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Citation for final published version:

Prokop, Daniel , Tabari, Saloomeh and Chen, Wei 2023. Survival instincts of Chinese entrepreneurs in the UK: adaptation or hibernation. *International Journal of Entrepreneurship and Small Business* 10.1504/IJESB.2025.10059695

Publishers page: <https://doi.org/10.1504/ijesb.2025.10059695>

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Survival instincts of Chinese entrepreneurs in the UK: adaptation or hibernation

Daniel Prokop^{a*}, Saloomah Tabari^a, Wei Chen^b

^a Cardiff University, King Edward VII Avenue, Cardiff, CF10 3WA

^b Sheffield Hallam University, Howard Street, Sheffield, S1 1WB

*Corresponding author contact details: prokopd@cardiff.ac.uk, +442920879422

Abstract

Surviving a crisis requires a unique set of responses from a firm. This paper examines migrant entrepreneurs and their responses to Covid-19 pandemic. These entrepreneurs are disadvantaged in their markets, typically due to cultural differences, but also other barriers that include outright discrimination by native populations. Consequently, global crisis has a more severe meaning to migrant entrepreneurs who struggle in the best of times. Empirically we focus on interviews with Chinese entrepreneurs in the UK, employing template analysis to disentangle the data. We find two key mechanisms these entrepreneurs employ to respond to crisis: *adaptation* and/or *hibernation*. *Adaptation* is about introducing changes in response to altering market conditions, it is a proactive response. *Hibernation* is a passive response characterised by deliberate shutdown and/or slow-down of operations, with business continuity funded from accumulated financial reserves. The paper concludes that policy should be more sensitive to enabling responses that ensure firm survival.

Keywords: firm survival, crisis, Covid-19, entrepreneurship, Chinese businesses, migrant entrepreneurship

JEL codes: L26, L25, L8, M3

1. Introduction

Covid-19-induced pandemic has disrupted markets severely by becoming a key event testing survival of businesses globally. Emerging evidence suggests that businesses that adopted technologies (Akpan et al. 2021; Abed 2022) or innovated (Wang et al. 2020; Li et al. 2021; Suleman Ali 2022) enjoyed

higher probability of survival. However, these effects need to be taken in context of research that suggests that micro firms, and those based in peripheral regions were particularly exposed to the negative effects of the pandemic, given their weaker economic surroundings and financial resilience (Cowling et al. 2020; Brown and Cowling 2021; Huggins et al. 2023). As such, studies trying to further disentangle how small and medium sized enterprises (SMEs) coped with crisis and avoided failure are critical for both policymakers and entrepreneurs (Salamzadeh and Dana 2022), to further understand the responses, instincts, and decision-making that generates positive survival outcomes (Dheer and Salamzadeh 2022). This is especially important, as the probability of future events of this magnitude is rather high, adding the level of urgency and significance to this learning process (Etemad 2020).

Whilst a multitude of studies focused on understanding what happened to businesses (e.g. Price et al. 2022; Ramanathan et al. 2022; Suleman Ali 2022; Adam and Alarifi 2021; Hamilton 2020) and how the business community responded to crisis (e.g. Elo et al. 2022; Leppäaho and Ritala 2022; Lungu et al. 2021; Sheth 2020), less attention was devoted to specific types of entrepreneurs, in particular migrant entrepreneurs. Given a whole host of literature devoted to international entrepreneurship indicating how migrant entrepreneurs differ from domestic ones (e.g. Elo et al. 2018; Guercini, Ottati, Baldassar, Johanson 2017; Vinogradov and Jørgensen 2017; Kushnirovich 2015; Baklanov et al. 2014; Baycan-Levent and Nijkamp 2009), through for example their challenges (Ram et al. 2017), but also ability to mobilise transnational resources (David et al. 2021), it remains theoretically critical to understand survival of such enterprises during crisis.

There is a wealth of evidence indicating the importance of immigrant entrepreneurs to their host economies (Hart and Acs 2011; Low 2008; King 2012; Huang and Liu 2019; Ngota et al. 2019; OECD/European Commission 2021; Riaño 2022), revealing their unique ability to not only adapt to new local circumstances but also thrive against all odds (Ram et al. 2017), given linguistic barriers, cultural differences, and often outright discrimination (Hack-Polay et al. 2021; Barth and Zalkat 2020; You and Zhou 2019; Wang and Warn 2018; Chrysostome 2010). As such, trying to understand how such entrepreneurs reacted to crisis, here represented by Covid-19 pandemic and related lockdowns, can be quite revealing, as migrant entrepreneurs operating through their unique struggles may need to make decisions about future viability of their business ventures that have maximum effectiveness. Since their spectrum of survival decisions is limited compared to native entrepreneurs (Canello 2016), these decisions could constitute the most important actions to ensure business survival more broadly.

Given this interest and in response to calls for learning from Covid-19 crisis (Etemad 2021), we ask the following research question: how do migrant entrepreneurs respond to crisis in the UK? In order to answer this question, we interviewed 14 Chinese entrepreneurs based in the UK running a number of service sector businesses. Our approach addresses a shortage of qualitative studies of migrant entrepreneurs (Dabić et al. 2020). We employed template analysis to extract findings from the data. Our

key contribution is to observe that migrant entrepreneurs studied here revealed two key survival approaches: *adaptation* or *hibernation*. Whilst the former approach includes either employment of digital technologies at a greater scale and switching products, the latter reveals the ability of migrant enterprises to prepare for ‘rainy days’ with financial reserves to wait off the crisis in order to grow in restructured markets. The findings contribute to the migrant entrepreneurship (e.g. Njoku and Cooney 2022; Baron and Harima 2019; Lundberg and Rehnfors 2019) and small business survival literatures (e.g. Srinok and Zandi 2021; Leppäaho and Ritala 2022; Cowling et al. 2015).

The article is structured as follows: section 2 reviews the literature on firm survival and migrant entrepreneurship, section 3 outlines our methodological design followed by findings reported in section 4; section 5 discusses these findings, whilst we conclude the paper with implications for policy and practice in section 6.

2. Survival and migrant enterprises

This section reviews literature on key firm survival factors, migrant entrepreneurship, and crises.

2.1. Firm survival

The survival of firms is determined by a number of factors partly related to fixed characteristics of the firm or its entrepreneur, and partly to characteristics that are shaped by decisions taken by entrepreneurs. Firm’s age is probably one of the key attributes of the firm that is related to its survival. It can be manifested either through the liability of newness – where young firms are under increased risk of failure due to limited experience and still undeveloped growth trajectory, or liability of senescence – where older firms are unable to change their ways through developed inertia (Coad 2018). As such, age constitutes a characteristic that is non-linear in character (Holmes and Schmitz 1996; Holmes et al. 2010), but it cannot be considered in isolation from other factors that may explain firm survival (Coad 2018). Size is also important (Jovanovic 1982; Evans 1987; Andresson et al. 2012), as firms prolong their operations they are more likely to grow, accumulate assets (Geroski 1995), with larger firms having lower chances of failure (Renski 2011; Kim and Lee 2016; Basile et al. 2017).

A number of studies (Ugur and Vivarelli 2021) identified innovation to be an important factor explaining why some firms survive when others do not. Crucially so, innovation expresses ability of a firm and its employed human capital to translate knowledge into new commercial opportunities, either new products or services, business model, process or organisational improvements. Firms with higher levels of absorptive capacity show a greater innovation performance (Cohen and Levinthal 1990; Lau and Lo 2015), as such contributing to firm survival (Cefis and Marsili 2005; Ugur and Vivarelli 2021;

Zhang and Mohnen 2022). Innovation ensures that a firm competes in a market not merely on price – in a race to the bottom – but predominantly on new or improved products, services, or processes that are better than competition, enabling the firm to achieve growth (Nathan and Rosso 2022) and increase productivity (Ugur and Vivarelli 2021).

Many scholars highlight the importance of looking at the entrepreneur and their characteristics, as firms do not make decisions for themselves, rather it is the individuals that matter. Hence, it is often not the strategic decisions available to an entrepreneur, but their execution that determines firm's success (Clifton et al. 2020). As such, human capital of the entrepreneur is found to be positively related to firm survival (Bosma et al. 2004; Santarelli and Vivarelli 2007; Rauch and Rijdsdijk 2013), especially expressed through education, prior experience in a similar sector as their firm's (Gimeno et al. 1997), managerial (Gimmon and Levie 2010) or entrepreneurial experience (Linder et al. 2020). In fact, there is evidence that entrepreneurs who started their firms straight after education are more likely to be successful (Huggins et al. 2017). These expressions of human capital indicate the ability of the entrepreneur to manage their businesses, show better innovation and technology adoption, and reveal ambitions (Queiró 2022) that translate into greater firm growth and consequently survival. As such, entrepreneurs with higher levels of human capital reveal greater levels of effectiveness at running enterprises, making the right decisions, and avoiding inertia by utilising their absorptive capacity (Cohen and Levinthal 1990).

Given the importance of human capital, instincts of entrepreneurs and their decisions are critical to ensuring survival of firms. Having higher level of schooling, or education in general, exposes entrepreneurs to a broader knowledge and understanding of the reality, a greater ability to analyse situations and come up with a wider spectrum of decisions to evaluate future path selection for their ventures. This is especially important as crisis situations may induce rigid thinking and prevent an entrepreneur from appropriate situational analysis and solution identification (Osievskyy et al. 2023). Managerial and prior entrepreneurial experience add vital applied expertise that enhance decision making and instincts of an entrepreneur through familiarity of situations, past good or bad decisions teach causal effects that can be applied more routinely to a new venture. Consequently, an entrepreneur with higher levels of human capital across a range of measures, may not only make better decisions, but may make these faster – either capitalising on emerging opportunities or saving time for work that builds their business.

There is evidence to suggest that the demographic background of an entrepreneur may also play an essential role in explaining their firm survival. In particular, past research highlights the importance of age (Dahl and Sorenson 2012; Storey and Wynarczyk 1996), gender (Bosma et al. 2004; Kiefer et al. 2022), and nationality (Canello 2016; Sinkovics and Reuber 2021). Entrepreneur's age captures a complex dynamic of characteristics that could include accumulated experience, openness to technology

and change, but also retirement planning or rigid thinking. Gender of an entrepreneur accounts for the fact that female enterprises typically show lower levels of survival compared to male ones, predominantly predicated on traditional gender responsibilities, but also the fact that most firms are run by males. Finally, migrant entrepreneurs who tend to operate under disadvantaged conditions compared to natives show a greater struggle to survive (Ram et al. 2017). However, at the same time, those surviving firms may have been subjected to entrepreneurial filtration mechanism (Prokop 2021) that selected entrepreneurs that show uniquely high levels of perseverance and determination to succeed.

Given these spectra of firm and entrepreneur characteristics that inform of firm survival, it is important to observe how firms cope during crises. A study by Mangani and Tarrini (2017) of a cohort of Italian digital publishing firms affected by the Great Recession of 2008 indicates that firms that run diversified rather than specialised operations are more likely to survive, suggesting risk-minimisation strategies as important survival approaches. Further to that, firms that accumulate adaptive skills – primarily by developing human capital, are found to experience greater survival probabilities than those that focus on cost-cutting strategies (Bartoloni et al. 2021). This confirms older studies that indicated cost-restraint as disadvantageous actions taken by firms during recessions (Pearce and Michael 1997). These responses also separate younger from more established firms, with the latter more likely to engage in cost-cutting in response to crises (Latham 2009).

As such, there is clear evidence pointing towards improved survival rates of firms that face recession proactively (e.g. Srinok and Zandi 2021). This is further evidenced in studies that investigate innovativeness of firms during Covid-19, where more innovative firms were found to enjoy higher survival levels compared to their less innovative counterparts (Suleman Ali 2022). Furthermore, in a study of family firms Leppäaho and Ritala (2022) show that these businesses not only tend to accumulate resources for the rainy days, but they also reveal a risk changing behaviour in response to crisis. Family firms that were risk-averse prior to Covid-19 pandemic were more likely to become risk takers during crisis, indicating their readiness to proactively secure survival when external conditions challenge their family firms' viability. Such firms would engage in innovation – opening new lines of products. This importance of facing recession head-on is further highlighted when firms choose to engage in new marketing techniques, using digital platforms, e.g. social media (Nickell et al. 2013). Finally, it is important to note that notwithstanding the immediate responses, human capital is the main determining factor of firms returning to growth during recessions (Cowling et al. 2015).

Decision-making during crisis is complex yet urgent. For migrant entrepreneurs who operate in a more constrained business environment, survival responses need to be effective, as the margin of error is smaller. The next section pays attention to such entrepreneurs and crises.

2.2. Migrant enterprises and crisis

Whilst migrant enterprises constitute a small proportion of firms in most place-based entrepreneurial ecosystems, their contribution is highly important. Migrant entrepreneurs bring in external knowledge and networks (Schäfer and Henn 2018) that play a vital role in shaping the evolutionary trajectory of an ecosystem. In fact, such external links are important to healthy entrepreneurial ecosystems (Prokop and Thompson 2022) positioning them favourably in terms of wider economic development. As such, migrant entrepreneurs are important economic actors, that represent heterophilious connections, so crucial to preventing network lock-in of place-based entrepreneurial ecosystems (Prokop and Thompson 2022). They add to the cultural vibrancy of their ecosystems, making them more attractive as places (David and Schäfer 2022). Consequently, they contribute to better collective entrepreneurial outcomes of ventures in ecosystems they co-create.

However, migrant entrepreneurs occupy a disadvantaged position in these spaces, where they are typically less-equipped to run businesses compared to native populations (Elo et al. 2018). Extant research shows evidence of cross-cultural struggle (Hammarstedt and Miao 2019), where migrant entrepreneurs find it difficult to operate within a different cultural context, in particular understanding the native market they are prepared to serve. As a result, many such entrepreneurs tend to focus on their diaspora, serving culturally proximate segments of the market (Hamilton and Dana 2008). However, only when migrant entrepreneurs step outside of their cultural comfort zone their businesses can enjoy higher growth rates thanks to connecting with the native populations (Guercini, Milanesi, Ottati 2017; Tubadji et al. 2020). Furthermore, linguistic barriers (Barth and Zalkat 2020) make bureaucratic side of running firms harder and prevent such entrepreneurs from engaging with both native customers and potential employees, often leading them to hire from within their diasporas (Hack-Polay et al. 2021; Chrysostome and Arcand 2009). Therefore, language proficiency issues may act as a reinforcing mechanism that prevents growth of migrant enterprises, by limiting their ability to embed themselves in local native networks. These challenges are further compounded by discrimination that can manifest itself in various forms (Naudé et al. 2017; Ram et al. 2017; Rashid and Cepeda-García 2021), for example through a struggle in accessing financial capital (Zhang 2008), inability to gain trust of native consumers (Hack-Polay et al. 2021), or indirect market exclusion (You and Zhou 2019). In fact, discrimination is identified as the main reason why migrants enter entrepreneurship in the first place (e.g. Guerrero et al. 2021; Poblete 2018; Naudé et al. 2017), since they find it either impossible to progress in career, secure employment matching their skills, or secure any employment. Consequently, migrant entrepreneurs show a high level of perseverance, ambition and resilience to overcome such struggles (Ramos-Escobar et al. 2022).

In their determination for success, it is the human capital and ability to employ international networks (Basu 2011), managing local business relationships (Ramadani et al. 2014), and multicultural competencies (Light et al. 2013) that are important for migrant entrepreneurs. In fact, prior entrepreneurial experience has been found to be particularly important to success of migrant firms in

Silicon Valley (Basu and Virick 2015). Given the fact that migrant enterprises are predominantly family firms, this does not mean that they become lifestyle firms or lack growth ambitions, as evidence points out many stories of successful migrant businesses that become publicly-listed (Etemad 2018). As such, some of these founders engage in transnational entrepreneurship, which allows them to draw on knowledge and resources from their home and host countries. In their study of Chinese transnational entrepreneurs in Canada Lin and Tao (2012) find that their firms are quite successful and express a growth-orientation of the entrepreneurs. As their firms are typically family-owned, with the average Chinese entrepreneur holding a higher education degree, they are found to be able to support their families through this single source of income (Lin and Tao 2012), suggesting better financial and lifestyle conditions compared to those on offer in the labour market. In fact, family firms more generally are cautious and ‘slow but steady’ growth-oriented businesses (Miller et al. 2016), indicating their ability to develop secure income streams from entrepreneurial activities. The transnationality is also reported as an element of Chinese entrepreneurs in Italy, with their firms securing better growth by building inter-ethnic networks that mobilise resources and knowledge from both the Chinese diaspora and native population (Guercini, Milanese, Ottati 2017).

Given how determined and successful migrant entrepreneurs are in spite of their disadvantageous position, their ability to navigate through a crisis is quite telling in terms of key decisions they make to ensure business continuation. Their position may be considered as one where migrant entrepreneurs persevere through multiple crises types related to being a migrant (Lintner 2019), making their determination for business survival unique, given how much they endured before an exogenous crisis – whether financial or health related – impacted their firms. In their study of European migrant entrepreneurs in Thailand Egan and Tosanguan (2009) found that those pursuing entrepreneurial success were more likely to proactively respond to crisis, in this case the Great Recession, compared to hobbyists who could rely on vast financial reserves capable of patiently waiting for the crisis to end in order to return to their lifestyle firms. However, this is a unique case of migrant entrepreneurs from developed countries running businesses in a developing nation, where they did not face the same disadvantageous conditions as migrant entrepreneurs in an inverse scenario, with them enjoying high levels of personal wealth prior to founding their ventures (Egan and Tosanguan 2009) – as such driven to entrepreneurship by different motivations – lifestyle rather than necessity focused. Studies of the Great Recession indicated that migrant entrepreneurs could suffer diverse outcomes depending on their sector of activity and financial setup – e.g. those in construction or hospitality, or taking mortgage did not do well in the US, compared to others that survived by adopting cost-control measures (Correa and Girón 2013). However, some research also indicates that migrant enterprises are more likely to fail compared to native firms during crisis, which is predominantly attributable to their liability of foreignness (Irastorza and Peña-Legazkue 2018) – the difficulty in operating a firm in a foreign country. As such, the unique nature of migrant enterprises and the disadvantages they

experience suggest that surviving any crisis is of greater struggle to such firms, yet potentially those that survive show a high level of resilience.

Whilst previous types of crises were mostly of a financial proclivity, the recent Covid-19 pandemic was even more exogenous, as it was health based. Thus far, evidence on migrant enterprises surviving during the pandemic is limited, but shows an interesting development of issues. For example, a modest study of African migrant entrepreneurs in Finland revealed early evidence suggesting that they either stop their business operations, control costs and increase working hours, or amend suppliers to overcome disrupted global transport networks (Vorobeva and Dana 2021). A similar experience of Finnish migrant enterprises in hospitality sector confirmed these findings, and added that government support schemes had too restrictive eligibility criteria for them to apply for (Arslan et al. 2022) – adding extra stress to already struggling businesses. For transnational migrant entrepreneurs the situation is slightly different – as they engage across multiple institutional and geographical spaces, as such they were found to reveal mitigation responses and new opportunity exploration in coping with Covid-19 pandemic (Harima 2022). The transnational cultural and knowledge resources that migrant entrepreneurs can access allow them to be better prepared to cope in times of crises, enabling them to run more flexible firms compared to native counterparts (David et al. 2021). This is especially important when considering that many of them rely on family members to help with their ventures, when formal employment may be unavailable due to crisis-induced cost control.

Clearly, there is emerging evidence on how migrant entrepreneurs dealt with Covid-19 crisis, but evidence base is still unsubstantial, especially when it comes to different national/cultural contexts and responses selected, given how reliant migrant entrepreneurs are on their knowledge, skills and resources gained or accessed from home countries. Specifically, Chinese migrant entrepreneurs are unique in the fact that their home country dominates global production and at the same time is one of the largest markets in the world, suggesting that they may respond differently than migrant entrepreneurs from other countries. The remaining parts of the paper are devoted to testing this uniqueness by exploring how Chinese migrant entrepreneurs responded to Covid-19 crisis.

3. Methods

This paper responds to increasing calls for more qualitative and inductive type research on migrant entrepreneurs (Dabić et al. 2020), in particular studies that are interested in advancing the theory (Aliaga-Isla and Rialp 2013) or highlighting the mechanisms (Dana and Dumez 2015). Therefore, qualitative research, using in-depth semi-structured interviews, has been used to focus on discovering new insights. This approach is well suited to gather detailed information about the participants (Dana and Dana, 2005). It allowed a better understanding of the daily challenges immigrant entrepreneurs deal

with and their survival responses. The study has an inductive character (Strauss and Corbin 1998), learning from the insights gathered from migrant entrepreneurs.

3.1. Data collection

In order to collect a culturally uniform sample we focused on Chinese entrepreneurs in the UK, who display unique entrepreneurial characteristics, not least because of their preferential connections to world's manufacturing hub - China (Lin and Zhou 2022). Increasingly so, they are found to be more than just 'middleman minorities' and reveal ability to establish innovative and/or global businesses (Zhang et al. 2021). At the same time, they are an understudied migrant community in the UK (Pharoah et al. 2009), which may have faced greater difficulties in operating their migrant enterprises, given the media reports that the virus originated in China. The mix of these capabilities, connections and challenges, makes their responses to crisis unique.

We selected a sample of participants who were Chinese immigrants in the UK, and founded and operated a business for at least 3 years prior to the pandemic, to discount the effect of the honeymoon period (Hudson 1987; Coad 2018), when early starts enjoy greater survival chances. As such these participants were intentionally selected for the important information they can provide on their response to crisis (Creswell and Plano Clark 2010; Neuman 2014). Data was collected through in-depth interviews, which, in order to ensure safety of both the researcher and the participants and comply with lockdown restrictions, took place over Zoom.

In total, 14 interviews were conducted with entrepreneurs across Sheffield, Chesterfield, London, Derby, and Nottingham between May 2020 and July 2020 which lasted between 40-60 minutes each. This number of interviews is in line with Saunders and Townsend's (2016) guidelines for qualitative research samples. All interviews were voice-recorded and transcribed. The interviews were collected by one of the authors who is native Chinese to provide more ease and comfort to the participants to share their insights, especially as Chinese migrants are typically difficult to study given their mistrust towards the intentions of the researchers and linguistic issues (Pharoah et al. 2009).

Each interview started with general questions about the entrepreneur's background and the nature of their business, exploring their motivations to start a business, followed by questions related to how Covid-19 crisis affected their firms, and how they reacted to it. Table 1 outlines the summary of the interviewees' socio-demographic characteristics. In order to ensure anonymity of the interviewees, especially given the sensitive nature of studying Chinese migrants (Pharoah et al. 2009), we randomly generated Chinese names to replace the real ones (as displayed in Table 1), and ensured the data revealed in the manuscript does not allow identification, yet at the same time offers sufficient detail to understand the nature of their responses to crisis.

It is important to note that some of the entrepreneurs studied owned and ran more than one firm, in one case an interviewee also owned manufacturing operations in China (*Wanyan Hu*), confirming the much broader character of Chinese migrant entrepreneurs (Zhang et al. 2021) than just local traders. We have revisited the entrepreneurs in April 2023 to check the status of their enterprises, given their responses to crisis. All except for one still continued with the same businesses. The one (*Jie Zhen*) that closed their business did so for pragmatic reasons in response to changing market trends – in order to open another business in the same sector, but addressing a different consumer demand in the hospitality sector.

Table 1 About here

3.2. Analytical approach

The study employs Template Analysis (TeA), which is a novel approach to data analysis in the field of entrepreneurship, but gaining increasing importance in management and organisational research (King et al. 2018). Whilst its origins are in psychology (e.g. Brooks et al. 2015), it has been found to be an effective derivative of thematic analysis which is not embedded in any particular philosophical stance, as such enabling greater flexibility to focus on answering research questions (King et al. 2018). TeA helps to identify tight generic themes originating within the data, whilst simultaneously allowing for problem-solving and theory building (Tabari et al. 2020). Importantly, TeA enables managing rich unstructured qualitative data and present them in a simpler way to ease interpretation (Waring and Wainwright 2008).

A bottom-up approach was used in coding the data inductively, with some of the *a priori* themes from existing literature in this area (e.g. *innovation, cost control*). This was an iterative process, which required coding and recoding data and amending the emerging template. In particular, as in Ensenhardt's (1989) approach, revisiting the literature was important to understand what the data said to ensure coding captured the meanings hidden in the data. After finalising the initial template, the preliminary codes were clustered leading to the emergence of a set of higher order codes which were then grouped together into meaningful main codes (or, in non-template language: themes) for the final template. The quality and validity of the final template (Table 2) has been inspected by co-authors (Tabari et al. 2020) to ensure it represents data captured and minimises researcher's bias.

Table 2 About here

4. Findings

In their response to crisis the Chinese migrant entrepreneurs reveal two key approaches: *adaptation* and *hibernation*, equally split across the sample. The former was related to behaviour that was proactive, it showed intent to change something about businesses to generate sales, even if it meant a wider deviation from the original sectoral focus. The latter reflected more cautious behaviour, where brand integrity was important to migrant entrepreneurs, or the business was in a sector where generating sales was not possible, but the entrepreneur responded passively to crisis, relying on savings to wait off the storm in order to return to ‘business as usual’.

Whilst we observed some limited skew towards more female entrepreneurs choosing to adapt to new circumstances (5 out of 7), and more male respondents hibernating (5 out of 7), the sample size is insufficient to clarify if this is a wider gendered phenomenon. We have also observed no particular spatial or sectoral differences. As such, we would caution the reader to account for the sample size in interpreting the findings.

The results are summarised in Table 3. Below we disaggregate these two core responses to reveal a complexity of motivations and approaches that express them.

Table 3 About here

4.1. Cost control

As the Covid-19 crisis started, respondents that were characterised by *adaptation* response observed a need to reduce their business expenses to adjust to new demand levels, but also to prolong operations. These cost control measures were a response to improve how the business navigated crisis. Whilst two firms also stopped operations of their core activities, they all reoriented their costs towards profit-making activities. This diversification type strategy (Mangani and Tarrini 2017) was important to controlling business cash flow, especially as it was not predicated on sole cost-reductions that may lead to adverse survival effects (Bartoloni et al. 2021).

For example, Jian Tian before the pandemic was selling top-end sports equipment aimed at a wealthier clientele and managed sporting talent, training them towards major sport events. Whilst the equipment sales did not generate high volumes, it was a sustainable activity. However, the training side of the business had to stop, and all costs had to be reduced to reposition the focus. Covid-19 forced Jian Tian to switch to a cheaper line of sports equipment products, serving family type customers at a higher volume of sales. As such the control of business costs was exercised to enable revenue-generating operations.

During the lockdown, my sales have increased ... Many families with children need entertainment and they are looking for sports gadgets staying at home. Our high-quality product is a popular choice and it will have a wide market in the UK and EU. [Jian Tian]

Furthermore, cost control as an adaptive mechanism was important to migrant entrepreneurs, as many of them relied on imports from China, which, due to logistics problems, increased in prices. Whilst the availability of products returned to some normal, costs did not immediately deflate, leading some of them to alter their logistical arrangements – air to water shipping. Whilst this prolonged the time such goods took to reach migrant businesses, it reduced cost tensions enabling continuation of operations.

4.2. Online marketing

Migrant businesses that showed *adaptation* response were proactive in recognising that to continue operations their marketing approach required changes. In all cases, regardless of the sector, the key solution was to switch to online marketing, which mitigated against lockdowns by enabling businesses to reach customers, old and new. Whilst many of them already had some limited online presence prior to the pandemic, their engagement with this form of marketing appeared passive in character. However, in order to adapt to the drastic change in circumstances the migrant entrepreneurs recognised that their online presence needed to be managed actively, as it would provide a better communication channel about their firms and products, confirming previous findings (Nickell et al. 2013). Consequently, many of them used social media, where they could sell directly to their followers, or employed other online platforms to reach customers – e.g. eBay or Amazon. For example, Xinya Quan operating her takeaway greatly benefited from online orders, reflecting positively on past decisions to forego opening a restaurant in favour of a takeaway, as adjustment to Covid-19 conditions was easier, given the nature of the business, as presented below.

Selling online is the right direction! Both of our current businesses depend on it. I am glad that I did not choose to do the buffet restaurant on high-street as it has been hit very hard in the pandemic. After the pandemic, more customers will buy their food or products online, this trend will continue. [Xinya Quan]

Many of the migrant entrepreneurs considered these to be new trends, revealing their greater openness towards emerging commercial approaches. The data does not indicate any clear pattern related to the age of the entrepreneur or the business, nor how long they lived in the UK for, suggesting that this openness is a unique feature of *adaptive* entrepreneurs. This ‘head-on’ proactive nature of responding to crisis is particularly important to firm survival (Srinok and Zandi 2021).

4.3. Innovation

As part of the proactive nature of *adaptation* response, Chinese migrant entrepreneurs placed emphasis on innovation, reflected predominantly in them either selling new products, or changing the nature of their revenue-generation. For example, Shun Shao could not continue to run her fitness and entertainment business during Covid-19, as it required in-person contact with her customers. Instead, she monitored her customers online at no cost – to ensure they continued to practice, and developed an online sale of weight loss products using her social media. Whilst this is something that she started doing just before the outbreak, thanks to online platforms and increased demand for fitness during lockdowns, she was able to rely on these sales as the only profitable revenue generation activity and direct it at a much wider customer base, as depicted below.

In terms of weight loss products, my main market were 21-45 years females last year, but now Children over 12 to senior people in their 70s, male or female customers all buying. The demographic range is much wider.

I am glad that I have the online selling business through social media. It has almost no cost while I can sell to my friends, students and fans all over the world, including the UK, China, Hong Kong, US, Canada and EU. [Shun Shao]

This is an important survival mechanism (Suleman Ali 2022), as innovative firms recognise market opportunities and amend their offering, revealing a competitive character. For Chinese migrant enterprises this is quite novel, as for many decades they have not been recognised as innovation-oriented firms (Zhang et al. 2021). As such, innovation shows the ability of Chinese migrant entrepreneurs to critically reflect on their businesses, and, in part, take risks to ensure survival by securing revenue generation. As mentioned before, some of this new products or new nature of business required further adjustments in marketing. This is indicative of more drastic changes required as they affected more than one aspect of the business. Consequently, adaptive migrant entrepreneurs show ability to take risks.

4.4. Cost-cutting

For Chinese migrant entrepreneurs whose response to crisis was *hibernation*, the cost-cutting was an important step towards slowing down business operations. Unlike with cost-control, here the migrant entrepreneurs had a very simple goal: to minimise expenditure towards a leaner business, especially as any business operations were inhibited by lockdown restrictions. Further to that, cost reductions were even more important as the migrant entrepreneurs found it difficult to find alternative income streams. The key reason behind such drastic decision-making was to ensure the business survived until after the pandemic, when it was expected that the market conditions would greatly improve. This is well captured in Ruohua Geng's case, where his travel agency business was intensively engaged in reducing costs, with a positive outlook towards the future, as depicted below.

The only thing I can do now is to pause all the inbound and outbound travel business operation and try to save some cost. Unfortunately, I may have to lay off quite a lot staff soon to reduce running costs. ... Even with the support from government, our company will lose at least 2 Million RMB this year.

I will diversify our business to another sector after the pandemic. The purpose is to mitigate damages if future similar crises happen again.

A lot of competitors will be wiped out. If we can survive, then we have opportunities to have better market share. [Ruohua Geng]

Whilst cost-reduction does not lead here to any income generation, it confirms prior research on Covid-19 responses (Vorobeva and Dana 2021). Crucially, migrant entrepreneurs are deeply invested in their businesses, and this mechanism shows their cautious approach towards preservation of their firms. Although extant research does not support this as a survival strategy (Bartoloni et al. 2021), our cohort of firms clearly reveals a 3-year survival since the first lockdowns. This close reliance on their firms is predominantly motivated by lack of opportunities our respondents experienced in previous spells of employment, where their nationality prevented them from career progression.

4.5. Stopping operations

Hibernation is only partly an endogenous response, as it is predominantly imposed on the entrepreneurs by Covid-19 restrictions. Chinese migrant entrepreneurs highlighted experiencing supply issues, making it impossible for them to provide their products or services to their customers. At the same time, their firms stopped operating due to lack of demand, which even if they could resolve supply issues, continued to prevent them from generating any revenue. For example, Wanyan Ma runs a construction business that predominantly deals with renovations. For his business it was impossible to operate due to restrictions, and no alternative ways of raising revenue were sought by Wanyan, as depicted below.

All the building and refurbishment projects halted from 20th March to now. There are no business activities going on site. ... There are no other options. I can't put my staff at risk, and it is impossible to work from home for builders. [Wanyan Ma]

Some of the migrant firms recognised it as important to focus on their existing customers to provide them with support during the pandemic, even if it costed them to do so. Chinese migrant entrepreneurs recognised the importance of brand and reputation, which they wanted to preserve for post-Covid times, when they expected an uplift in the markets. These reduced or stopped operations show a lack of exploration of alternatives by hibernating migrant entrepreneurs. Whilst, their problems were partly sector-related (Correa and Girón 2013), they did not try to find alternative sources of revenue,

confirming one of the migrant responses identified among African migrant entrepreneurs in Finland (Vorobeva and Dana 2021).

4.6. *Waiting*

For any firm to choose to wait off a crisis is inherently a risky decision, especially when it is impossible to identify when that crisis could end. Even though such inaction is very passive in nature, it requires strong financial foundations from a business or its owner. Chinese migrant entrepreneurs show a high level of financial resilience, in part related to their ability to foresee a need to operate reserves or savings, as depicted below.

Nothing like this happened before. Fortunately, we can hold on for a long time, while large companies may go bust during this crisis. [Zhiyi Tao]

As such, *hibernation* is a very unique response for firms that can exercise financial restraint and perseverance when running limited or no operations. What is interesting is that the majority of Chinese migrant entrepreneurs admitted this quite openly. For example, Xun Sun stressed the importance of holding cash reserves to ensure good financial management, as shown in the excerpt below.

Many companies can't get through the crisis because they did not prepare for the rainy days. I understand that the booms and dooms of the economy are inevitable and have reserved savings for business operations for a period of time. [Xun Sun]

For some of them, waiting released time they could spend with family, enabled by financial reserves. This was especially prevalent among the micro-firms when operations were efficiently run from home already prior to the pandemic. This ability shows how migrant entrepreneurs faced with daily difficulties developed resilience through sound financial management, given the hardships they typically endure (e.g. Naudé et al. 2017; Ram et al. 2017; Rashid and Cepeda-García 2021).

5. Key responses to crisis: adaptation or hibernation

The unique nature of migrant entrepreneurs studied here indicates two core responses that lead to survival: *adaptation* or *hibernation*. Table 4 captures representative quotes illustrating these responses.

Table 4 About here

Adaptation is characterised by pro-activity (Srinok and Zandi 2021), search for revenue generation and growth. Migrant entrepreneurs who responded through *adaptation* would also show a higher propensity towards innovation, introducing new products, shifting focus of their business, changing the ways they do things, employing new technologies (Akpan et al. 2021; Abed 2022). In all these actions they recognise that survival during crisis can be growth-oriented, developmental for their businesses, enable them to try new things. *Adaptation* as such becomes a response when entrepreneurs recognise altered market conditions. They do not make assumptions as to the length of the crisis, but instead focus on maximising revenue generation. In part, this reflects their approach to multiple crises they are used to facing – predominantly related to being a migrant (Hack-Polay et al. 2021; Barth and Zalkat 2020; You and Zhou 2019; Wang and Warn 2018; Chrysostome 2010) and being in a disadvantaged position compared to native entrepreneurs (Canello 2016). Innovation, whilst improving survival chances (Suleman Ali 2022), is how they continuously persevere in achieving success for their firms. As such, Covid-19 crisis, whilst unique, may have been merely yet another obstacle to overcome.

In contrast *hibernation* is a passive response, but is predicated on the calculated ability of migrant entrepreneurs to wait off the crisis. Whilst in part, Covid-19 restrictions imposed a stop on business activities, migrant entrepreneurs merely tapped into their financial reserves to wait until they could resume their operations, without any search for alternative sources of revenue. This is unique, as prior survival literature did not indicate *hibernation* as a positive survival response (Srinok and Zandi 2021). As such, migrant entrepreneurs reveal how a passive response could result in survival, if businesses are prepared for crises. Therefore, *hibernation* is the ability to wait off, given accumulated resources. It is about reducing operational functions, slowing cost generation, and preparing for reopening when market demand returns. Interestingly, whilst *hibernation* is a passive response, the migrant entrepreneurs studied here revealed ambitious, even aggressive approach to business expecting many of their competitors to fail during Covid-19 crisis, leaving them with greater growth opportunities after crisis. It is important to distinguish *hibernation* from no-response, when firms are forced to close operations and have not accumulated resources to survive. *Hibernation* is deliberate and determined by prior decision-making and preparation. If sectoral issues could have been predominantly involved (Correa and Girón 2013), leaving all firms in the same sector with no proactive *adaptation* response possibility, *hibernation* could be considered itself a very aggressive response to crisis.

Given these findings, we propose a model of survival composed of two core survival responses to crises, as presented in Figure 1. Essentially, each crisis induces a selection of responses, with the two key responses leading to survival being *adaptation* or *hibernation*.

Figure 1 About here

6. Conclusion

The aim of this paper was to understand how migrant entrepreneurs respond to crisis in the UK. In doing so, we conducted a qualitative study of 14 Chinese migrant entrepreneurs. What we found amounts to two core responses to crisis that lead to firm survival: *adaptation* or *hibernation*. In essence, *adaptation* is about introducing changes in response to altering market conditions to ensure revenue-generation and/or growth, it is a proactive response. *Hibernation* is a passive response characterised by deliberate shutdown and/or slow-down of operations, with the business continuity funded from accumulated financial reserves of an entrepreneur that has been prepared for difficult times.

Implications

The findings presented here have implications for theory, policy and practice.

During crisis firms can make one of the two decisions to ensure their survival: *adaptation* or *hibernation*. This choice may be determined by their sectoral context or availability of resources. These two core actions emerged from a study of migrant entrepreneurs that have always operated from a disadvantaged position compared to natives (Canello 2016), making these two responses possibly the most effective survival approaches for a wider set of entrepreneurs. This adds to the literature on firm survival, building on emerging research uncovering these response mechanisms (Vorobeva and Dana 2021).

Governments need to recognise that survival of a business largely depends on its prior financial condition. As firms with greater reserves are able to weather a crisis passively, perhaps policymakers should require firms to hold minimum financial reserves to be prepared for difficult market conditions, whenever these emerge. In part, policymakers introduced similar conditions on banks to prevent the next financial crisis, yet in reality a whole population of firms could benefit from this prudent approach. Furthermore, policymakers need to recognise that during crisis firms may need to adapt to new market conditions. As such, they should design support programs that enable entrepreneurs to adapt to new market conditions, either through new ways of doing things or generating new products or services. In the UK, the approach of policymakers was focused more on enabling some form of *hibernation* – though funded by taxpayers rather than business owners, without recognising *adaptation* as an alternative route out of crisis.

Entrepreneurs – both migrant and native – need to be aware that in order to ensure survival of their businesses, they need to reflect on what responses their resources enable them to select, given that *adaptation* and *hibernation* are vastly different. All entrepreneurs should consider some form of preparation in their business plans for crisis. Some form of crisis is guaranteed to happen again, being unprepared may threaten the future viability of a business.

Limitations and recommendations for future research

This research is not without limitations. It could have engaged with a wider sample of migrant entrepreneurs, especially of a more diverse background. Whilst the Chinese entrepreneurs studied were all highly educated, revealing strong human capital foundations – critical to firm survival (Bosma et al. 2004; Santarelli and Vivarelli 2007; Rauch and Rijsdijk 2013), this is not a consistent image of all migrant entrepreneurs, with many of them not possessing such educational background. Studying those could have potentially revealed a different set of responses. For scholars studying firm survival or survival of migrant enterprises we recommend to focus on disentangling how the decisions about a response are made. Crucially so, we have recognised what responses were selected, but not how the decision-making process of an entrepreneur leads to each one of them.

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Interviewee	Gender	Age	Education (country of study)	Time in the UK	Firm Age [years]/ Location	Nature of business
Jie Zhen	Female	38	Further Education College (UK)	13 years	5 / Derby	Takeaway and wine retail
Zhiyi Tao	Male	47	Undergraduate Degree, MBA & PhD (UK)	19 years	12 / London	Workwear design and sales
Su Duan	Female	36	Undergraduate Degree / Postgraduate Degree (UK)	19 years	9 / Nottingham	Student recruitment, education
Xun Sun	Female	47	MBA (UK)	18 years	13 / Sheffield	Metal products supply
Ju Zhu	Female	41	Postgraduate Degree (UK)	9 years	3/ Sheffield	Food & catering
Jian Tian	Female	43	Postgraduate Degree (UK)	18 years	12/ Sheffield	Sport club management, sporting equipment sales
Shun Shao	Female	45	Undergraduate Degree (China)	20 years	8 / Sheffield	Fitness academy/ Weight loss products
Xinya Quan	Female	40	Undergraduate Degree (China)	14 years	6 / Derby	Takeaway & Wine selling
Zhixing Liao	Male	39	Postgraduate Degree (UK)	15 years	3 / Chesterfield	Takeaway
Wanyan Ma	Male	42	Postgraduate Degree (UK)	18 years	10 / London	Construction
Ruohua Geng	Male	32	Postgraduate Degree (UK)	12 years	10 / Nottingham	Travel agency & hotel
Zhixiu Kong	Male	58	PhD (UK)	16 years	13 / Sheffield	Alternative therapies
Yachun Hou	Male	57	Undergraduate Degree (UK)	36 years	30 / Sheffield	Automotive, technical design
Wanyan Hu	Male	39	Undergraduate Degree (UK)	17 years	13 / Sheffield	Carwash supplier/ Exporter of luxury goods

Table 1. Background of interviewees.

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| <ul style="list-style-type: none">1. Adaptation<ul style="list-style-type: none">1.1. Cost control<ul style="list-style-type: none">1.1.1. Demand adjustments1.1.2. Survival1.1.3. Rise in prices1.2. Online marketing<ul style="list-style-type: none">1.2.1. Social media and apps1.2.2. Adopt new trends1.2.3. Online platforms1.3. Innovation<ul style="list-style-type: none">1.3.1. New product line2. Hibernation<ul style="list-style-type: none">2.1. Cost-cutting<ul style="list-style-type: none">2.1.1. Limiting operations2.2. Stopping operations<ul style="list-style-type: none">2.2.1. Supply chain problems2.2.2. Maintenance of customer base2.3. Waiting<ul style="list-style-type: none">2.3.1. Using savings2.3.2. Responsibility to family, staff, community |
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Table 2. Response to crisis: final template.

Response to crisis	Core detailed responses
	<ul style="list-style-type: none"> ▪ anticipated or observed fall in demand ▪ prioritising continuation of operations ▪ supply chain problems leading to increase in prices
Adaptation	<ul style="list-style-type: none"> ▪ to continue operations changes to marketing became necessary ▪ a need to change how firms interact with customers ▪ adopting Chinese delivery apps (e.g. Hungry Panda) as well as British (e.g. JustEat, CityGrab) ▪ social media critical in enabling sale of products directly to customers
	<ul style="list-style-type: none"> ▪ new products introduced ▪ selling products that are not main business ▪ responding to shifts in consumer demands
	<ul style="list-style-type: none"> ▪ reducing operating costs
Hibernation	<ul style="list-style-type: none"> ▪ logistics issues - unable to obtain supplies ▪ unable to provide service at all – supply and demand evaporated ▪ focusing on existing customers - aftercare to protect reputation
	<ul style="list-style-type: none"> ▪ tapping into cash reserves or own savings ▪ spending more time with family

Table 3. Summary of findings

Response to crisis	Representative quote
Adaptation	<i>I can have more time to sell weight loss products (diet package) and it turns out very successful. Many people, no matter in China or the UK, have spent long time at home because of lockdown. They want to control the weight particularly in the restrained situation. [Shun Shao]</i>
	<i>I am doing on-line selling to keep my business active. It is the major income during this lockdown for my business. I am the exclusive sales agency for CompanyA, it is the No. 1 official partner of InternationalSports (the governing body of the sports). CompanyA provides the official equipment for all the InternationalSports games. [Jian Tian]</i>
	<i>Shut the business down for three weeks and then opened the pizza delivery service. We found the pizza home delivery business is getting busy through online booking, such as JustEat. [Ju Zhu]</i>
	<i>Car washing products are in deep trouble and our design products export business can provide important income during the difficult time! [Wanyan Hu]</i>
	<i>Actually the business is better than a year ago, because most customers can't be dinning out and they will order food more frequently. [Xinya Quan]</i>
	<i>During the lockdown, one little product, the electronic scooter charger, has become our star. The growth of the sales has increased 1,000% during this period. The reason is simple. People do not want to take public transportation to avoid catching virus. The demands for E-bikes and E-scooters have grown dramatically, so does the demand for the chargers. Fortunately, we have got these in stock. [Yachun Hou]</i>
Hibernation	<i>Controlling our spending and waiting for recovery is my current strategy. We need survive first and then grow with the economy. I am looking for growth sector at the moment as well, monitoring the direction from the public and private sector related to post-pandemic government stimulus. [Xun Sun]</i>
	<i>It is very hard to change our business model and generate other income at the moment. Most business halted. [Su Duan]</i>
	<i>We shut the business down and wait to see the overall environment change because of outbreak. [Ruohua Geng]</i>
	<i>All the business in the UK has been stopped from middle of March and now slowly recover. I try to avoid any bold actions at the moment. Although we might not make much profit, our business can survive a long time. [Zhiyi Tao]</i>
	<i>Shut the business down and wait to see the overall environment change because of outbreak. [Zhixing Liao]</i>
<i>All the building and refurbishment projects halted. I can't put my staff at risk, and it is impossible to work from home for builders. [Wanyan Ma]</i>	

	<i>We reduce the opening hours and provide a lot of appointment online. We will deliver the medicine to customers if necessary. [Zhixiu Kong]</i>
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Table 4. Core themes and representative quotes.

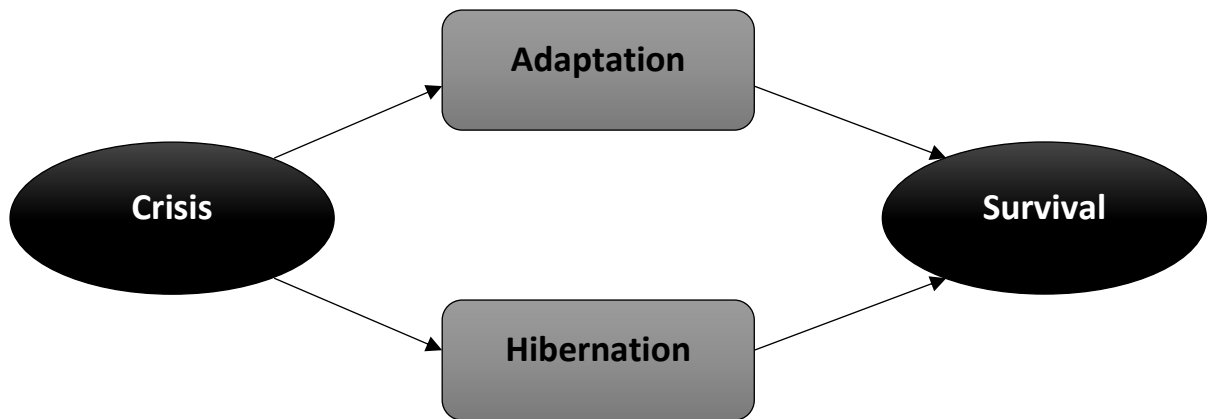


Figure 1. Key survival approaches in crisis.