovation

Innovation implies change or novelty (Tidd and Bessant, 2018). According to Schumpeter (1939), economic development directly depends on innovation, understood as new products, new processes or production methods, new markets or even new supply sources. Today, the concept of innovation has been extensively examined and improved (Boons and Lüdeke-Freund, 2013; Schneider and Spieth, 2013); however, the central concept of novelty as a determinant of economic change and progress has been preserved. West and Anderson (1996) define innovation as introducing and applying processes, products or procedures that are new to the firm and intended to benefit the company and its stakeholders, including society at large. This definition emphasises that innovation refers to intentional attempts to seek benefits from change by promoting innovation's practical utility.

This study focuses on the concept of innovation as strategic business renewal. Research shows that business model innovation is triggered by external developments such as changes in the competitive environment or new technologies (Pateli and Giaglis, 2005). Wenzel et al. (2020) summarise that innovating is a coping strategy that has sustainable effects and can make the firm stronger for the future, especially for situations where new ways to generate revenue are needed.

Due to their ability to absorb external shocks, family firms appear incredibly innovative because of their proclivity to identify new solutions and new activities and redesign management practices (Mzid *et al.*, 2019).

Under these assumptions, a crisis requires firms to think openly about new things (Roy *et al.*, 2018) to overcome organisational inertia, by provoking innovative actions and stimulating individuals to engage in creativity and original agility (Akgün and Keskin, 2014).

Innovation, in this view, affects resilience (Sabahi and Parast, 2020; Todt *et al.*, 2018; Senbeto and Hon, 2020).

4. Hypotheses development

Several studies link the concept of resilience to job quality, considering the intrinsic qualities (Eurofound, 2012) such as job satisfaction, motivation, social environment, physical and emotional health as an essential economic growth engine, competitiveness and well-being of the firm (Judge *et al.*, 2001; Swider *et al.*, 2011).

They find that job quality serves as the foundation of economic resilience to promote faster recovery from crises (Hudgins, 2016; Larson and Luthans, 2006; Matos *et al.*, 2010).

Employees who are satisfied with their job and feel good about it are supposed to be able to act more effectively and to achieve higher performance than those who are not satisfied with their job and who invest energy in coping with negative situations (Tugade and Fredrickson, 2004).

Family business scholars underline that how fundamental family firms characteristics (goals, intentions for intrafamily succession, governance, risk propensity, and others associated with job quality) are managed can affect the

ability of family firms to be resilient (Patel and Fiet, 2011; Sharma and Salvato, 2011). Recent studies have found that contingencies and events can disrupt entrepreneurial resources, implying a renewal of strategic and corporate entrepreneurship of family businesses, that, under their long-lasting perspective, appear able to turn adversities into opportunities better than their counterparts if they are in a supportive and motivating work environment (Roux-Dufort, 2007; Williams and Shepherd, 2018).
Thus, the first hypothesis would be:

H1. There is a significant association between job quality and resilience in family firms during the COVID-19 crisis.

On the other hand, many authors sustain that the firms' proclivity to innovate and reorganise the business model involves adaptation and transformation (Dahles and Susilowati, 2015; Larsson *et al.*, 2016), and, consequently, influence resilience as the ability to adapt and survive in turbulent times (Biggs, 2011; Duarte Alonso and Bressan, 2015). As pointed out by some authors (Abdullah *et al.*, 2018), an innovative approach to a crisis involves entrepreneurs using their initiative to apply innovative ideas.

Miller et al. (2015), deepening innovation in family firms, argue that family-run businesses are known for their patient financial capital, which may be necessary to innovate and survive across time, improving the ability to resist and adapt behaviours to face challenges.

Moreover, family firms' ability to renew requires innovation, and family firms' specificities provide advantages that are difficult to be imitated (Patel and Fiet, 2011; Mzid *et al.*, 2019) because family relationships allow family members to evaluate ideas and try to solve problems and to seize opportunities (Chirico and Salvato, 2016) especially during crises. Amann and Jaussaud (2012) note that during the crisis, investment in innovation (in a broad sense) ensures family firms as effective means to resist. The authors introduce the concept of 'ritualised ingenuity', underlying that family businesses move from a crisis into a recovery phase by better mobilising their resources to their non-family counterparts. Thus, the second hypothesis would be:

H2. There is a significant association between innovation and resilience in family firms during the COVID-19 crisis.

Figure I synthesises the illustrated concepts and hypotheses in the following model:

(Please insert figure I about here)

5. Methodology

5.1 Sample and data collection

A quantitative survey method has been utilised for this study. The quantitative method involved descriptive statistical analysis; therefore, data were analysed using the Statistical Package for the Social Sciences (SPSS), version 22.0 (Corp, 2013). Survey questionnaires were administered to identify whether job quality and innovation have a significant association with the resilence in family firms during the COVID-19 crisis.

Regarding the information collection technique, taking into account the restrictions derived from the spread of the COVID-19 pandemic, it was decided to use an internet survey with CAWI (Computer Assisted Web Interview) mode, using a structured questionnaire with closed-ended questions. Data were collected in the second semester of 2020.

This paper's empirical data originate from a study exploring a random sample of 570 Italian family firms. Sample characteristics included informant's position, sector, generation, number of employees (see Table 1). In total, 800 firms were randomly selected from a family-business database, and a survey was mailed to the firms. The sampled family firms showed positive income and profits, despite the COVID-19 crisis After sending the questionnaire on-line, 673 surveys were returned, of which 570 contained sufficient data to be included in the analysis.

(Please insert table 1 about here)

The questionnaire had four statements for each variable, thus ensuring the minimum number of items required for content validity (Hair *et al.*, 2009). The questionnaire consisted of two main sections: the first related to firms details and the second to 12 items based on a 1–5 Likert scale (Allen and Seaman, 2007) to reveal the relationship between job quality and innovation with the resilence in family firms during the COVID-19 crisis. Table 2 shows the statements developed based on the literature review.

(Please insert table 2 about here)

The questionnaire was pilot tested before the leading survey on 10 family firms. Following several modifications to the layout, order, and wording of some items, the questionnaire's internal reliability was greater than 0.7, calculated via Cronbach's alpha. Alpha coefficients below 0.6 are weak in reliability, 0.6-0.8 are moderately strong, and 0.8-1.0 are very strong in reliability (Malhotra, 2004). The relationships among the items are reliable for further analysis. Table 3 shows the reliability test for each variable.

(Please insert table 3 about here)

To test the data collected's quality, although the sample selection was random, a no-response test was performed to check for bias. Following Armstrong and Overton (1977), no significant differences were found in study variables between the first and last interviewee, suggesting that response bias was not a problem (Kanuk and Berenson 1975; Oppenheim, 2000).

The final version of the questionnaire was approved by two academic experts in the field of management, following a content validity method (Churchill, 1979), and then submitted to a sample of 800 Italian family firms.

Ethical aspects were considered and respected throughout the implementation of the study through informed consent. Moreover, the research objective was clearly stated and presented to the respondents before filling the questionnaire. Anonymity was guaranteed, and authorisation was obtained to gather data and to use the collected information for scientific and academic purposes.

6. Results

Multiple regression analysis is a statistical technique used to test the relationship between more than one independent variables and a single dependent variable, given the condition that both variables must be metric (Hair *et al.*, 2006). Therefore, it is applied in this study to examine the metric data of job quality and innovation (two independent variables) and resilience in family firms during the COVID-19 crisis (one dependent variable), respectively.

The following hypotheses were tested:

H1. There is a significant association between job quality and resilience in family firms during the COVID-19 crisis.

H2. There is a significant association between innovation and resilience in family firms during the COVID-19 crisis.

According to Table 4, a significant value for job quality is 0.000 ($\beta = 0.274$), which indicates that job quality towards resilience is more than 99.99% (p-value<0.01). Therefore, H1 is supported, which indicates that job quality value directly relates to the resilience of family firms during the COVID-19 crisis. This means that, if job quality value is high, family firms' resilience will be higher and they will have a high intention to be more motivated thanks to the social environment, the physical and emotional health favourable, to identify opportunities to face up to the crisis.

As regards the hypothesis H2, a significant value for innovation is 0.000 ($\beta = 0.342$), which indicates that innovation towards resilience is more than 99.99% (p-value<0.01). Therefore, H2 is supported, which indicates that innovation value directly relates to family firms' resilience during the COVID-19 crisis. This means that, if innovation value is high, family firms' resilience will be higher and they will have a high intention to reorganise, adapt, transform and create a new business model to face up to the crisis.

The coefficient of determination (R2) was 0.540, which means that the two independent variables can explain 54% of family firms' resilience during the COVID-19 crisis. Thus, the effect size for this study is large. The proposed model was adequate as the F-ratio = 78.602 (p-value = 0.000) was significant at 1% level ($p < 0.01$).

(Please insert table 4 about here)

7. Discussion and Conclusion

To answer our research question, whether job quality and innovation strengthen family firms' resilience during the COVID-19 crisis, we carried out a quantitative study on a sample of 570 Italian family firms. Results of our study showed that job quality and innovation have strengthened family firms resilience during COVID-19 crisis. Specifically, the sampled family firms stated that they initially suffered a decline in their turnover, resulting in a consequent reduction in sales. In a short time, they changed their business model, investing additional resources in other activities and initiatives that immediately brought benefits in terms of income, employment and market share thank job quality that has permitted to have employees more motivated and more proactive to change. Their job quality and innovation proclivity rooted in the essence of being a family business, that is in the intention of surviving across generations, have stimulated their ability to adapt their business to the changing conditions of the market and the environment, thus managing to respond promptly and actively to the crisis generated by the pandemic. Findings demonstrated that firms' ability to reorganise their business, generating new ideas and strategies, and introducing innovations (considered in a broad sense), together with proactivity and risk-taking, have stimulated firms' resilience and, thus, adaptation and, in turn, have produced an overcoming the difficulties of the particular unfavourable situation. In other words, this empirical study provides some significant evidence of how job quality and innovation can contribute significantly to family firms' resilience during the COVID-19 crisis in Italy.

Findings show academic and practical implications.

8. Scholarly implications

Scholarly implications are twofold. First, our study contributes to family firm research by extending the studies on factors that significantly influence the concept of resilience. While there are explicit threats from the COVID-19 pandemic, there are also opportunities to arise out of such crises. Our finding showed how family firms had approached the uncertainty in a way that keeps them healthy and useful during this challenging time. The pandemic forced everyone out of the status quo, inviting stakeholders to develop innovative solutions to respond to today's pressing needs. Family firms analysed focused on what they know, who they are, and where they want to be, utilising this crisis how a transformative opportunity. Our findings reveal family firms' extraordinary resilience, job quality and innovation with family, employees, and external stakeholders facing the COVID-19 crisis. To search for solutions, reorganise, transform, and create new business models are valid alternatives adopted to face the COVID-19 crisis. Many family firms sought to make sure that employees worked efficiently at home, using equipment purchases, while also emphasising the importance of personal and frequent communication and interaction with employees with a strong sense of belonging and commitment. Smart working, home delivery, and digital technologies have changed the way employees think and allow family firms to identify new and unexpected strategic opportunities (Nambisan *et al.*, 2017; Tilson *et al.*, 2010).

This extends and strengthens prior literature proposing that, even during crises, family firms benefit from the ability to adapt to change (Salisu *et al.*, 2020), to be innovative, flexible and responsive to external crises (Doern, 2016; Anthopoulou *et al.*, 2017; Branicki *et al.*, 2018; Lintner, 2019; Manning *et al.*, 2019).

Secondly, our work contributes to crisis management, offering suggestions to help other firms exceed COVID-19 crisis. Our empirical findings show that family firms follow different approaches to deal with the crisis, and these strategies can help other firms in this challenging moment: job quality, loyalty, commitment, leadership, and identity. Findings, in this sense, extend other studies that have analysed family influence in the firms' activities (Conz *et al.*, 2020), by underlying whether and how this can sustain family firms also in that that appears to be one of the worst crisis of the history. Existing literature and prominent media examples show that family firms may react faster in crises than their non-family counterparts (Ates *et al.*, 2011; Pal *et al.*, 2014). According to some researchers (Astrachan and Shanker 2003; Chua *et al.*, 1999), the existence of the family and its active involvement in the management and management of the business represents the first element capable of differentiating family businesses from those of other nature and, at the same time, the primary source of competitive advantage, which can derive from the interaction between business and family, to face moments of crisis. All businesses, both family and non-family-owned, are being impacted by the COVID-19 pandemic. How they respond provides relevant insight into what makes family businesses different. Family business owners are notoriously loyal to their employees – especially long-term employees. The findings showed that this commitment to one another is often reciprocated. In the face of COVID-19 crisis, many family firms made ties among stakeholders stronger than ever by allowing them to make their commitment clear. When the pressure was on, the act of putting values into action has had transformative power. Also, family firms leadership with "the long view" in mind can unify family owners and employees to sacrifice and stand together through a crisis. Commitment to the livelihoods of the employees who work for them is a hallmark of most family businesses, as is the dedication of those employees to each other and the family business When a family business faces financial uncertainty and market challenges, family stakeholders are more likely to dig deep to keep their businesses alive.

In fact, many owners have re-invest family capital in the firms analysed to keep it afloat, rolling up his sleeves to work harder. They did not look for another job or another investment, but rather have stayed the course because it is more than a business and more than an investment to the family owner. The family stakeholder's identity is often tied to their business; their name is "on the door". This element emerged above all for firms of the third, fourth and fifth generation. Their commitment to their enterprise span generations, including future generations. Keeping the business going is much more than a financial decision; it is an honour, purpose and identity that will help many businesses through this challenging time.

9. Managerial implications

The findings of this study provide important implications for business owners and managers. Family businesses can be a good role model for all other businesses to follow by taking advantage of short-term opportunities and adapting business models. The analysis has shown how crises offer these adaptation opportunities; none of the analysed companies has exited the market. Furthermore, innovations can also be external, such as bars or restaurants, creating new ideas to generate sales. Short-term opportunities can also give rise to long-term ones, thinking now about the potential business models that will emerge in the future. One of the main goals of these long-term considerations is to improve the resilience of companies.

10. Limitations and future research

This study presents drawbacks that can represent an exciting stimulus for further researches. The first limit can be retrieved in the context, that is Italy. Results derived from a large sample of Italian family firms that, despite numerous, is focalised only in Italy. Other studies could investigate what happens in other Countries by carrying out cross-cultural analysis and studies. Moreover, we suggest longitudinal studies to understand how family firms react in a long-lasting perspective, by observing financial and income results, and employment. Finally, being a quantitative analysis, this study had not examined in-depth entrepreneurs and managers' perceptions. Thus, further studies could adopt qualitative approaches to deepen the analysis through case studies.

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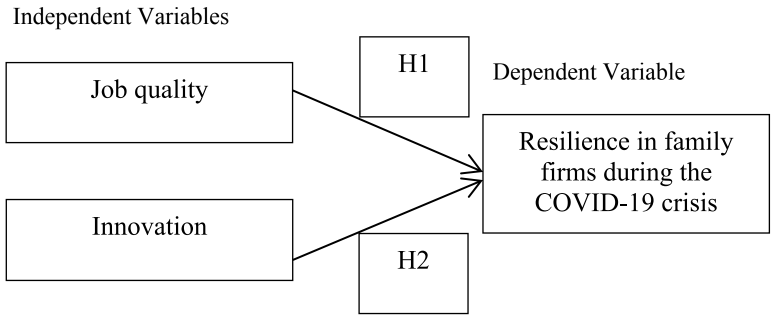
Figure I. Hypotheses model



Source(s): Author's own elaboration

Table 1. Italian family firms' details

	Frequency	**Valid percent (%)**
Informant's position		
1. CEO	402	70.5
2. Head of Sales	55	9.5
3. Head of Marketing	48	8.5
4. Head of HR	45	7.5
5. Other	20	4
Sector		
1. Accommodation and Food		
Service	101	18
2. Activities		
3. Manufacturing	105	18.5
4. Agriculture, Forestry and	110	19.5
Fishing	55	9.5
5. Wholesale and Retail Trade		
6. Human Health and Social	99	17.5
Work Activities	87	15
7. Other		
	13	2
Generation		
1. First	65	11.5
2. Second	145	25.5
3. Third	155	27
4. Fourth	136	24
5. Fifth	69	12
Number of employees		
1. 1-5	235	41
2. 6-10	145	25.5
3. 11-20	132	23
4. 20-40	43	7.5
5. > 40	15	3

Source(s): Author's own elaboration

Table 2. Questionnaire statements and sources used

Variable	Statement	Source
Resilience in family firms	Ability to adapt to change Ability to face challenges Experience Adaptation	Salisu, Hashim, Mashi and Aliyu (2020); Liu, Ming Lee and Lee (2020); Conza, Lamb and De Massis (2020); Folke et al., 2002; Gunderson and Holling, (2001); Holling, (2001); Plummer and Armitage (2007); Walker, Holling, Carpenter and Kinzig (2004)
Job quality	Job satisfaction Motivation Social environment Physical and emotional health	Eurofound (2012); Judge et al. (2001); Swider et al. (2011); Hudgins (2016); Larson and Luthans (2006); Matos et al. (2010)
Innovation	Reorganising New business model Creativity Transformation	Dahles and Susilowati (2015); Larsson, Milestad, Hahn and Von Oelreich (2016)

Source(s): Author's own elaboration

Table 3. Reliability test

Number	Constructs	Alpha coefficient	Number of items
1	Resilience	0.811	4
2	Job quality	0.784	4
3	Innovation	0.792	4

Source(s): Author's own elaboration

Table 4. Results of multiple regression analysis

Model	B	SE	Standardised coefficients β	T	Sig.
1 Constant	0.932	1.287		0.728	0.459
Job quality	0.274	0.062	0.280	4.328	0.000**
Innovation	0.342	0.061	0.341	5.567	0.000**
R2	0.540				
Adjusted R2	0.533				
Sig. F	0.000				
F-value	78.602				

Notes: **p-value<0.01 (two-tailed); dependent variable: Resilience in family firms during the COVID-19 crisis