

Exports or public procurement to resist in the post-pandemic world? How e-commerce appeases this food and beverage SMEs ambidextrous dilemma

Public
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Abstract

Purpose – Food and beverage (F&B) small and medium-sized enterprises (SMEs) must diversify their markets and obtain predictable sources of revenues to withstand difficult and volatile periods such as the post-pandemic geopolitical scenario, recently burdened by the Russian-Ukrainian conflict. On the other hand, another strand of the literature suggests that public procurement could be considered a great source of income, enabling solid contracts, revenues and cash-flow stability. Therefore, this paper aims to explore the role of public procurement, the adoption of e-commerce platforms and their interactions in affecting the exporting performances of SMEs operating in the F&B sector.

Design/methodology/approach – The study retrieves data from 2,186 Italian F&B manufacturing SMEs relying on Margo by Cribis database. Therefore, it conducts a structured equational model (SEM) to test the developed hypotheses empirically.

Findings – The findings reveal that digital selling platforms positively affect exports, whereas public procurement negatively affects F&B SMEs exports. Nonetheless, findings underline that the interaction between public procurement and the adoption of digital selling platforms dampens public procurement's negative effects on exports.

Originality/value – This study brings an original contribution to the F&B literature by conducting empirical research on an extensive sample of firms from one of the most influential countries in the F&B vertical, Italy, with officially registered data. More importantly, to the best of the authors' knowledge, this study pioneers the investigation of the relationship between public procurement and e-commerce platforms in affecting F&B SMEs' export performances.

Keywords Public procurement, E-commerce, Resilience, E-commerce platforms, F&B, Export, Ambidexterity, Agility, Cross-border e-commerce, SMEs

Paper type Research paper



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1. Introduction

Recent economic, health and political challenges have escalated markets volatility and risk, putting businesses and economies worldwide in danger (Hadjielias *et al.*, 2022; Hamid *et al.*, 2023). In this context, it is of the utmost importance for organizations to develop effective strategies to mitigate the impact of market fluctuations and economic uncertainties (Hadjielias *et al.*, 2022; Hamid *et al.*, 2023; Malodia *et al.*, 2023). Specifically, this is particularly relevant to businesses operating within the food and beverage (F&B) sector, as recent health and political challenges have significantly impacted the supply and demand for food (Ali *et al.*, 2022). Hence, F&B businesses must confront various challenges, such as business and market disruptions, food security and availability (Ali *et al.*, 2022).

The need to develop and consolidate business strategies that nurture organizational stability during difficult times is of paramount importance to small and medium-sized enterprises (SMEs) (Ensari and Karabay, 2014; Etuk *et al.*, 2014). This is because SMEs tend to be more vulnerable due to their smallness, financial resource constraints and lack of specialized knowledge (Klein and Todesco, 2021). But, SMEs play a crucial role in many countries' economic growth and development (Akenroye *et al.*, 2020); hence, their survival is of the utmost importance to governments and other larger entities. The European Union reports that 99% of the businesses within its borders are SMEs (European Commission, 2020a). F&B SMEs are of particular significance to the EU's success and prosperity since the F&B sector accounts for most of the EU's employment and value (European Commission, 2022).

The current body of literature proposes various strategies that could assist F&B SMEs in overcoming challenging situations. First, scholars' empirical evidence underlines the importance for organizations to internationalize in an attempt to diversify their market exposure (Adomako *et al.*, 2017; Bertello *et al.*, 2021). Recent technological advances have reduced the imposed barriers which restricted foreign markets to larger corporations (Bertello *et al.*, 2021; Cosentino *et al.*, 2020; Dabić *et al.*, 2020). Thus, F&B SMEs now have the opportunity to shift their focus toward foreign markets, as international diversification offers them the possibility to strengthen their ability to survive and grow (Adomako *et al.*, 2017; Reuber *et al.*, 2018; Tolstoy *et al.*, 2021). Nonetheless, the identification of appropriate export technologies is crucial for F&B SMEs seeking to internationalize (Ballerini *et al.*, 2023; Lehtinen *et al.*, 2016) since they must face various constraints associated with their smallness (such as limited resources and organizational capabilities) (Bellone *et al.*, 2010; Cerrato and Piva, 2012; Dethine *et al.*, 2020; Paul *et al.*, 2017) in addition to the multiple variables (such as geographical location, information asymmetries, contractual challenges) present in pursuing foreign market ambitions (Bertello *et al.*, 2021; Braganza *et al.*, 2017). Hence, there is a growing need for empirical research to investigate the relationship between SMEs' digitalization and their ability to permeate foreign markets (Bansal *et al.*, 2023; Costa *et al.*, 2020; Dethine *et al.*, 2020; Jia *et al.*, 2022). Specifically, scholars call for additional research concerning how e-commerce technologies affect SMEs' exports performance (Dethine *et al.*, 2020; Jia *et al.*, 2022) since e-commerce enables companies to expand beyond their domestic market by reducing the costs associated with internationalization (Tolstoy *et al.*, 2016), thus nurturing its pervasiveness as an instrument amongst F&B SMEs (Jia *et al.*, 2022).

On the other hand, scholars underline the need for SMEs to pursue public procurement contracts to obtain reliable and predictable sources of income to improve their stability (Akenroye *et al.*, 2020; Di Mauro *et al.*, 2020; Medina-Arnáiz, 2010). However, SMEs' participation in public procurement contracts is limited (Loader, 2011; Reijonen *et al.*, 2022; Saastamoinen *et al.*, 2017, 2020; Suhonen *et al.*, 2019). This is

because the exploration and comprehension of public procurement policies and contracts often requires resources which are not widely available within F&B SMEs (Loader, 2011; Reijonen *et al.*, 2022; Saastamoinen *et al.*, 2017, 2020; Suhonen *et al.*, 2019). Moreover, lack of specific knowledge and positive attitudes toward pursuing public procurement contracts hinder F&B SMEs' ability to successfully partake in public procurement contracts (Karjalainen and Kemppainen, 2008; Loader, 2011; Reijonen *et al.*, 2022; Saastamoinen *et al.*, 2017, 2020; Suhonen *et al.*, 2019). Hence, F&B SMEs seeking to successfully overcome challenging times must pursue stability both through public procurement; and diversification, through foreign market internationalization. In fact, multiple scholars report the need for future research bodies to gather empirical evidence to further our current understanding of how the pursuit of public procurement pursuit affects SMEs' internationalization (Kalinic and Brouthers, 2022; Loader and Norton, 2015; Loader, 2015; Flynn and Davis, 2015; McKeivitt and Davis, 2015; Reijonen *et al.*, 2022; Saastamoinen *et al.*, 2017). Studies investigating the aforementioned research gaps are believed to be of interest since they further address and acknowledge the highly complex barriers that F&B SMEs must face to pursue internationalization and public procurement contracts (Bellone *et al.*, 2010; Cerrato and Piva, 2012; Dethine *et al.*, 2020; Loader and Norton, 2015; Loader, 2015; Flynn and Davis, 2015; McKeivitt and Davis, 2015; Saastamoinen *et al.*, 2017). Moreover, conducting additional empirical research on the internationalization of F&B SMEs and its relationship with public procurement contracts can enhance our understanding of the relationship between international aspirations and public procurement (Reijonen *et al.*, 2022; Saastamoinen *et al.*, 2017, 2020; Suhonen *et al.*, 2019). The above-mentioned research gap is relevant to practice because it helps guide F&B SMEs' decision-making processes and strategic endeavors to nurture business stability and growth. Finally, the authors believe that F&B SMEs' critical role within the EU economic area (European Commission, 2022), as well as their contribution toward national prosperity (Ensari and Karabay, 2014; Etuk *et al.*, 2014), adds further relevance and timeliness to this body of work.

From a theoretical standpoint, the authors deem appropriate the use of the transaction cost theory (TCT) (Coase, 1995; Williamson, 1975, 1985) since scholars have evolved the initial proposition to fit the contexts of international business literature and public-private contracts (Beuve *et al.*, 2019; Cuypers *et al.*, 2021; Kano and Verbeke, 2015; Verbeke and Greidanus, 2009). TCT allows the authors of this study to explore the dimension of strategic opportunism dimension associated with international endeavors (Verbeke and Greidanus, 2009) and public procurement (Beuve *et al.*, 2019). Furthermore, through the use of the TCT framework, the authors will be able to make a significant contribution toward filling the theoretical void that requires further empirical evidence on how the constraints and boundary conditions of public procurement contracts impact companies' decision-making processes (Cuypers *et al.*, 2021).

Consequently, based on the previously reported scholarly empirical bodies of work, the authors of this manuscript seek to answer the following research questions:

RQ1. Do e-commerce platforms impact F&B SMEs' international aspirations?

RQ2. How does the pursuit of public procurement affect F&B SMEs' international ambitions?

To answer these reported research question, the present study retrieves data from 2,186 Italian F&B manufacturing SMEs relying on Margò by Cribis database (Brancati *et al.*, 2018; Modina and Zedda, 2022; Stefko *et al.*, 2019; Vavrecka *et al.*, 2021). The authors deemed relevant to investigate companies in the Italian context due to the importance of

Italian F&B SMEs to the national economic growth and prosperity (The World Bank, 2022). Moreover, Italian F&B SMEs account for 10% of total Italian exports (The World Bank, 2022), underlining their strategic and economic importance. Therefore, the authors conducted a structured equational model (SEM) to assess the relationship between F&B SMEs' public procurement and adoption of e-commerce platforms in affecting their export performances.

This manuscript contributes in a number of ways to the current body of scholarly knowledge. First, the authors gather empirical evidence which supports the hypothesis developed in this study, hypothesizing that: e-commerce platforms positively influence F&B SMEs' exports; public procurement contracts negatively impact F&B SMEs exports performance; and, finally, e-commerce platforms adoption positively moderates the negative impact that public procurement contracts pursuit has on F&B SMEs' exports performance. In doing so, the authors answer the call to research established by previous scholarly publications (Bellone *et al.*, 2010; Cerrato and Piva, 2012; Dethine *et al.*, 2020; Loader and Norton, 2015; Loader, 2015; Flynn and Davis, 2015; McKeivitt and Davis, 2015; Saastamoinen *et al.*, 2017). Second, the authors underline how public procurement contracts boundaries and constraints impact F&B SMEs' decision-making processes and strategic opportunism (Cuyppers *et al.*, 2021). Third, the authors propose that ambidextrous F&B SMEs are capable of overcoming barriers associated with internationalization and public procurement contracts, allowing them to pursue both dimensions without suffering negative effects on their export performances (Hadjielias *et al.*, 2022; Iborra *et al.*, 2020; Khurana *et al.*, 2022; Saratchandra *et al.*, 2022). The foregoing empirical finding is one of this study's most original contributions. Finally, this manuscript's insights suggest to policymakers the need to elaborate ways to facilitate and ameliorate public procurement tenders in an attempt to improve SMEs participation to public-private contracts (Reijonen *et al.*, 2022; Saastamoinen *et al.*, 2017, 2020; Suhonen *et al.*, 2019). Moreover, these manuscript insights support both private and public entities and organizations operating within the Italian context, thus highlighting one of this novel insights.

The article is structured as follows: section 2 contains a review of the literature review on transaction cost theory, internationalization, digital sales platforms, public procurement and ambidexterity, and it also illustrates the formulation of the research hypothesis. Section 3 presents an overview of the methodological approach implemented, highlighting the SEM technique and the reason why it was selected to conduct the study, as well as the analysis process. Section 4 presents the discussion with the literature highlighting divergences and agreements. Finally, sections 5 and 6 highlight the study's theoretical and practical implications, and section 7 describes its limitations and directions for future research.

2. Literature review and hypothesis development

2.1 Transaction cost theory

This body of work builds upon the seminal work of two Nobel awardees' (Coase, 1995; Williamson, 1975, 1985) transaction cost theory (TCT), which has become over the years one of the most prominent and widely recognized theories of management research (Cuyppers *et al.*, 2021). Initially, TCT was developed to be employed within vertical integration decisions such as "make vs buy"; however, today's scholars employ TCT to investigate various organizational phenomena such as horizontal diversification, strategic elements, public and private contracts and collaborations, and multinational ventures (Cuyppers *et al.*, 2021).

TCT's basic proposition is that organizational actors seek to maximize gains by pursuing "transactions (which differ in their attributes) to governance structures (the adaptive

capacities and associated costs of which differ) in a discriminating way” (Williamson, 1985, p. 18). Building upon the behavioral assumptions of opportunisms and bounded rationality, TCT postulates that asset specificity, uncertainty and frequency are the key attributes based on which various governance structures will be applied to transactions (Cuypers *et al.*, 2021).

First, Williamson (1985) gave particular significance to the notion of asset specificity. An asset is specific to a certain transaction if its value diminishes when used in another transaction. Originally, human and physical asset specificity, dedicated assets and site specificity were described as the four main conditions of asset specificity (Williamson, 1985). Second, Williamson’s (1985) TCT attribute of uncertainty is described as environmental unpredictability which leads organizations to adapt and enact sequential decision-making processes governed by bounded rationality. Third, Williamson’s (1985) TCT characteristic is frequency, which alludes to the frequency of recurring transactions. Incurred overhead governance costs are more likely to be recovered through frequently recurring transactions. Thus, TCT postulates that frequently recurring transactions are preferable to less frequent transactions (Williamson, 1985).

Over the years, the aforementioned TCT’s basic proposition has evolved in numerous ways; changes in TCT changes were driven by modern economic activities and the emergence of new types of transactions (Cuypers *et al.*, 2021). First, international business academics extended TCT to the concepts and notions concerning international expansion and multinational enterprises (Hennart, 1982). Indeed, the international business literature has broadened the strategic opportunism dimension of TCT by expanding upon the so-called Williamsonian dimension (Verbeke and Greidanus, 2009). In other words, international endeavors and expansion often fall within the strategic opportunism dimension of TCT since reprioritization and other deliberate governance intents reveal companies’ strategic preferences (Kano and Verbeke, 2015; Qi *et al.*, 2020). Behavioral uncertainty, viable governance forms, administrative mechanisms and internationalization operations are identified as the main elements which govern organizations’ decisions about international endeavors (Hennart and Park, 1993; Gaignon and Anderson, 1988). Second, scholars expanded TCT insights to e-businesses (Deng *et al.*, 2022; Hennart, 2019, 2022; Hui, 2020), technology platforms and communicational advances (Boudreau, 2017; Lehdonvirta *et al.*, 2019; Qi *et al.*, 2020; Schmidt and Wagner, 2019; Zhu and Liu, 2018). Technology and online platforms nurture new business models which underline multi-party contexts that allow researchers to extend the logic of TCT beyond the dyadic level (Cuypers *et al.*, 2021; Zhu and Liu, 2018). Hence, scholars encourage the use of TCT within studies that target companies operating through online platforms. Third, academics have extended TCT to the concepts and notions concerning public-private partnerships (Chong *et al.*, 2015; Mahoney *et al.*, 2009). Public procurement contracts tend to be more rigorous and unyielding than private contracts; hence, the aforementioned rigidity of public procurement contracts constraints the value that an organization can generate from them (Beuve *et al.*, 2019; Mahoney *et al.*, 2009; Moszoro *et al.*, 2016). Therefore, public-private partnerships’ costs and benefits force companies to tailor their strategic preferences and governance intent to public procurement endeavors (Cuypers *et al.*, 2021; Mahoney *et al.*, 2009). Indeed, scholars believe TCT can contribute to our understanding of public procurement contracting, as well as help academics further explore how boundary conditions affect TCT decision-making (Cuypers *et al.*, 2021).

Consequently, considering this manuscript’s intended framework, sample composition and research aim and the aforementioned application of TCT, the authors believe TCT to best fit this body of work. Additionally, considering Table 1, which highlights some bodies of work that employ TCT, the authors of this manuscript believe they can further expand and develop the strand of the literature strand on TCT and e-commerce, public procurement and internationalization by conducting an empirical study which merges these elements in a single study.

Authors	Exports	Digital platforms	Public-private contracts	Key findings
Verbeke and Greidanus (2009)	✔			Develop the concept of bounded reliability to describe organizations' accurately failed commitments Further develop the concept of legitimacy for international business studies
Kano and Verbeke (2015)	✔			Investigate the internationalization theory of medium-sized enterprises jointly with the transaction cost theory Bonded reliability and conventional opportunism is the primary driver of international endeavors' commitment failure Bonded reliability and conventional opportunism improve managerial decision-making and firms' strategic actions
Gatignon and Anderson (1988)	✔			Transaction cost argument molds governance structures Transaction cost argument promotes asset utilization Cultural and political differences impact transaction cost considerations for market mediation
Hennart and Park (1993)	✔			The transaction cost theory notion of strategic opportunism can be applied to acquisitions and greenfield investments to fuel internationalization ambitions Japanese investors with weak competitive advantages prefer acquisitions Japanese investors with a competitive solid advantage prefer greenfield investments
Hennart (2019)		✔		Network capabilities are the primary driver of Internet-based service firms Networks significantly affect the form of governance of firms
Lehdonvirta et al. (2019)		✔		Opportunistic behaviors and strategies rule platform-based trades The platforms act as a signaling system for opportunistic behaviors Global platforms promote cross-border opportunistic behaviors
Chong et al. (2015)			✔	Small municipalities' public procurement contracts require lower degrees of specialized knowledge due to weaker competitions Large municipalities' public procurement contracts attract various contenders; hence, those contracts are more rigid and difficult to obtain
Beuve et al. (2019)			✔	Public procurement contracts are rigid and less adaptable than private-private contracts Public procurement contracts' rigidity increases during politically challenging times Political opponents often employ public procurement contracts' rigidity to disrupt third parties' participation
Boudreau (2017)		✔		Platform boundaries are different among them despite their similar scope and use Technological design significantly affects platform costs and capabilities requirement Platform design often reflects management priorities and opportunistic behaviors

Table 1.
Overview of literature covering issues of internationalization, digital platforms and public procurement contracts from the perspective of transaction cost theory

(continued)

Authors	Exports	Digital platforms	Public-private contracts	Key findings
Zhu and Liu (2018)		✓		Platform owners are strategic players and can influence companies' opportunistic behaviors Online marketplaces require relatively low platform-specific investments Larger companies may seek to appropriate value from third parties' products sold on their platforms
Schmidt and Wagner (2019)		✓		Blockchain technologies diminish transaction costs incurred by companies Blockchain nurtures companies' governance cost and structure innovation Blockchain limits opportunistic strategic choices in transactional relationships
Moszoro <i>et al.</i> (2016)			✓	Public procurement contracts' rigidity might stem from political rigidity toward third-party entities and their opportunistic behaviors Public procurement contracts do not overlap with other markets; hence, private-public contracts should be considered with other strategic approaches
Mahoney <i>et al.</i> (2009)			✓	Public-private contracts research should further evolve to describe global challenges and concepts
Saastamoinen <i>et al.</i> (2020)			✓	Supplier performance is related to public procurement contracts Customers' and competitors' focus can be utilized as predictors of organizations' awarding of public procurement contracts
Suhonen <i>et al.</i> (2019)			✓	Proposition of a framework in which public procurement characteristics are discussed and evaluated to explore the dimensions of risk, supplier sensitivity and contractual power
Reijonen <i>et al.</i> (2022)			✓	Favorable perception of public procurement networks increases bids' chances of success SMEs' continuous pursuit of public procurement contracts increases their chances of landing private-public contracts SMEs joint bidding to public procurement contracts increases chances of success
Cuypers <i>et al.</i> (2021)	✓	✓	✓	Transaction cost theory has a substantial influence on various management research strands such as internationalization, public procurement and digital platforms Transaction cost theory is resilient, thanks to its ability to evolve effectively Transaction cost theory is relevant to studies that investigate phenomena of our time
Qi <i>et al.</i> (2020)	✓	✓		Transaction costs are reduced when manufacturing companies sell through TPMPs TPMPs allow for more profound market knowledge, which reduces the costs and risks associated with transactions
Hennart (2022)	✓	✓		TPMPs dismantle the correspondence on a one-to-one basis between the need for commitment and embeddedness, as well as the mode of entry for internet-based platforms

(continued)

Table 1.

Authors	Exports	Digital platforms	Public-private contracts	Key findings
Deng <i>et al.</i> (2022)	✓	✓		E-commerce platforms affect the speed of internationalization and firms' survival
Hui (2020)	✓	✓		Digital platform quality moderates the relationship between the speed of internationalization and vendors' survival rate eBay boosts exports of smaller sellers through its administrative and logistics services; thus, smaller sellers are relieved from having to understand the export procedures and customs regulations. These benefits are particularly visible when new sellers seek to reach distant countries

Table 1. Source(s): Authors' own work

2.2 E-commerce and internalization

Over the last decades, the ability to internationalize has become crucial for companies of all sizes (Bertello *et al.*, 2021; Beugelsdijk *et al.*, 2018; Sukaatmadja *et al.*, 2021) including F&B SMEs (Sparkes and Thomas, 2001). Internationalization has been defined as "a process of increasing company commitment to international markets" (Dethine *et al.*, 2020, p. 19), and it can be achieved through exporting, importing and other forms of foreign investments (Dethine *et al.*, 2020; Falahat *et al.*, 2020).

Recent technological advancements have broken down the imposed barriers which made the global market exclusive to large corporations, thus enabling manufacturers and agri-food SMEs to aspire to expand into foreign markets (Bertello *et al.*, 2021; Cosentino *et al.*, 2020; Dabić *et al.*, 2020; Hui, 2020; Malodia *et al.*, 2023; Mudalige *et al.*, 2019; Paiola *et al.*, 2022). The opportunity for SMEs to move from domestic to foreign markets is extremely attractive since scholars and practitioners believe that internationalization improves companies' diversification, survival and growth potential (Adomako *et al.*, 2017; Lee *et al.*, 2012). In fact, a large portion of the literature has focused a lot on its efforts toward the investigation of such phenomena (Acedo and Jones, 2007; Fraccastoro *et al.*, 2021; McDougall *et al.*, 1994; Mainela *et al.*, 2018; Reuber *et al.*, 2018).

Broadly speaking, the literature underlines the importance of new technologies such as informational and communicational tools because they seem to enable F&B SMEs' pursuit of a broader scope beyond their domestic market (Bargoni *et al.*, 2023a, b; Beugelsdijk *et al.*, 2018; De Cock *et al.*, 2021; Feliciano-Cestero *et al.*, 2023; Jia *et al.*, 2022; Romanello and Veglio, 2022; Tolstoy *et al.*, 2021). Indeed, scholarly publications underline the central role that technologies have in promoting SMEs' wellness and growth potential (Bressan *et al.*, 2022; Hui, 2020; Vrontis *et al.*, 2016). This is particularly true for SMEs operating within the F&B sector because informational and communicational technologies offer cheaper access to foreign markets that would otherwise be unreachable (Hui, 2020; Kim and Cavusgil, 2020; Lehtinen *et al.*, 2016; Matarazzo *et al.*, 2021; Zahra, 2021). In fact, the identification of appropriate export technologies is considered to be crucial, if not necessary, for SMEs operating within the F&B sector (Lehtinen *et al.*, 2016; Matarazzo *et al.*, 2021). Prime examples of appropriate technologies for companies' international ambitions are digital platforms and social commerce (Matarazzo *et al.*, 2021; Rahman *et al.*, 2023; Tolstoy *et al.*, 2021).

Technologies aimed at improving companies' international presence can be divided into three main categories of digital facilitators: e-commerce, e-marketing and e-business (Dethine *et al.*, 2020). E-commerce does focus on the online transactional aspects of business allowing companies to pursue B2B and B2C sales (Dethine *et al.*, 2020). E-commerce practices are often associated with fast international growth (Swoboda and Sinning, 2022), making it an attractive form of digital tool for companies looking to expand their market reach.

The rise and propagation of e-commerce platforms in today's world stems from the advent of a stronger broadband, the advancement of digital tools and the growth of payment methods which consequently improve customers' experience (Bansal *et al.*, 2023; Tolstoy *et al.*, 2021; Vakulenko *et al.*, 2019). Additionally, order fulfillment technologies have also evolved, creating a seamless process of delivery (Nguyen *et al.*, 2018). On top of that, the rise in popularity of e-commerce is also championed by the fact that it enables companies to enter new foreign markets at lowered costs (Tolstoy *et al.*, 2016). Finally, over the past few years, online purchases of F&B have increased, thus promoting the pervasiveness of e-commerce, forcing companies to innovate to fulfill online demands for F&B goods and seek to expand their revenue streams (Jia *et al.*, 2022).

Nonetheless, all that glitters is not always gold. Internationalization processes are extremely challenging and demanding since there are multiple variables associated with foreign markets which are not present in domestic markets (Bertello *et al.*, 2021; Braganza *et al.*, 2017). SMEs seeking to increase their internationalization must consider a multitude of factors such as geographical location, distribution channels, information asymmetry and contractual enforcement (Ballerini *et al.*, 2023; Bertello *et al.*, 2021; Freeman *et al.*, 2006). Moreover, internal obstacles such as smallness, limited resources, vision and organizational capabilities also hinder F&B SMEs' possibilities to internationalize and penetrate new markets (Bellone *et al.*, 2010; Cerrato and Piva, 2012; Dethine *et al.*, 2020; Paul *et al.*, 2017).

Despite these barriers, F&B SMEs can benefit from digital platforms. The literature presents findings which suggest that companies can utilize digital platforms to achieve rapid growth while expanding their presence in foreign markets (Tolstoy *et al.*, 2021). Moreover, digital platforms allow small and medium-sized agri-food businesses to satisfy customers' online demand which, as previously mentioned, has spiked over the years, especially during and after the covid pandemic (Hamid *et al.*, 2023; Inthong *et al.*, 2022; Jia *et al.*, 2022), thus making studies addressing the impact of digital platforms and their effects on SMEs' export extremely relevant. As a matter of fact, the covid pandemic acted as a catalyst, making those technologies necessary for digital transformation and Internet usage to ensure food and beverage businesses' resilience and growth (Gavrila and De Lucas Ancillo, 2021). However, the relationship between digitalization and internationalization within the context of SMEs remains relatively unclear (Dethine *et al.*, 2020). Thus, there is still a lack of studies which address the influence that digitalization has on the internationalization of SMEs (Costa *et al.*, 2020).

Because of the broad scope of internalization and its literature, the authors reduced the scope of the study to focus on exports since this is considered to be one of the most commonly adopted practices employed by SMEs when trying to enter foreign markets (Majocchi *et al.*, 2005). Moreover, the literature suggests that e-commerce and social commerce are particularly complementary to export practices (Dethine *et al.*, 2020; Jia *et al.*, 2022), making online demand and sales central to F&B SMEs (Jia *et al.*, 2022). Thus, the following hypothesis is developed:

- H1. Within the context of SMEs operating in the food and beverage industry, e-commerce platforms positively enhance internationalization.

2.3 Public procurement and internationalization

When pursuing governmental contracts, SMEs have a competitive advantage which is due to their flexibility, agility and capability to offer customized products or services (Hillemane, 2012). Nevertheless, small and medium-sized businesses are often underrepresented within the public sector markets, thus making it a topical issue for academic and policymakers to investigate and further develop it (Akenroye *et al.*, 2020; Reijonen *et al.*, 2022; Saastamoinen *et al.*, 2017, 2020; Suhonen *et al.*, 2019). This is believed to

be of interest because SMEs have a great impact on multiple factors affecting a country's well-being, such as economic growth, job creation, provision of goods and services and import and export (Ensari and Karabay, 2014; Etuk *et al.*, 2014). Moreover, SMEs are considered necessary to promote the innovativeness of different industrial sectors such as the F&B vertical (Bodlaj *et al.*, 2020). Therefore, governments must engage with SMEs if they want to tackle the complex challenges associated with the public sector, since they can achieve greater degrees of innovativeness as well as increase supplier diversity and innovation (Akenroye *et al.*, 2020; Simionescu and Bica, 2014).

It is important to underline that the relationships between governments and SMEs are not only beneficial to the administration. In fact, there is research which underlines the importance of public contracts to SMEs (Akenroye *et al.*, 2020; Di Mauro *et al.*, 2020). Public sector contracts give the opportunity to small and medium-sized organizations to achieve a greater degree of stability since those contracts are often viewed as predictable income (Medina-Arnáiz, 2010). Nonetheless, it is not possible for SMEs to fully rely on public procurement since government financial resources have undergone budgetary cuts (Citroni *et al.*, 2019). Therefore, SMEs entities must pursue other markets to guarantee themselves other sources of income and revenue (Akenroye *et al.*, 2020).

However, increasingly challenging times force F&B SMEs to not only pursue reliable income sources through public procurement (Saastamoinen *et al.*, 2017, 2018, 2020) but also to diversify their revenue streams in order to facilitate business growth and stability (Bowen and Morris, 2019). To achieve diversification, it is common for F&B SMEs to internationalize themselves to not only acquire new sources of income and expand their market share but also as a means of spreading the risk across a multitude of markets (Bowen and Morris, 2019; Spowart and Wickramasekera, 2012). However, F&B SMEs looking to diversify through internationalization must consider two main dimensions of barriers: internal and external (Cosentino *et al.*, 2020; Chandra *et al.*, 2020; García-Pérez-de-Lema *et al.*, 2021; Paoloni *et al.*, 2020; Petrolo *et al.*, 2022; Zaridis *et al.*, 2021). Internal barriers are lack of human capital (Mendy and Rahman, 2019; Vesperi and Coppolino, 2022), lack of financial resources (Al-Hyari *et al.*, 2012; Manolopoulos *et al.*, 2018) and limited managerial skills and knowledge (Aharoni, 2015; Boermans and Roelfsema, 2013). External barriers to SMEs internationalization are transactional barriers and risks associated with currencies (Al-Hyari *et al.*, 2012; Roy *et al.*, 2016), the foreign country's regulations (Manolopoulos *et al.*, 2018), sociocultural barriers (Mendy and Rahman, 2019; Roy *et al.*, 2016) and potentially fragmented market conditions (Leonidou, 2004).

SMEs trying to obtain public procurement have to deal with a multitude of difficulties and barriers which hinder their ability to access it (Loader and Norton, 2015; Loader, 2015; Flynn and Davis, 2015; McKevitt and Davis, 2015; Saastamoinen *et al.*, 2017). Loader (2005) reported that the barriers can be real and perceived. Nonetheless, those barriers restrict SMEs' involvement in public procurement since perception can affect firms' resources and performance (Saastamoinen *et al.*, 2017). Perceived obstacles do affect all firms despite their size. However, they have a more significant impact on smaller companies (Karjalainen and Kempainen, 2008).

Loader (2011) has divided the barriers to SMEs' participation in public procurement into two main dimensions. Firstly, the public sector environment and procurement process are associated with limitations. Those barriers are associated with policy, contract requirements, organization and culture. Secondly, there are limitations associated with the capacity constraints, lack of knowledge and attitudes of public procurement. When focusing specifically on SMEs, the literature underlines the following limitations associated with public procurement. Firstly, SMEs struggle to obtain the necessary financial and human resources, which translates into scarce legal and administrative resources necessary to obtain public procurement (Karjalainen and Kempainen, 2008). The literature highlights evidence

which suggests that SMEs' limited supply capacity hinders their ability to obtain public procurement (Karjalainen and Kempainen, 2008). Thirdly, SMEs often fail to utilize formal customer acquisition processes (Wang *et al.*, 2007). The criteria used for evaluation in public procurement can be seen as complicated, ambiguous and restrictive, thus discouraging SMEs from pursuing it (Saastamoinen *et al.*, 2017). Finally, SMEs often struggle to employ their resources in new ways (Ambrosini *et al.*, 2009).

Consequently, the previously discussed issues raise the question of whether F&B SMEs have the capabilities to pursue public procurement and diversify their revenue sources through internationalization. For example, the lack of knowledge and human resources necessary to successfully pursue both directions, public procurement and internationalization (Loader and Norton, 2015; Loader, 2015; Flynn and Davis, 2015; McKeivitt and Davis, 2015; Saastamoinen *et al.*, 2017), might be aggravated by the lack of attractiveness of F&B SMEs to skilled workers (European Commission, 2022). Moreover, as previously indicated, the EU highlights issues normally associated with F&B SMEs that must be addressed to obtain public procurement (European Commission, 2022). Consequently, it questions whether F&B SMEs can manage those elements and internationalize themselves with their limited financial and human resources.

Finally, from a TCT prospective, public procurement directives and constraints force companies to invest in specific knowledge and assets which are not applicable to international ambitions (assets specificity) (Chong *et al.*, 2015; Williamson, 1985). Thus, building upon the assumptions of opportunism and bounded rationality, TCT's seminal work seems to suggest that out of the two options (public procurement contracts and exports), F&B SMEs should privilege public procurement endeavors due to their reliability and predictability (Beuve *et al.*, 2019; Chong *et al.*, 2015) since public procurement contracts fall under TCT's notion of "predictability" (Cuypers *et al.*, 2021). Therefore, it is possible to further support the notion that public procurement contracts initiatives might negatively impact F&B SMEs' export performance.

Thus, based on the previously discussed scholarly body of knowledge, the authors have developed the following research hypothesis:

- H2. Public procurement is negatively related to the internationalization of food and beverage SMEs .

2.4 Resilience from ambidextrous SMEs: public procurement and e-commerce

Ambidexterity is the ability to manage incremental and revolutionary changes to balance exploration and exploitation activities (Tushman and Reilly, 1996), and it is indispensable for managers operating in contexts limited by resource constraints (Cao *et al.*, 2009). Exploitation relates to learning activities such as efficiency, production, refinement and implementation of already existing knowledge (March, 1991). In contrast, exploration focuses on experimentation, innovation, flexibility, risk taking and the discovery of new knowledge (Alcalde-Heras *et al.*, 2019; March, 1991). As a matter of fact, the literature indicates that ambidexterity is crucial to increasing firms' survivability, as well as enabling operational flexibility and organizational adaptability while also reducing environmental uncertainty (Alcalde-Heras *et al.*, 2019; Jansen *et al.*, 2006; Levinthal and March, 1993; March, 1991; Schmitt *et al.*, 2010). An SME's structure, which generally entails flexibility, adaptability, few hierarchical levels, cohesion and efficient internal communication, allows them to foster innovation (Archibugi *et al.*, 2013; Marcati *et al.*, 2008) and implement ambidextrous strategies and orientation more easily than larger corporations (Alcalde-Heras *et al.*, 2019; Lubatkin *et al.*, 2006).

Despite the difficulties traditionally associated with SMEs achieving ambidexterity (Chang and Hughes, 2012; Ebben and Johnson, 2005), researchers provide evidence

that underlines the idea that SMEs can achieve ambidexterity despite the aforementioned challenges (Cao *et al.*, 2009; Lubatkin *et al.*, 2006). Ambidextrous SMEs are able to identify opportunities and threats in rapidly shifting markets, thus making them resilient (Iborra *et al.*, 2020). Moreover, they are able to disregard past behaviors and explanations and offer new alternatives to the market (O'Reilly and Tushman, 2013). Additionally, ambidextrous SMEs are able to allocate their resources so as to adapt to new challenges and opportunities and distance themselves from traditional business models (Iborra *et al.*, 2020). As a matter of fact, researchers indicate that complementary returns can be achieved by companies when pursuing both dimensions of ambidexterity: exploration and exploitation (Luger *et al.*, 2018). In situations of distress and crisis, ambidextrous SMEs can improve their resilience, resistance and recovery (Hadjielias *et al.*, 2022; Iborra *et al.*, 2020; Khurana *et al.*, 2022). Moreover, the literature indicates that digitalization practices within SMEs do enhance ambidexterity (Saratchandra *et al.*, 2022). Indeed, digital assets and platforms can often simplify processes, facilitate information transfer (Bargoni *et al.*, 2023a), favor cooperation between partners and de facto fuel organizational agility (Ciampi *et al.*, 2022). It is therefore arguable that adopting e-commerce platforms can streamline the process for overseas sales and lighten the workload of the limited human resources typically present in F&B SMEs, in addition to breaking down many physical barriers (Ahmed *et al.*, 2022; Bergamaschi *et al.*, 2021).

On the other hand, public procurement creates somewhat reliable and predictable revenues and financial conditions for SMEs (Saastamoinen *et al.*, 2018). Thus, they can then pursue other investments and strategies to increase their competitive advantage. Hence, SMEs can focus their resources on e-commerce projects since it allows them to diversify their revenues streams and enhance their competitive advantage and growth potential (Adomako *et al.*, 2017; Lee *et al.*, 2012; Swoboda and Sinning, 2022).

Consequently, it can be expected that SMEs with public procurement contracts can benefit from their steady revenues and cash inflows and use their limited resources to internationalize to improve their overall financial stability and revenue diversification. Furthermore, since SMEs with higher degrees of digitalization would foster an SME's ambidexterity (Saratchandra *et al.*, 2022), they should be able to exploit their steady revenues from public procurement contracts and explore new internationalization opportunities through newly implemented e-commerce and social commerce platforms (Luger *et al.*, 2018).

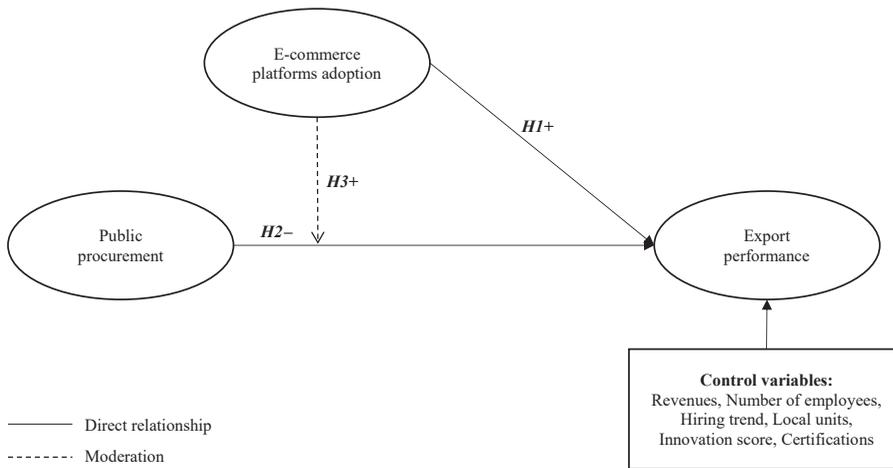
Finally, when considering the TCT's seminal work, F&B SMEs with high degree of digitalization should be able to pursue both exports and public procurement contracts since they already possess the specific assets necessary to expand their international reach; hence, digitized F&B SMEs might no longer need to make opportunistic decisions between exports and public contracts "transactions" (Cuypers *et al.*, 2021).

From the arguments and strands of the literature previously mentioned, the following hypothesis has been developed:

- H3. Within the context of SMEs operating in the food and beverage industry, the adoption of e-commerce platforms positively moderates the negative relationship between public procurement and export performances.

3. Methodology and findings

This study intends to test the developed hypotheses by conducting an empirical investigation by developing a structured equation model, as shown in Figure 1. The following subsections discuss the data collection, measurement and analyses undertaken.



Source(s): Authors own work

Figure 1.
Hypothesized model

3.1 Data collection

The authors considered the Italian F&B industry highly relevant for this investigation. Italy is not only one of the biggest exporters in the global F&B industry, but it is also a country that attaches strategic centrality to the F&B sector. Indeed, it is the only G7 country to have seen the weight of the F&B industry increase over the last four decades (1982–2021) as a proportion of its total manufacturing exports (together with Canada, albeit with much smaller increases). Numbers in hand, the World Bank database (2022) shows that in the last four decades, the weight of the F&B industry has risen from 7% to 10% of total Italian exports, thus gaining three percentage points (+42,8%) in its performance over the weight of the whole country exports. The authors rely on the prominent corporate database “Margò by Cribis” owned by the global company specializing in business information CRIF, which has recently been called upon to do data collection in management research (Brancati *et al.*, 2018; Modina and Zedda, 2022; Stefko *et al.*, 2019; Vavrecka *et al.*, 2021). Margò consists of a database covering all the Italian companies registered in the Italian Chamber of Commerce. Information provided in Margò consists of official data deposited by the companies themselves (e.g. turnover or the number of employees, certifications, sector membership) enriched by additional data actively retrieved by CRIF itself, such as website presence, social media channels, telephone numbers and e-mails.

The companies’ sample was retrieved with the following inclusion criteria. First, the authors selected only active companies with administrative locations within the Italian territory. Second, only companies within the European Community statistical classification of economic activities (NACE) C.10 group corresponding to “manufacturing of food products” (Eurostat, 2016) were included. Third, according to the European Commission’s definition (2020b) of SMEs, the study includes only companies that disclose their last turnover as being no more than 50 million € and had between 1 and 250 employees. These inclusion criteria allow the authors to obtain a database that can effectively represent all the active F&B manufacturing SMEs in Italy, a country that, as explained, lends itself as one of the most important and peculiar of the global economy for this sector, and therefore of relevance for research purposes. It is worth mentioning that these inclusion criteria do not admit businesses dealing with the provision of food and beverage services (not included in the

NACE 10 section in fact) since these activities, such as bars, restaurants, agritourists, do not have export ambitions and would therefore be outside the scope of this investigation.

The final data set consists of 2,186 companies matching the criteria on September 30th, 2022. The sample of SMEs shows that almost half of the Italian F&B SMEs are active in exporting (48%), confirming the aforementioned statement about the growing weight of F&B exports in the Italian economy. On the other hand, slightly more than one out of ten firms (11%) participate in public tenders and engage in public procurement activities. Three-quarters of the companies' employ between 11 and 50 people, while it is encouraging, and again in line with the fact that this sector is fundamentally strategic for the country, that around two out of three companies have a stable or growing number of employees (63%), although it should not be overlooked that 37% of the companies are unfortunately experiencing a decrease in the number of employees due to several economic factors. All sample characteristics are summarized in [Table 2](#).

3.2 Measurement

Given the ubiquity of information that the Margo database captures, including both formal data and self-reported information from executives, the use of the covariance-based structural equation modelling (CB-SEM) technique is proposed as a suitable solution. The solution is viable despite the secondary nature of the data observations, as already carried out by prior research ([Budsaratragoon and Jitmaneeroj, 2021](#); [Caputo et al., 2022](#); [Chang and Kuo, 2008](#); [Edgington et al., 2010](#); [Fuchs et al., 2011](#); [Singh et al., 2018](#)). In addition, the software adopted in this case, AMOS 28, affords to measure out of items of different natures such as categorical dummies and scales, a single latent variable, like in this case. The constructs are e-commerce

Demographic variable	Category	Frequency	Percentage (%)
Export	Yes	1,053	48
	No	1,133	52
Public procurement	Yes	236	11
	No	1,950	89
E-commerce website	Yes	333	15
	No	1,853	85
Social media	Yes	970	44
	No	1,216	56
Revenues	<1Mln€	668	31
	<10Mln€	1,099	50
	>10 Mln€	419	19
Employees	1–10	360	16
	11–50	1,634	75
	50–250	192	9
Employees trend	Decreasing	803	37
	Stable	841	38
	Increasing	542	25
Number of local units	1	953	44
	2–3	934	43
	4+	299	14
Accredia certified	Yes	288	13
	No	1,898	87
Innovation score	Low (1–2)	1,086	50
	Medium (3)	362	17
	High (4–5)	738	34

Table 2. Sample demographics **Source(s):** Authors' own work

selling platforms deployment, public procurement and export performances. Digital selling platform deployment refers to the use of different online selling platforms, which, especially considering Web 2.0, is not only reduced to an e-commerce website, but also includes the use of various social media sites that enable social commerce techniques (Cassetta *et al.*, 2020; Lin *et al.*, 2019). Margò database, thanks to a web scraping algorithm, can determine if a business owns an official social media page among Facebook, LinkedIn, Instagram, Vimeo, Pinterest, YouTube or Twitter in addition to an e-commerce site. The study measures reliance on public procurement as the provided number of public tenders won by companies in the latest three years from 2020 to 2022 (pandemic and post-pandemic period). Finally, the export performances entail assessing whether SMEs can sell abroad (Kapri, 2019; Rossi *et al.*, 2021) and the percentage of total turnover consist of exports (Eramudugoda and Ramos, 2023). The Margò database provides the disclosure of business owners about their exports and their export intensity. Since there is a lack of measurement scales in the literature to measure these constructs based on these items, it is first required to undertake an exploratory factor analysis (EFA).

In addition to the three constructs to be validated, the study will add to the model several manifest control variables to attenuate unobserved heterogeneity issues. First, human capital is considered to be an impacting factor that could rather foster or hinder firms' export performances (Azar and Ciabuschi, 2017; Krammer *et al.*, 2018; Rasiah *et al.*, 2016); therefore, the study includes the number of employees and hiring trend versus the prior year as control variables. Moreover, taken into consideration that a company's size is considered to affect its export performance (Faria *et al.*, 2020; Rwehumbiza, 2020), the study includes the number of local offices owned and the firm's revenue measured in natural logarithm form to measurement standard deviation (Nirino *et al.*, 2022). Furthermore, researchers agree that innovation level also could affect firms' exports (Azar and Ciabuschi, 2017; Brancati *et al.*, 2018; Rasiah *et al.*, 2016). Therefore, this study relies on the 1 to 5 innovation score that CRIF attributes to the companies included in the database considering several proxies (e.g. the number of patents produced, expenditure on R&D, grants received). Finally, acknowledging that official quality standards certifications are considered other factors fostering firms' exports (Blind *et al.*, 2018; Moya *et al.*, 2019), the study controlled also for firms' having the Accredia certification (the Italian Accreditation Body) against the one that has not with a 1–0 dummy variable. Measurements are shown in Table 3.

3.3 Exploratory factor analysis

To validate the constructs, an EFA has been conducted to validate the latent factors of the proposed framework. Before starting the factor analyses protocols the authors conducted a Malhanobis test of distances on SPSS to detect any potential outliers finding and excluding one observation from the original data set. Then as a first step in determining if a given set of data is suitable for EFA, there are two primary factors to consider: sample size and the strength of the correlation between items. Therefore, the Kaiser-Meyer-Olkin (KMO) test and Bartlett's test for sphericity (Pallant, 2020), are carried out. Both tests were positive, since KMO was > 0.6 (0.632) and Bartlett's test showed $p < 0.05$. After a round of item exclusions (from 13 to 8), the authors encountered a final solid factors loading setup. Specifically, Facebook and Instagram are the only two with sufficient principal component analysis (PCA) extraction commonalities among social media platforms. All the retained commonalities are above the 0.55 cutoff, meaning there are good correlations between the items (Tabachnick *et al.*, 2007). The results from the Promax rotation provide all the components with a loading coefficient above 0.600, and the standardized Cronbach's alpha coefficients are above 0.700. The cumulative variance explained by the three factors retained (all with eigenvalues > 1)

Table 3.
Constructs and factors'
measurements and
loadings

Constructs and items	Measurements	Structure matrix loadings	Std. Cronbach Alfa
<i>Public procurement reliance</i>			0.770
Tenders 2020	Number of tenders won in 2020	0.921	
Tenders 2021	Number of tenders won in 2021	0.788	
Tenders 2022	Number of tenders won in 2022	0.772	
<i>E-commerce digital platforms</i>			0.714
E-commerce website	Dummy variable (1 = yes; 0 = no)	0.714	
Facebook	Dummy variable (1 = yes; 0 = no)	0.837	
Instagram	Dummy variable (1 = yes; 0 = no)	0.857	
<i>Export performances</i>			0.730
Export capability	Dummy variable (1 = yes; 0 = no)	0.857	
Export intensity	Revenues from exports % of total revenues	0.897	
<i>Control variables</i>			
Revenues	Revenues in L.N.		
Employees	Total number of employees		
Employees trend	% of the increase (decrease) vs prior year		
Local units	Number of local units		
Innovation score	1–5 points scale		
Accredia certified	Dummy variable (1 = yes; 0 = no)		

Source(s): Authors' own work

provides a solid 70.25% explanation. Finally, to detect common method variance and potential biases, given that the panel data set was partially based on survey information, the authors carried out Harman's single-factor test with a robust result for the squared variance of 30.35%, far below the 50% threshold (Podsakoff *et al.*, 2003). Table 3 shows the factors' loadings.

3.4 Confirmatory factor analysis

In order to further reinforce the validity of the constructs and their adequacy to be included in a CB-SEM model, the study conducted a confirmatory factor analysis (CFA). The first step of the CFA protocol foresees to check the goodness of fit indices of the three correlated latent factors. The results shown in Table 4 are more than satisfying since all the absolute fit indices and the incremental fit indices are convincingly above the required thresholds: GFI >0.95, AGFI >0.90, $\chi^2/df < 5$, RMSEA <0.07, PCLOSE >0.05, NFI >0.95, CFI >0.95 (Hooper *et al.*, 2008; Hu and Bentler, 1999).

Secondly, the factor loadings are checked for the items retained from the EFA. The outcome is sufficient, given that these items for latent constructs are newly conceived. Every item loads

Table 4.
CFA goodness of fit
indices

No. of factors	Absolute fit indices					Incremental fit indices	
	GFI	AGFI	χ^2/df	RMSEA	PCLOSE	NFI	CFI
3	0.994	0.987	3.182	0.032	0.999	0.988	0.993

Source(s): Authors' own work

the latent variables for at least a minimum 0.50 threshold generally required in this type of research (Awang, 2015), while the construct reliability (CR) of each factor still presented solid overall loadings above the 0.7 threshold (Hair *et al.*, 2017). Next, there was conducted a convergent validity test by calculating the AVE value for each construct, which positively resulted above the 0.5 cutoff (Hair *et al.*, 2017). Then, the discriminant validity test was carried out, by comparing the AVE's square root of each construct to their correlation coefficient. All appeared higher than the correlation coefficient, confirming that the factors do not have discriminant validity issues (Fornell and Larcker, 1981). Table 5 shows each factor's correlation matrix, the AVE and the AVE's square root (in italic).

4. Structural model

After the EFA and CFA protocols, the authors could eventually test the developed hypotheses with CB-SEM using the the full indicator interaction term for the moderation (Collier, 2020). The analyses' results confirm all the tested hypotheses. Indeed, deploying digital selling platforms statistically positively affects business export performances, supporting H1 ($\beta = 0.229; p < 0.01$). On the other hand, the participation and winning of public tenders negatively affect the business export performance supporting H2 ($\beta = -0.059; p < 0.01$). Nonetheless, the interaction between public procurement reliance and usage of digital selling platforms statistically positively affects the companies' export performance supporting H3 ($\beta = 0.033; p < 0.05$).

Among the control variables, revenues, employee hiring trend and Accredia certification resulted in a statistically significant positive effect on businesses' exports. As a matter of fact, the mainstream literature supports that the larger the turnover of a company, the more useful resources it has to manage international market demand as well (Wilkinson and Brouthers, 2006). According to a similar logic, the growing employee trend also implies that expanding firms possess more human capital at their disposal to efficiently manage foreign as well as domestic markets. Finally, the positive relation of quality certifications with exports supports the work of other scholars who argue that this sort of certification is a form of guarantee and an incentive to purchases by foreign clients (Moya *et al.*, 2019).

On the other hand, the number of local units, the total number of employees and the innovation score statistically negatively affected the businesses' export performances. Intuitively, the more local units (such as sales outlets or the like) companies have, the more this implies that their focus is domestic and not overseas. More counterintuitive, however, is the fact that as the number of employees increases, the export performance of the company decreases, which can be partially explained by associating it with the fact that the more local units a company has, the more it undoubtedly requires personnel who are employed for tasks more related to domestic development. It is no coincidence that it is the recruitment trend that instead has a positive effect on exports, as highlighted earlier. Finally, it is also counterintuitive that the CRIF innovation score attributes a negative relationship with exports, contrary to other literature (Brancati *et al.*, 2018). However, it should be noted that the CRIF Innovation score includes in its parameters the level of attention that companies have toward grants and patent registrations, which can be considered the kind radical of innovation that, according to Azar and Ciabuschi (2017), do not contribute to export performance.

The presented model provides a great degree of reliability as it provides a robust R-square of 0.624, way above the minimum value of 0.250 usually adopted in business and marketing research (Sarstedt and Mooi, 2014, p. 211). In other words, the model expects to cover 62.4% of the variance in export performance among Italian SMEs of the F&B industry. The CB-SEM results are shown in Table 6. Moreover some further robustness checks applying PLS-SEM and gaussian copula methodology to try to account further for endogeneity concerns and mitigate multicollinearity model issues typically happening in CB-SEM including moderations, confirm our main findings (Appendix).

Table 5.
Correlation matrix,
discriminant validity,
construct reliability
and variance inflation
factors

Var. n	Var. Name	CR	AVE	1	2	3	4	5	6	7	8	VIF
1	Public Procurement	0.816	0.622	<i>0.789</i>								1.013
2	Export	0.804	0.697	-0.014	<i>0.835</i>							1.334
3	Digital selling platforms	0.745	0.504	0.043	0.213	<i>0.710</i>						1.421
4	Revenues			0.038	0.478	0.365						2.961
5	Employees			0.064	0.308	0.236	0.679					1.929
6	Employees' trend			0.006	0.030	-0.005	0.017	0.061				1.006
7	Local Units			0.056	0.007	0.084	0.162	0.218	0.018			1.063
8	Innovation score			-0.073	-0.365	-0.540	-0.602	-0.352	-0.004	-0.066		1.973
9	Accredia certification			-0.003	0.234	0.192	0.390	0.265	0.012	0.025	-0.264	1.189

Note(s): In italic are expressed the values of the DV, IND.V., and the moderator
Source(s): Authors' own work

	Hypotheses		Beta	S.E.	C.R.	<i>p</i>	Results
H1	Digital selling platforms	→ Export	0.229	0.059	3,865	***	Supported
H2	Public procurement	→ Export	-0.059	0.022	-2,636	0.008	Supported
H3	Interaction term	→ Export	0.033	0.017	1,971	0.049	Supported
Control variables	Revenues		0.239	0.005	46,791	***	
	Employees		-0.002	0.000	-8,47	***	
	Employees Trend		0.001	0.000	3,781	***	
	Local units		-0.023	0.004	-5,554	***	
	Innovation score		-0.093	0.007	-14	***	
	Accredia certification		0.07	0.019	3,623	***	
	Observations		2,185				
	<i>R</i> -squared		0.634				

Note(s): *** stands for $p < 0.001$
 Source(s): Authors' own work

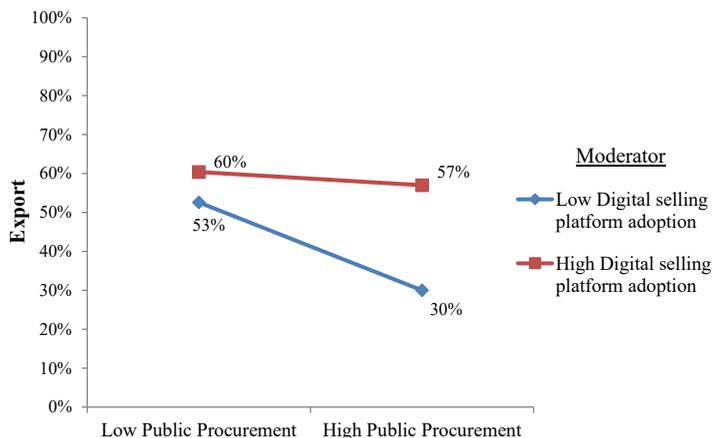
Table 6. Structured equation model results

Figure 2 shows graphically the moderation effects of the deployment of e-commerce selling platforms' in damping the negative effect of public procurement on exports.

5. Discussion

Motivated by the fact that e-commerce and public procurement have come to be regarded as increasingly more relevant and an important topics to address F&B SMEs' internationalization and exports performance, this paper examines their relationships. The obtained results make a timely contribution to the extant literature as they provide statistical evidence for positive and negative effects of e-commerce and public procurement on F&B SMEs' exports.

Firstly, our results show that, statistically speaking, e-commerce and other digital selling platforms positively enhance companies' exports (Dethine et al., 2020; Jia et al., 2022), thus supporting H1 as highlighted in Table 6. The empirical findings obtained, which support H1, are consistent with most academic publications (Dethine et al., 2020; Hui, 2020; Jia et al., 2022;



Source(s): Authors own work

Figure 2. Graphical representation of moderation effect

Tolstoy *et al.*, 2021). Therefore, our results further support the scholarly literature which gives substance to the notion that digital channels (such as e-commerce) positively contribute to organizations' international endeavors (Deng *et al.*, 2022; Hui, 2020; Swoboda and Sinning, 2022). E-commerce technologies should be of interest to F&B SMEs seeking to strengthen their ability to survive and their potential for growth through expansion and diversification of their revenue stream portfolio (Adomako *et al.*, 2017; Feliciano-Cestero *et al.*, 2023; Deng *et al.*, 2022; Lee *et al.*, 2012; Matarazzo *et al.*, 2021; Swoboda and Sinning, 2022). As a matter of fact, the improvement of the export performance of F&B SMEs through e-commerce allows them to attempt to satisfy the growing demand of online food products, thus promoting F&B SMEs competitiveness (Deng *et al.*, 2022; Hamid *et al.*, 2023; Inthong *et al.*, 2022; Jia *et al.*, 2022). On top of that, by supporting H1, this manuscript highlights the role of e-commerce as a viable technology to satisfy foreign markets demands (Deng *et al.*, 2022; Jia *et al.*, 2022; Qi *et al.*, 2020). Consequently, F&B SMEs seeking to improve or expand their international presence should consider tools such as e-commerce and social commerce platforms as viable options (De Cock *et al.*, 2021; Jia *et al.*, 2022; Qi *et al.*, 2020; Romanello and Veglio, 2022; Tolstoy *et al.*, 2021).

The confirmation of the positive effects of e-commerce on the export performance of F&B SMEs can be justified by a multitude of elements discussed within the current scholarly body of literature. First, it is important to acknowledge that recent technological advances have reduced the barriers experienced by smaller companies (such as F&B SMEs) seeking to expand into foreign markets (Deng *et al.*, 2022; Feliciano-Cestero *et al.*, 2023). For example, F&B SMEs which employ e-commerce might be able to nurture their export performance because of online digital sales channels, that help smaller entities offset some of the risks traditionally associated with SMEs such as a lack of organizational capabilities and resources (Bellone *et al.*, 2010; Cerrato and Piva, 2012; Dethine *et al.*, 2020; Paul *et al.*, 2017). Hence, empirical bodies of research argue that technologies such as e-commerce and social commerce channels have lowered the costs normally associated with digital sales platforms (Bertello *et al.*, 2021; Cosentino *et al.*, 2020; Dabić *et al.*, 2020). Moreover, e-commerce platforms generate large quantities of data which nurture organizations' efficient supply chain management and promote the automation of internal processes such as inventory management, production and distribution, thus promoting efficiency and improved performance (Dethine *et al.*, 2020).

Secondly, this study's empirical findings support H2 (as shown in Table 6), which means that F&B SMEs' pursuit of public procurement contracts negatively impacts their exports performance.

Despite the competitive advantage held by SMEs seeking to obtain government contracts (Hillemane, 2012), our empirical findings suggest that F&B SMEs pursuing public procurement contracts might experience a degradation of their export performance. This result can be connected to what the literature typically refers to as the barriers associated with SMEs' pursuit of public procurement (Loader and Norton, 2015; Loader, 2015; Flynn and Davis, 2015; McKeivitt and Davis, 2015; Saastamoinen *et al.*, 2017). Due to the limited nature of SMEs' resources and knowledge, the pursuit of public procurement might negatively influence companies' exports since F&B SMEs have to invest human capital to gain knowledge about the legal and administrative aspects of obtaining public procurement (Karjalainen and Kempainen, 2008; Reijonen *et al.*, 2022; Saastamoinen *et al.*, 2020; Saastamoinen *et al.*, 2017; Suhonen *et al.*, 2019).

TCT might help us better comprehend the results obtained concerning this paper's H2. TCT postulates that companies seek to maximize their gains by pursuing "transactions" in a discriminating way (Williamson, 1985). Thus, building upon behavioral assumptions of opportunisms and bounded rationality, F&B SMEs might prioritize those ambitions to the detriment of their exporting performance. Public procurement contracts tend to be rigorous and unyielding (Beuve *et al.*, 2019; Boudreau, 2017; Moszoro *et al.*, 2016). Therefore, the

rigorousness of public procurement contracts further highlights the asset specificity notion of TCT since F&B SMEs must tailor resources and human capital to meet the requirements of private-public contracts (Moszoro *et al.*, 2016); thus, this could help explain the degradation of these F&B SMEs' exports performance. Furthermore, F&B SMEs might favor public procurement contracts over exporting due to the notion of uncertainty of the TCT (Williamson, 1985). International endeavors carry higher degrees of environmental unpredictability; hence, F&B SMEs might lean toward private-public contracts due to their predictable and reliable nature (Akenroye *et al.*, 2020; Di Mauro *et al.*, 2020; Medina-Arnáiz, 2010).

Finally, empirical evidence suggests that the reported lack of attractiveness of F&B SMEs to skilled workers by F&B SMEs (European Commission, 2022) and their limited supply chain capabilities might directly affect their ability to simultaneously satisfy demands from local authorities and foreign markets (Karjalainen and Kemppainen, 2008).

Thirdly, our empirical findings reveal that the interaction between public procurement and the utilization of digital sales channels dampens the negative effect of public procurement on F&B SMEs' exports, thus confirming H3 as shown in Table 6. Researchers underline that organizations can achieve complementary results when pursuing the two dimensions of ambidexterity (Luger *et al.*, 2018). Empirical evidence also indicates that higher degrees of digitalization within SMEs foster the firm's ambidexterity (Saratchandra *et al.*, 2022). Thus, more digitally ready firms are more ambidextrous F&B SMEs. Therefore, they can explore new opportunities in foreign markets and public procurement contracts, as well as exploit innovation activities associated with exports through e-commerce and social commerce platforms and new administrative and legal knowledge (Luger *et al.*, 2018). Hence, ambidextrous F&B SMEs are able to somewhat mitigate their need to make discriminating decisions based on the notions of TCT (Anzenbacher and Wagner, 2020). Consequently, firms' ambidexterity broadens the strategic opportunisms by expanding the so-called Williamsonian dimension (Verbeke and Greidanus, 2009) of F&B SMEs.

Public procurement contracts create a somewhat predictable client for SMEs; hence, F&B SMEs can consequently pursue other strategic ambitions (Saastamoinen *et al.*, 2018, 2020; Suhonen *et al.*, 2019). Thus, firms can take advantage of it and, together with e-commerce, focus on their export performance (Caravella and Crespi, 2021).

Ambidexterity comes into play in moments of distress and high volatility; thus, F&B SMEs can enhance their resilience, resistance and recovery (Hadjielias *et al.*, 2022; Iborra *et al.*, 2020; Khurana *et al.*, 2022). In conclusion, F&B SMEs could enhance their ambidextrousness by adopting online digital sales channels such as e-commerce. By doing so, F&B SMEs can maintain enough assets to dedicate some of them to the pursuit of public procurement contracts.

Consequently, this study provides empirical evidence suggesting that more digitally ready F&B SMEs can be ambidextrous. Thus, they can positively influence exports through online sales platforms and public procurement (Saratchandra *et al.*, 2022), henceforth diminishing the previously reported negative effect of public procurement on exports. Moreover, ambidexterity would allow SMEs to innovate their behaviours (O'Reilly and Tushman, 2013), thus promoting diversification and revenue predictability through public procurement and digital sales channels (Saratchandra *et al.*, 2022).

In conclusion, inspired by the work of Matarazzo *et al.*, 2021 and Schmidt and Wagner (2019), and based on the results obtained by this study and the current scholarly body of research, this manuscript develops the following propositions:

- P1. E-commerce positively influences F&B SMEs' export performance.
- P2. The pursuit of public procurement negatively affects F&B SMEs' export performance.

- P3. Considering TCT, SMEs might favor public procurement over international endeavors due to the predictability and reliability of private-public contracts.
- P4. Adopting e-commerce platform adoption positively moderates the negative impact of public procurement over SMEs' export performance.
- P5. Ambidextrous firms can pursue both endeavors (public procurement and internationalization).
- P6. Digitized F&B SMEs no longer have to make a discriminating decision between public procurement contracts and exports initiatives since they already have access to assets and resources which are specific ("assets specificity") to exports.

6. Conclusion

This study attempts to investigate how public procurement contracts affect F&B SMEs' export performance, as well as how e-commerce platforms promote F&B SMEs international ambitions. Furthermore, this study attempts to explore whether e-commerce platforms have a moderating role for F&B SMEs seeking to pursue both private-public contracts and international ambitions.

The context of this study is represented by Italian SMEs operating within the F&B sector.

The obtained results indicate that the adoption of e-commerce platforms positively affects F&B SMEs' export performance, thus enhancing their presence in foreign markets. Second, this study's empirical findings highlight the negative impact that the pursuit of public procurement contracts has on F&B SMEs' export performance: smaller entities seeking to pursue public-private contracts experience a reduction of their exports and internationalization. However, this research study's empirical results highlight the moderating effect that e-commerce platforms have in relation to the negative impact of public procurement on the internationalization of F&B SMEs.

6.1 Implications

6.1.1 Theoretical implications. This study contributes to the literature on SMEs operating within F&B sectors by exploring the relationships between online digital sales, public procurement and exports. The main theoretical contribution of the research is to provide empirical evidence which indicates that online digital platforms positively influence companies' exports, as well as highlight empirical evidence which suggests that public procurement negatively affects organizations' exports. In doing so, we answer the call for research concerning those aspects (Dethine *et al.*, 2020; Jia *et al.*, 2022; Loader and Norton, 2015; Loader, 2015; Flynn and Davis, 2015; McKevitt and Davis, 2015; Saastamoinen *et al.*, 2017).

Second, this study's empirical results further contribute to the TCT and public procurement literature. Organizations seem to prefer and pursue "transactions" which are perceived to be more predictable and reliable (Cuypers *et al.*, 2021); hence, SMEs seem to lean toward public procurement contracts rather than international expansion (Akenroye *et al.*, 2020; Di Mauro *et al.*, 2020; Medina-Arnáiz, 2010; Saastamoinen *et al.*, 2018). Therefore, the TCT's notion of uncertainty seems to play a key role in F&B SMEs' decision-making process (Williamson, 1985).

A third original contribution to the theory consists in empirically supporting that when public procurement reliance is paired with the adoption of e-commerce platforms, their combination drastically diminishes the negative effects of public procurement on F&B SMEs exports. Aligning our findings with recent bodies of work (Hadjielias *et al.*, 2022; Iborra *et al.*, 2020; Khurana *et al.*, 2022), we propose that ambidextrous F&B SMEs are able to overcome barriers to pursue both dimensions without suffering negative effects on their export

performance. In fact, there are publications which highlight how ambidextrous organizations are resilient (Cao *et al.*, 2009; Iborra *et al.*, 2020; Lubatkin *et al.*, 2006) and are also capable of pursuing multiple business objectives (Hadjielias *et al.*, 2022; Iborra *et al.*, 2020; Khurana *et al.*, 2022). Furthermore, the introduction of e-commerce strengthens SMEs ambidexterity since it demands less resources from the companies to internationalize; hence, they can direct their resources toward the pursuit of public procurement (Iborra *et al.*, 2020; Mu *et al.*, 2022; Saratchandra *et al.*, 2022). Finally, the aforementioned moderating effect of the adoption of e-commerce platforms might help us further contribute to the TCT notion of asset specificity (Williamson, 1985). Since companies have already gained access to online sales platforms, they are more likely to continue their export activities since the assets involved in their internationalization processes are specific to that “transaction.” Therefore, it would be detrimental to the company to reduce their export activities when those assets, knowledge and resources cannot be applied to public procurement “transactions” (Cuyppers *et al.*, 2021). In conclusion, the results concerning H3 further reinforce the behavioral assumption of opportunism and bounded rationality of TCT (Cuyppers *et al.*, 2021).

6.1.2 Practical implications. From a practical perspective, this study’s insights offer several implications for managers, practitioners and owners of SMEs operating in the food and beverage industry. First, our study strengthens the validity that online digital platforms are beneficial to exports (Dethine *et al.*, 2020; Jia *et al.*, 2022). Secondly, while not denying any kind of benefit that commitment to public procurement can bring, this study shows how F&B SMEs that are highly committed to this objective tend to decrease their export performance. Therefore, managers of such firms are called upon to assess their employers’ strategic priorities very carefully before venturing into time-consuming tenders seeking public procurement contracts. In addition, companies that have among their primary strategies, for whatever good reason, to persevere in maintaining interactions with the public supply are called upon to consider adopting one or more e-commerce platforms. Indeed, their adoption, supported by the guaranteed stability gains from public procurement (Saastamoinen *et al.*, 2018), would allow SMEs to improve their ambidextrous agility and achieve export performances comparable to those of companies that do not employ any resources in public procurement.

Third, this study provides readers with evidence which suggest that F&B SMEs perceive public procurement contracts to be desirable obligations since companies are willing to sacrifice their international ambitions to secure predictable and stable public-private contracts (Beuve *et al.*, 2019).

Therefore, the aforementioned implications concerning export performance, e-commerce and public procurement contracts should be particularly relevant to Italian F&B SMEs due to their central role within the Italian economy (The World Bank, 2022). Hence, Italian F&B SMEs should direct their resources toward digital technologies. Moreover, this manuscript highlights to Italian firms the negative effects that public procurement may have on their exports if managers and owners do not appropriately address the potentially negative effects through digital selling platforms (Luger *et al.*, 2018; Saratchandra *et al.*, 2022).

Finally, this study also provides some valuable insights for policymakers. Firstly, F&B SMEs engaging in public tenders to obtain supply partnerships with institutions, incur lowered export performance; hence, policymakers should find ways to facilitate and shorten the time frame for these tenders (Flynn, 2018; Kidalov and Snider, 2011; Reis and Cabral, 2015), for example, through greater degrees of flexibility, agility, reducing the over prescriptive requirements, shortening contracts and limit website usage by merging everything into a single electronic portal (Loader, 2015). Furthermore, the institutions themselves could think about facilitating contractors or grant winners by simplifying their order processes or payment bureaucracy to streamline the selection process and cooperation with ongoing contracts (Flynn, 2018; Kidalov and Snider, 2011; Loader, 2015). On the other hand, state incentives or programs

need to foster F&B SMEs adoption of e-commerce platforms in an attempt to not only promote exports but to moderate the negative effects that public procurement contracts have on companies' international ambitions. This is particularly useful for the Italian ruling bodies and policymakers, as F&B SMEs are essential to Italy's economic growth and prosperity. Consequently, the Italian government should establish policies and grants aimed at promoting e-commerce platforms and other online sales platforms. For example, the Italian legislative bodies have established programs aimed at supporting organizations' digitalization through the PNRR (PNRR: [digitalizzazione, innovazione, competitività, cultura e turismo, 2021](#)); hence, additional resources should be directed toward similar initiatives.

7. Limitations and future research

There are some limitations associated with our study that could be addressed by future research on e-commerce platforms, public procurement and ambidexterity. Firstly, it should be pointed out that the dataset under consideration is based entirely on cross-sectional data apart from the tender awarded figures that refer to the last three years. That means that it has not been feasible to conduct a longitudinal study on the effect of won tenders on export performances. To partially mitigate the risk of endogeneity, a study with SEM was conducted by adding several control variables. However, the methodology and data adopted cannot offset all the risks, while further studies with longitudinal data could certainly strengthen the results of this research study. Secondly, a limitation consists of a sample just considering Italian SMEs operating within the F&B manufacturing industry. Studies with a broader sample could provide additional empirical evidence about the phenomenon investigated. Secondly, the present study has the limitations of a structured equation model technique. Although SEM has been successfully applied in several other studies in the past, it does have some intrinsic shortcomings in the evaluation and representation of the identified latent factors. Moreover, other qualitative methodologies could be useful in providing a deeper interpretation of the quantitatively retrieved results of this study.

Thirdly, future studies should gather additional empirical evidence aimed at exploring the prioritization of public procurement contracts over the export performance of SMEs. This should help scholars further understand whether the predictability of private-public contracts makes SMEs lean toward public procurement rather than internationalization.

Finally, future research could test our hypothesis within different contexts and analyze potential discrepancies found across countries and sectors. Additionally, future studies could add variables to assess companies' ambidexterity and verify our empirical findings associated with hypothesis 3 ([Andrade *et al.*, 2023](#)).

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References

- Acedo, F.J. and Jones, M.V. (2007), “Speed of internationalisation and entrepreneurial cognition: insights and a comparison between international new ventures, exporters and domestic firms”, *Journal of World Business*, Vol. 42 No. 3, pp. 236-252.
- Adomako, S., Opoku, R.A. and Frimpong, K. (2017), “The moderating influence of competitive intensity on the relationship between CEOs’ regulatory foci and SME internationalisation”, *Journal of International Management*, Vol. 23 No. 3, pp. 268-278.
- Aharoni, Y. (2015), “The foreign investment decision process”, *International Business Strategy*, pp. 24-34.
- Ahmed, A., Bhatti, S.H., Gölgeci, I. and Aslan, A. (2022), “Digital platform capability and organizational agility of emerging market manufacturing SMEs: the mediating role of intellectual capital and the moderating role of environmental dynamism”, *Technological Forecasting and Social Change*, Vol. 177 No. 121513, 121513, doi: [10.1016/j.techfore.2022.121513](https://doi.org/10.1016/j.techfore.2022.121513).
- Akenroye, T.O., Owens, J.D., Elbaz, J. and Durowoju, O.A. (2020), “Dynamic capabilities for SME participation in public procurement”, *Business Process Management Journal*, Vol. 26 No. 4, pp. 857-888, doi: [10.1108/bpmj-10-2019-0447](https://doi.org/10.1108/bpmj-10-2019-0447).
- Alcalde-Heras, H., Iturrioz-Landart, C. and Aragon-Amonarriz, C. (2019), “SME ambidexterity during economic recessions: the role of managerial external capabilities”, *Management Decision*, Vol. 57 No. 1, pp. 21-40, doi: [10.1108/md-03-2016-0170](https://doi.org/10.1108/md-03-2016-0170).
- Al-Hyari, K., Al-Weshah, G. and Alnsour, M. (2012), “Barriers to internationalisation in SMEs: evidence from Jordan”, *Marketing Intelligence and Planning*, Vol. 30 No. 2, pp. 188-211, doi: [10.1108/02634501211211975](https://doi.org/10.1108/02634501211211975).
- Ali, I., Arslan, A., Chowdhury, M., Khan, Z. and Tarba, S.Y. (2022), “Reimagining global food value chains through effective resilience to COVID-19 shocks and similar future events: a dynamic capability perspective”, *Journal of Business Research*, Vol. 141, pp. 1-12, doi: [10.1016/j.jbusres.2021.12.006](https://doi.org/10.1016/j.jbusres.2021.12.006).
- Ambrosini, V., Bowman, C. and Collier, N. (2009), “Dynamic capabilities: an exploration of how firms renew their resource base”, *British Journal of Management*, Vol. 20, pp. S9-S24, doi: [10.1111/j.1467-8551.2008.00610.x](https://doi.org/10.1111/j.1467-8551.2008.00610.x).
- Andrade, J., Franco, M. and Mendes, L. (2023), “Facilitating and inhibiting effects of organisational ambidexterity in SME: an analysis centred on SME characteristics”, *Journal of the Knowledge Economy*, Vol. 14 No. 1, pp. 35-64, doi: [10.1007/s13132-021-00831-9](https://doi.org/10.1007/s13132-021-00831-9).
- Anzenbacher, A. and Wagner, M. (2020), “The role of exploration and exploitation for innovation success: effects of business models on organizational ambidexterity in the semiconductor industry”, *International Entrepreneurship and Management Journal*, Vol. 16 No. 2, pp. 571-594, doi: [10.1007/s11365-019-00604-6](https://doi.org/10.1007/s11365-019-00604-6).
- Archibugi, D., Filippetti, A. and Frenz, M. (2013), “Economic crisis and innovation: is destruction prevailing over accumulation?”, *Research Policy*, Vol. 42 No. 2, pp. 303-314.
- Awang, Z. (2015), *SEM Made Simple: A Gentle Approach to Learning Structural Equation Modeling*, MPWS Rich Publication, Bangi.
- Azar, G. and Ciabuschi, F. (2017), “Organizational innovation, technological innovation, and export performance: the effects of innovation radicalness and extensiveness”, *International Business Review (Oxford, England)*, Vol. 26 No. 2, pp. 324-336, doi: [10.1016/j.ibusrev.2016.09.002](https://doi.org/10.1016/j.ibusrev.2016.09.002).

- Ballerini, J., Herhausen, D. and Ferraris, A. (2023), "How commitment and platform adoption drive the e-commerce performance of SMEs: A mixed-method inquiry into e-commerce affordances", *International Journal of Information Management*, Vol. 72, doi: [10.1016/j.ijinfomgt.2023.102649](https://doi.org/10.1016/j.ijinfomgt.2023.102649).
- Ballerini, J., Yahiaoui, D., Giovando, G. and Ferraris, A. (2023 In press), "E-commerce channel management on the manufacturers' side: ongoing debates and future research pathways", *Review of Managerial Science*, doi: [10.1007/s11846-023-00645-w](https://doi.org/10.1007/s11846-023-00645-w).
- Bansal, A., Panchal, T., Jabeen, F., Mangla, S.K. and Singh, G. (2023), "A study of human resource digital transformation (HRDT): a phenomenon of innovation capability led by digital and individual factors", *Journal of Business Research*, Vol. 157 No. 113611, 113611, doi: [10.1016/j.jbusres.2022.113611](https://doi.org/10.1016/j.jbusres.2022.113611).
- Bargoni, A., Jabeen, F., et al. (2023a), "Growth hacking and international dynamic marketing capabilities: a conceptual framework and research propositions", *International Marketing Review*, doi: [10.1108/imr-07-2022-0156](https://doi.org/10.1108/imr-07-2022-0156).
- Bargoni, A., Klietstik, T., et al. (2023b), "Family firms' characteristics and consumer behaviour: an enquiry into millennials' purchase intention in the online channel", *Journal of Business Research*, Vol. 156 No. 113462, 113462, doi: [10.1016/j.jbusres.2022.113462](https://doi.org/10.1016/j.jbusres.2022.113462).
- Bellone, F., Musso, P. and Nesta, L. (2010), "Financial constraints and firm export behaviour", *World Economy*, Vol. 33 No. 3, pp. 347-373, doi: [10.1111/j.1467-9701.2010.01259.x](https://doi.org/10.1111/j.1467-9701.2010.01259.x).
- Bergamaschi, M., Bettinelli, C., Lissana, E. and Picone, P.M. (2021), "Past, ongoing, and future debate on the interplay between internationalization and digitalization", *Journal of Management and Governance*, Vol. 25 No. 4, pp. 983-1032, doi: [10.1007/s10997-020-09544-8](https://doi.org/10.1007/s10997-020-09544-8).
- Bertello, A., Ferraris, A., Bresciani, S. and De Bernardi, P. (2021), "Big data analytics (BDA) and degree of internationalisation: the interplay between governance of BDA infrastructure and BDA capabilities", *Journal of Management and Governance*, Vol. 25 No. 4, pp. 1035-1055.
- Beugelsdijk, S., Kostova, T., Kunst, V.E., Spadafora, E. and Van Essen, M. (2018), "Cultural distance and firm internationalization: a meta-analytical review and theoretical implications", *Journal of Management*, Vol. 44 No. 1, pp. 89-130, doi: [10.1177/0149206317729027](https://doi.org/10.1177/0149206317729027).
- Beuve, J., Moszoro, M.W. and Saussier, S. (2019), "Political contestability and public contract rigidity: an analysis of procurement contracts", *Journal of Economics and Management Strategy*, Vol. 28 No. 2, pp. 316-335, doi: [10.1111/jems.12268](https://doi.org/10.1111/jems.12268).
- Blind, K., Mangelsdorf, A. and Pohlisch, J. (2018), "The effects of cooperation in accreditation on international trade: empirical evidence on ISO 9000 certifications", *International Journal of Production Economics*, Vol. 198, pp. 50-59, doi: [10.1016/j.ijpe.2018.01.033](https://doi.org/10.1016/j.ijpe.2018.01.033).
- Bodlaj, M., Kadic-Magljajic, S. and Vida, I. (2020), "Disentangling the impact of different innovation types, financial constraints and geographic diversification on SMEs' export growth", *Journal of Business Research*, Vol. 108, pp. 466-475, doi: [10.1016/j.jbusres.2018.10.043](https://doi.org/10.1016/j.jbusres.2018.10.043).
- Boermans, A.M. and Roelfsema, H. (2013), "The effects of managerial capabilities on export, FDI and innovation: evidence from Indian firms", *Asian Business and Management*, Vol. 12 No. 4, pp. 387-408.
- Boudreau, K. (2017), "Platform-based organization and boundary choices: entrepreneurship, innovation and growth in the early history of mobile computing", in Furma, J., et al. (Eds), in *Advances in Strategic Management*, Emerald Press.
- Bowen, R. and Morris, W. (2019), "The digital divide: implications for agribusiness and entrepreneurship. Lessons from Wales", *Journal of Rural Studies*, Vol. 72, pp. 75-84, doi: [10.1016/j.jrurstud.2019.10.031](https://doi.org/10.1016/j.jrurstud.2019.10.031).
- Braganza, A., Brooks, L., Nepelski, D., Ali, M. and Moro, R. (2017), "Resource management in big data initiatives: processes and dynamic capabilities", *Journal of Business Research*, Vol. 70, pp. 328-337, doi: [10.1016/j.jbusres.2016.08.006](https://doi.org/10.1016/j.jbusres.2016.08.006).
- Brancati, R., Marrocu, E., Romagnoli, M. and Usai, S. (2018), "Innovation activities and learning processes in the crisis: evidence from Italian export in manufacturing and services", *Industrial and Corporate Change*, Vol. 27 No. 1, pp. 107-130, doi: [10.1093/icc/dtx022](https://doi.org/10.1093/icc/dtx022).

- Bressan, A., Duarte Alonso, A., Vu, O.T.K., Do, L.T.H. and Martens, W. (2022), "The role of tradition for food and wine producing firms in times of an unprecedented crisis", *British Food Journal (Croydon, England)*, Vol. 124 No. 4, pp. 1170-1186, doi: [10.1108/bfj-04-2021-0454](https://doi.org/10.1108/bfj-04-2021-0454).
- Budsaratragoon, P. and Jitmaneeoj, B. (2021), "Corporate sustainability and stock value in Asian-pacific emerging markets: synergies or tradeoffs among ESG factors?", *Sustainability*, Vol. 13 No. 11, p. 6458, doi: [10.3390/su13116458](https://doi.org/10.3390/su13116458).
- Cao, Q., Gedajlovic, E. and Zhang, H. (2009), "Unpacking organisational ambidexterity: dimensions, contingencies, and synergistic effects", *Organisation Science*, Vol. 20 No. 4, pp. 781-796.
- Caputo, F., Fiano, F., Riso, T., Romano, M. and Maalaoui, A. (2022), "Digital platforms and international performance of Italian SMEs: an exploitation-based overview", *International Marketing Review*, Vol. 39 No. 3, pp. 568-585, doi: [10.1108/imr-02-2021-0102](https://doi.org/10.1108/imr-02-2021-0102).
- Caravella, S. and Crespi, F. (2021), "The role of public procurement as innovation lever: evidence from Italian manufacturing firms", *Economics of Innovation and New Technology*, Vol. 30 No. 7, pp. 663-684, doi: [10.1080/10438599.2020.1761591](https://doi.org/10.1080/10438599.2020.1761591).
- Cassetta, E., Monarca, U., Dilerio, I., Di Berardino, C. and Pini, M. (2020), "The relationship between digital technologies and internationalisation. Evidence from Italian SMEs", *Industry and Innovation*, Vol. 27 No. 4, pp. 311-339, doi: [10.1080/13662716.2019.1696182](https://doi.org/10.1080/13662716.2019.1696182).
- Cerrato, D. and Piva, M. (2012), "The internationalisation of small and medium-sized enterprises: the effect of family management, human capital and foreign ownership", *Journal of Management and Governance*, Vol. 16 No. 4, pp. 617-644.
- Chandra, A., Paul, J. and Chavan, M. (2020), "Internationalisation barriers of SMEs from developing countries: a review and research agenda", *International Journal of Entrepreneurial Behavior and Research*, Vol. 26 No. 6, pp. 1281-1310, doi: [10.1108/IJEBR-03-2020-0167](https://doi.org/10.1108/IJEBR-03-2020-0167).
- Chang, Y.Y. and Hughes, M. (2012), "Drivers of innovation ambidexterity in small-to medium-sized firms", *European Management Journal*, Vol. 30 No. 1, pp. 1-17.
- Chang, D.-S. and Kuo, L.-C.R. (2008), "The effects of sustainable development on firms' financial performance - an empirical approach", *Sustainable Development*, Vol. 16 No. 6, pp. 365-380, doi: [10.1002/sd.351](https://doi.org/10.1002/sd.351).
- Chong, E., Saussier, S. and Silverman, B.S. (2015), "Water under the bridge: determinants of franchise renewal in water provision", *Journal of Law, Economics, and Organization*, Vol. 31 No. suppl 1, pp. i3-i39, doi: [10.1093/jleo/ewv010](https://doi.org/10.1093/jleo/ewv010).
- Ciampi, F., Faraoni, M., Ballerini, J. and Meli, F. (2022), "The co-evolutionary relationship between digitalization and organizational agility: ongoing debates, theoretical developments and future research perspectives", *Technological Forecasting and Social Change*, Vol. 176 No. 121383, 121383, doi: [10.1016/j.techfore.2021.121383](https://doi.org/10.1016/j.techfore.2021.121383).
- Citroni, G., Lippi, A. and Profeti, S. (2019), "In the shadow of austerity: italian local public services and the politics of budget cuts", in *Local Public Services in Times of Austerity across Mediterranean Europe*, Springer International Publishing, Cham, pp. 115-140.
- Coase, R.H. (1995), "The nature of the firm", in *Essential Readings in Economics*, Macmillan Education UK, London, pp. 37-54.
- Collier, J. (2020), *Applied Structural Equation Modeling Using AMOS: Basic to Advanced Techniques*, Routledge, New York, doi: [10.4324/9781003018414](https://doi.org/10.4324/9781003018414).
- Cosentino, A., Paolini, P., Iannone, B. and Temperini, V. (2020), "Tradition, innovation and relationships: emergent profiles from agro-food Italian industry", *British Food Journal (Croydon, England)*, Vol. 123 No. 1, pp. 279-299, doi: [10.1108/bfj-04-2020-0306](https://doi.org/10.1108/bfj-04-2020-0306).
- Costa, E., Soares, A.L. and de Sousa, J.P. (2020), "Industrial business associations improving the internationalisation of SMEs with digital platforms: a design science research approach", *International Journal of Information Management*, Vol. 53 No. 102070, 102070, doi: [10.1016/j.ijinfomgt.2020.102070](https://doi.org/10.1016/j.ijinfomgt.2020.102070).

- Cuypers, I.R.P., Hennart, J.F., Silverman, B.S. and Ertug, G. (2021), "Transaction cost theory: past progress, current challenges, and suggestions for the future", *Academy of Management Annals*, Vol. 15 No. 1, pp. 111-150, doi: [10.5465/annals.2019.0051](https://doi.org/10.5465/annals.2019.0051).
- Dabić, M., Maley, J., Dana, L.P., Novak, I., Pellegrini, M.M. and Caputo, A. (2020), "Pathways of SME internationalisation: a bibliometric and systematic review", *Small Business Economics*, Vol. 55 No. 3, pp. 705-725.
- De Cock, R., Andries, P. and Clarysse, B. (2021), "How founder characteristics imprint ventures' internationalisation processes: the role of international experience and cognitive beliefs", *Journal of World Business*, Vol. 56 No. 3.
- Deng, Z., Zhu, Z., Johanson, M. and Hilmersson, M. (2022), "Rapid internationalization and exit of exporters: the role of digital platforms", *International Business Review (Oxford, England)*, Vol. 31 No. 1, 101896, doi: [10.1016/j.ibusrev.2021.101896](https://doi.org/10.1016/j.ibusrev.2021.101896).
- Dethine, B., Enjolras, M. and Monticcolo, D. (2020), "Digitalisation and SMEs' export management: impacts on resources and capabilities", *Technology Innovation Management Review*, Vol. 10 No. 4, pp. 18-34.
- Di Mauro, D., Ancarani, C. and Hartley, A. (2020), "Unravelling SMEs' participation and success in public procurement", *Journal of Public Procurement*, Vol. 20 No. 4, pp. 377-401.
- Ebben, J.J. and Johnson, A.C. (2005), "Efficiency, flexibility, or both? Evidence linking strategy to performance in small firms", *Strategic Management Journal*, Vol. 26 No. 13, pp. 1249-1259, doi: [10.1002/smj.503](https://doi.org/10.1002/smj.503).
- Edgington, T.M., Raghu, T.S. and Vinze, A.S. (2010), "Using process mining to identify coordination patterns in IT service management", *Decision Support Systems*, Vol. 49 No. 2, pp. 175-186, doi: [10.1016/j.dss.2010.02.003](https://doi.org/10.1016/j.dss.2010.02.003).
- Ensari, M.Ş. and Karabay, M.E. (2014), "What helps to make SMEs successful in global markets?", *Procedia, Social and Behavioral Sciences*, Vol. 150, pp. 192-201, doi: [10.1016/j.sbspro.2014.09.030](https://doi.org/10.1016/j.sbspro.2014.09.030).
- Eramudugoda, R. and Ramos, M.A. (2023), "Bribery and export intensity: the role of formal institutional constraint susceptibility", *Cross Cultural and Strategic Management*, Vol. 30 No. 2, pp. 248-271, doi: [10.1108/ccsm-08-2021-0150](https://doi.org/10.1108/ccsm-08-2021-0150).
- Etuk, R.U., Etuk, G.R. and Michael, B. (2014), "Small and medium scale enterprises (SMEs) and Nigeria's economic development", *Mediterranean Journal of Social Sciences*, Vol. 5 No. 7, p. 656, doi: [10.5901/mjss.2014.v5n7p656](https://doi.org/10.5901/mjss.2014.v5n7p656).
- European Commission (2020a), "Entrepreneurship and small and medium-sized enterprises (SMEs)", available at: https://single-market-economy.ec.europa.eu/smes_en (accessed 24 October 2022).
- European Commission (2020b), "User guide to the SME definition", available at: <https://op.europa.eu/en/publication-detail/-/publication/756d9260-ee54-11ea-991b-01aa75ed71a1> (accessed 24 October 2022).
- European Commission (2022), "Internal market, industry, entrepreneurship and SMEs: food and drink industry", available at: https://single-market-economy.ec.europa.eu/sectors/food-and-drink-industry_en (accessed 25 October 2022).
- Eurostat (2016), "Glossary: statistical classification of economic activities in the European Community (NACE)", available at: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Statistical_classification_of_economic_activities_in_the_European_Community_\(NACE\)](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Statistical_classification_of_economic_activities_in_the_European_Community_(NACE)) (accessed 23 October 2022).
- Falahat, M., Ramayah, T., Soto-Acosta, P. and Lee, Y.Y. (2020), "SMEs internationalisation: the role of product innovation, market intelligence, pricing and marketing communication capabilities as drivers of SMEs' international performance", *Technological Forecasting and Social Change*, Vol. 152, 119908.
- Faria, S., Rebelo, J. and Gouveia, S. (2020), "Firms' export performance: a fractional econometric approach", *Journal of Business Economics and Management*, Vol. 21 No. 2, pp. 521-542, doi: [10.3846/jbem.2020.11934](https://doi.org/10.3846/jbem.2020.11934).

- Feliciano-Cestero, M.M., Ameen, N., Kotabe, M., Paul, J. and Signoret, M. (2023), "Is digital transformation threatened? A systematic literature review of the factors influencing firms' digital transformation and internationalization", *Journal of Business Research*, Vol. 157 No. 113546, 113546, doi: [10.1016/j.jbusres.2022.113546](https://doi.org/10.1016/j.jbusres.2022.113546).
- Flynn, A. (2018), "Investigating the implementation of SME-friendly policy in public procurement", *Policy Studies*, Vol. 39 No. 4, pp. 422-443, doi: [10.1080/01442872.2018.1478406](https://doi.org/10.1080/01442872.2018.1478406).
- Flynn, A. and Davis, P. (2015), "The rhetoric and reality of SME-friendly procurement", *Public Money and Management*, Vol. 35 No. 2, pp. 111-118, doi: [10.1080/09540962.2015.1007705](https://doi.org/10.1080/09540962.2015.1007705).
- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *JMR Journal of Marketing Research*, Vol. 18 No. 1, p. 39, doi: [10.2307/3151312](https://doi.org/10.2307/3151312).
- Fraccastoro, S., Gabriellson, M. and Chetty, S. (2021), "Social media firm specific advantages as enablers of network embeddedness of international entrepreneurial ventures", *Journal of World Business*, Vol. 56 No. 3, 101164, doi: [10.1016/j.jwb.2020.101164](https://doi.org/10.1016/j.jwb.2020.101164).
- Freeman, S., Edwards, R. and Schroder, B. (2006), "How smaller born-global firms use networks and alliances to overcome constraints to rapid internationalisation", *Journal of International Marketing*, Vol. 14 No. 3, pp. 33-63.
- Fuchs, M., Eybl, A. and Höpken, W. (2011), "Successfully selling accommodation packages at online auctions – the case of eBay Austria", *Tourism Management*, Vol. 32 No. 5, pp. 1166-1175, doi: [10.1016/j.tourman.2010.10.007](https://doi.org/10.1016/j.tourman.2010.10.007).
- García-Pérez-de-Lema, D., Ruiz-Palomo, D. and Diéguez-Soto, J. (2021), "Analysing the roles of CEO's financial literacy and financial constraints on Spanish SMEs technological innovation", *Technology in Society*, Vol. 64 No. 101519, 101519, doi: [10.1016/j.techsoc.2020.101519](https://doi.org/10.1016/j.techsoc.2020.101519).
- Gatignon, H. and Anderson, E. (1988), "The multinational corporation's degree of control over foreign subsidiaries: an empirical test of a transaction cost explanation", *Economics and Organization*, Vol. 4.
- Gavrila, S.G. and De Lucas Ancillo, A. (2021), "Spanish SMEs' digitalisation enablers: e-receipt applications to the offline retail market", *Technological Forecasting and Social Change*, Vol. 162, 120381, doi: [10.1016/j.techfore.2020.120381](https://doi.org/10.1016/j.techfore.2020.120381).
- Hadjielias, E., Christofi, M. and Tarba, S. (2022), "Contextualising small business resilience during the COVID-19 pandemic: evidence from small business owner-managers", *Small Business Economics*, Vol. 59, pp. 1351-1380, doi: [10.1007/s11187-021-00588-0](https://doi.org/10.1007/s11187-021-00588-0).
- Hair, J.F. Jr, Babin, B.J. and Krey, N. (2017), "Covariance-based structural equation modeling in the journal of advertising: review and recommendations", *Journal of Advertising*, Vol. 46 No. 1, pp. 163-177, doi: [10.1080/00913367.2017.1281777](https://doi.org/10.1080/00913367.2017.1281777).
- Hamid, S., Azhar, M. and Sujood (2023), "Behavioral intention to order food and beverage items using e-commerce during COVID-19: an integration of theory of planned behavior (TPB) with trust", *British Food Journal*, Vol. 125 No. 1, pp. 112-131, doi: [10.1108/BFJ-03-2021-0338](https://doi.org/10.1108/BFJ-03-2021-0338).
- Hennart, J.-F. (1982), *A Theory of Multinational Enterprise*, University of Michigan Press, Ann Arbor, MI.
- Hennart, J.-F. (2019), "Digitalized service multinationals and international business theory", *Journal of International Business Studies*, Vol. 50 No. 8, pp. 1388-1400, doi: [10.1057/s41267-019-00256-2](https://doi.org/10.1057/s41267-019-00256-2).
- Hennart, J.-F. (2022), "How much is new in Brouthers et al.'s new foreign entry modes, and do they challenge the transaction cost theory of entry mode choice?", *Journal of International Business Studies*, Vol. 53 No. 9, pp. 2116-2132, doi: [10.1057/s41267-022-00523-9](https://doi.org/10.1057/s41267-022-00523-9).
- Hennart, J.-F. and Park, Y.-R. (1993), "Greenfield vs Acquisition: the strategy of Japanese investors in the United States", *Management Science*, Vol. 39 No. 9, pp. 1054-1070, doi: [10.1287/mnsc.39.9.1054](https://doi.org/10.1287/mnsc.39.9.1054).
- Hillemane, B.S.M. (2012), "Technological innovation in Indian SMEs: need, status and policy imperatives. Current opinion in creativity", *innovation and Entrepreneurship*, Vol. 1 No. 2.

- Hooper, D., Coughlan, J. and Mullen, M.R. (2008), "Structural equation modelling", *Guidelines for Determining Model Fit*, Vol. 8.
- Hu, L.-T. and Bentler, P.M. (1999), "Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives", *Structural Equation Modeling: A Multidisciplinary Journal*, Vol. 6 No. 1, pp. 1-55, doi: [10.1080/10705519909540118](https://doi.org/10.1080/10705519909540118).
- Hui, X. (2020), "Facilitating inclusive global trade: evidence from a field experiment", *Management Science*, Vol. 66 No. 4, pp. 1737-1755, doi: [10.1287/mnsc.2018.3263](https://doi.org/10.1287/mnsc.2018.3263).
- Iborra, M., Safón, V. and Dolz, C. (2020), "What explains the resilience of SMEs? Ambidexterity capability and strategic consistency", *Long Range Planning*, Vol. 53 No. 6, 101947, doi: [10.1016/j.lrp.2019.101947](https://doi.org/10.1016/j.lrp.2019.101947).
- Inthong, C., Champahom, T., Jomnonkwao, S., Chatpattananan, V. and Ratanavaraha, V. (2022), "Exploring factors affecting consumer behavioral intentions toward online food ordering in Thailand", *Sustainability*, Vol. 14 No. 14.
- Jansen, J.J.P., Van Den Bosch, F.A.J. and Volberda, H.W. (2006), "Exploratory innovation, exploitative innovation, and performance: effects of organisational antecedents and environmental moderators", *Management Science*, Vol. 52 No. 11, pp. 1661-1674.
- Jia, S., Tseng, H.T., Shanmugam, M., Rees, D.J., Thomas, R. and Hajli, N. (2022), "Using new forms of information and communication technologies to empower SMEs", *British Food Journal (Croydon, England)*, Vol. 124 No. 12, pp. 4833-4846, doi: [10.1108/bfj-01-2021-0066](https://doi.org/10.1108/bfj-01-2021-0066).
- Kalinic, I. and Brouthers, K.D. (2022), "Entrepreneurial orientation, export channel selection, and export performance of SMEs", *International Business Review (Oxford, England)*, Vol. 31 No. 1, 101901, doi: [10.1016/j.ibusrev.2021.101901](https://doi.org/10.1016/j.ibusrev.2021.101901).
- Kano, L. and Verbeke, A. (2015), "The three faces of bounded reliability: alfred Chandler and the micro-foundations of management theory", *California Management Review*, Vol. 58 No. 1, pp. 97-122, doi: [10.1525/cmr.2015.58.1.97](https://doi.org/10.1525/cmr.2015.58.1.97).
- Kapri, K. (2019), "Impact of political instability on firm-level export decisions", *International Review of Economics & Finance*, Vol. 59, pp. 98-105, doi: [10.1016/j.iref.2018.08.008](https://doi.org/10.1016/j.iref.2018.08.008).
- Karjalainen, K. and Kemppainen, K. (2008), "The involvement of small-and medium-sized enterprises in public procurement: impact of resource perceptions, electronic systems and enterprise size", *Journal of Purchasing and Supply Management*, Vol. 14 No. 4, pp. 230-240.
- Khurana, I., Dutta, D.K. and Singh Ghura, A. (2022), "SMEs and digital transformation during a crisis: the emergence of resilience as a second-order dynamic capability in an entrepreneurial ecosystem", *Journal of Business Research*, Vol. 150, pp. 623-641, doi: [10.1016/j.jbusres.2022.06.048](https://doi.org/10.1016/j.jbusres.2022.06.048).
- Kidalov, M.V. and Snider, K.F. (2011), "US and European public procurement policies for small and medium-sized enterprises (SME): a comparative perspective", *Business and Politics*, Vol. 13 No. 4, pp. 1-41, doi: [10.2202/1469-3569.1367](https://doi.org/10.2202/1469-3569.1367).
- Kim, D. and Cavusgil, E. (2020), "Antecedents and outcomes of digital platform risk for international new ventures' internationalisation", *Journal of World Business*, Vol. 55 No. 1.
- Klein, V.B. and Todesco, J.L. (2021), "COVID-19 crisis and SMEs responses: the role of digital transformation", *Knowledge and Process Management*, Vol. 28 No. 2, pp. 117-133, doi: [10.1002/kpm.1660](https://doi.org/10.1002/kpm.1660).
- Krammer, S.M.S., Strange, R. and Lashitew, A. (2018), "The export performance of emerging economy firms: the influence of firm capabilities and institutional environments", *International Business Review (Oxford, England)*, Vol. 27 No. 1, pp. 218-230, doi: [10.1016/j.ibusrev.2017.07.003](https://doi.org/10.1016/j.ibusrev.2017.07.003).
- Lee, H., Kelley, D., Lee, J. and Lee, S. (2012), "SME survival: the impact of internationalisation, technology resources, and alliances", *Journal of Small Business Management*, Vol. 50 No. 1, pp. 1-19.
- Lehdonvirta, V., Kässi, O., Hjørth, I., Barnard, H. and Graham, M. (2019), "The global platform economy: a new offshoring institution enabling emerging-economy microproviders", *Journal of Management*, Vol. 45 No. 2, pp. 567-599, doi: [10.1177/0149206318786781](https://doi.org/10.1177/0149206318786781).

- Lehtinen, U., Ahokangas, P. and Lu, J. (2016), "The role of intermediaries in food export: case evidence from Finland", *British Food Journal (Croydon, England)*, Vol. 118 No. 5, pp. 1179-1194, doi: [10.1108/bfj-03-2015-0116](https://doi.org/10.1108/bfj-03-2015-0116).
- Leonidou, L.C. (2004), "An analysis of the barriers hindering small business export development", *Journal of Small Business Management*, Vol. 42 No. 3, pp. 279-302, doi: [10.1111/j.1540-627x.2004.00112.x](https://doi.org/10.1111/j.1540-627x.2004.00112.x).
- Levinthal, D. and March, J.G. (1993), "The myopia of learning", *Strategic Management Journal*, Vol. 2 No. S2, pp. 95-112.
- Lin, X., Wang, X. and Hajli, N. (2019), "Building E-commerce satisfaction and boosting sales: the role of social commerce trust and its antecedents", *International Journal of Electronic Commerce*, Vol. 23 No. 3, pp. 328-363, doi: [10.1080/10864415.2019.1619907](https://doi.org/10.1080/10864415.2019.1619907).
- Loader, K. (2005), "Supporting SMEs through government purchasing activity", *The International Journal of Entrepreneurship and Innovation*, Vol. 6 No. 1, pp. 17-26, doi: [10.5367/000000053026383](https://doi.org/10.5367/000000053026383).
- Loader, K. (2011), "Are public sector procurement models and practices hindering small and medium suppliers?", *Public Money and Management*, Vol. 31 No. 4, pp. 287-294, doi: [10.1080/09540962.2011.586242](https://doi.org/10.1080/09540962.2011.586242).
- Loader, K. (2015), "SME suppliers and the challenge of public procurement: evidence revealed by a UK government online feedback facility", *Journal of Purchasing and Supply Management*, Vol. 21 No. 2, pp. 103-112, doi: [10.1016/j.pursup.2014.12.003](https://doi.org/10.1016/j.pursup.2014.12.003).
- Loader, K. and Norton, S. (2015), "SME access to public procurement: an analysis of the experiences of SMEs supplying the publicly funded UK heritage sector", *Journal of Purchasing and Supply Management*, Vol. 21 No. 4, pp. 241-250, doi: [10.1016/j.pursup.2015.02.001](https://doi.org/10.1016/j.pursup.2015.02.001).
- Lubatkin, M.H., et al. (2006), "Ambidexterity and performance in small-to medium-sized firms: the pivotal role of top management team behavioral integration", *Journal of Management*, Vol. 32 No. 5, pp. 646-672, doi: [10.1177/0149206306290712](https://doi.org/10.1177/0149206306290712).
- Luger, J., Raisch, S. and Schimmer, M. (2018), "Dynamic balancing of exploration and exploitation: the contingent benefits of ambidexterity", *Organization Science*, Vol. 29 No. 3, pp. 449-470, doi: [10.1287/orsc.2017.1189](https://doi.org/10.1287/orsc.2017.1189).
- Mahoney, J.T., McGahan, A.M. and Pitelis, C.N. (2009), "Perspective—the interdependence of private and public interests", *Organization Science*, Vol. 20 No. 6, pp. 1034-1052, doi: [10.1287/orsc.1090.0472](https://doi.org/10.1287/orsc.1090.0472).
- Mainela, T., Puhakka, V. and Sipola, S. (2018), "International entrepreneurship beyond individuals and firms: on the systemic nature of international opportunities", *Journal of Business Venturing*, Vol. 33 No. 4, pp. 534-550, doi: [10.1016/j.jbusvent.2018.04.002](https://doi.org/10.1016/j.jbusvent.2018.04.002).
- Majocchi, A., Bacchiocchi, E. and Mayrhofer, U. (2005), "Firm size, business experience and export intensity in SMEs: a longitudinal approach to complex relationships", *International Business Review (Oxford, England)*, Vol. 14 No. 6, pp. 719-738, doi: [10.1016/j.ibusrev.2005.07.004](https://doi.org/10.1016/j.ibusrev.2005.07.004).
- Malodia, S., Chauhan, C., Jabeen, F. and Dhir, A. (2023), "Antecedents and consequences of open innovation: a conceptual framework", *International Journal of Entrepreneurial Behaviour and Research*, Vol. ahead-of-print, No. ahead-of-print, doi: [10.1108/ijebr-03-2022-0235](https://doi.org/10.1108/ijebr-03-2022-0235).
- Manolopoulos, D., Chatzopoulou, E. and Kottaridi, C. (2018), "Resources, home institutional context and SMEs' exporting: direct relationships and contingency effects", *International Business Review (Oxford, England)*, Vol. 27 No. 5, pp. 993-1006, doi: [10.1016/j.ibusrev.2018.02.011](https://doi.org/10.1016/j.ibusrev.2018.02.011).
- Marcati, A., Guido, G. and Peluso, A.M. (2008), "The role of SME entrepreneurs' innovativeness and personality in the adoption of innovations", *Research Policy*, Vol. 37 No. 9, pp. 1579-1590.
- March, J.G. (1991), "Exploration and exploitation in organisational learning", *Organisation Science*, Vol. 2 No. 1, pp. 71-87.
- Matarazzo, M., Penco, L., Profumo, G. and Quaglia, R. (2021), "Digital transformation and customer value creation in Made in Italy SMEs: a dynamic capabilities perspective", *Journal of Business Research*, Vol. 123, pp. 642-656, doi: [10.1016/j.jbusres.2020.10.033](https://doi.org/10.1016/j.jbusres.2020.10.033).

- McDougall, P.P., Shane, S. and Oviatt, B.M. (1994), "Explaining the formation of international new ventures: the limits of theories from international business research", *Journal of Business Venturing*, Vol. 9 No. 6, pp. 469-487.
- McKevitt, D. and Davis, P. (2015), "How to interact, when and with whom? SMEs and public procurement", *Public Money and Management*, Vol. 35 No. 1, pp. 79-86, doi: [10.1080/09540962.2015.986897](https://doi.org/10.1080/09540962.2015.986897).
- Medina-Arnáiz, T. (2010), "Integrating gender equality in public procurement: the Spanish case", *Journal of Public Procurement*, Vol. 10 No. 4, pp. 541-563, doi: [10.1108/jopp-10-04-2010-b003](https://doi.org/10.1108/jopp-10-04-2010-b003).
- Mendy, J. and Rahman, M. (2019), "Application of human resource management's universal model: an examination of people versus institutions as barriers of internationalisation for SMEs in a small developing country", *Thunderbird International Business Review*, Vol. 61 No. 2, pp. 363-374.
- Modina, M. and Zedda, S. (2022), "Diagnosing default syndromes: early symptoms of entrepreneurial venture insolvency", *Journal of Small Business and Enterprise Development*, Vol. 30 No. 1, pp. 186-209, doi: [10.1108/jsbed-02-2022-0088](https://doi.org/10.1108/jsbed-02-2022-0088).
- Moszoro, M., Spiller, P.T. and Stolorz, S. (2016), "Rigidity of public contracts: rigidity of public contracts", *Journal of Empirical Legal Studies*, Vol. 13 No. 3, pp. 396-427, doi: [10.1111/jels.12119](https://doi.org/10.1111/jels.12119).
- Moya, B., Parker, A. and Sakrabani, R. (2019), "Challenges to the use of fertilisers derived from human excreta: the case of vegetable exports from Kenya to Europe and influence of certification systems", *Food Policy*, Vol. 85, pp. 72-78, doi: [10.1016/j.foodpol.2019.05.001](https://doi.org/10.1016/j.foodpol.2019.05.001).
- Mu, T., van Riel, A. and Schouteten, R. (2022), "Individual ambidexterity in SMEs: towards a typology aligning the concept, antecedents and outcomes", *Journal of Small Business Management*, Vol. 60 No. 2, pp. 347-378, doi: [10.1080/00472778.2019.1709642](https://doi.org/10.1080/00472778.2019.1709642).
- Mudalige, D., Ismail, N.A. and Malek, M.A. (2019), "Exploring the role of individual level and firm level dynamic capabilities in SMEs' internationalisation", *Journal of International Entrepreneurship*, Vol. 17 No. 1, pp. 41-74.
- Nguyen, D.H., de Leeuw, S. and Dullaert, W.E.H. (2018), "Consumer behaviour and order fulfilment in online retailing: a systematic review: order fulfilment in online retailing", *International Journal of Management Reviews*, Vol. 20 No. 2, pp. 255-276, doi: [10.1111/ijmr.12129](https://doi.org/10.1111/ijmr.12129).
- Nirino, N., Ferraris, A., Miglietta, N. and Invernizzi, A. C. (2022), "Intellectual capital: the missing link in the corporate social responsibility–financial performance relationship", *Journal of Intellectual Capital*, Vol. 23 No. 2, pp. 420-438, doi: [10.1108/jic-02-2020-0038](https://doi.org/10.1108/jic-02-2020-0038).
- O'Reilly, I. and Tushman, C.A. (2013), "Organisational ambidexterity: past, present, and future", *Academy of Management Perspectives*, Vol. 27 No. 4, pp. 324-338.
- Paiola, M., Khvatova, T., Schiavone, F. and Jabeen, F. (2022), "Paths toward advanced service-oriented business models: a configurational analysis of small-and medium-sized incumbent manufacturers", *Technological Forecasting and Social Change*, Vol. 182, 121774, doi: [10.1016/j.techfore.2022.121774](https://doi.org/10.1016/j.techfore.2022.121774).
- Pallant, J. (2020), *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using IBM SPSS*, Routledge.
- Paoloni, P., Modaffari, G. and Paoloni, N. (2020), "My name is bond, Pecorino Bond", *British Food Journal (Croydon, England)*, Vol. 122 No. 4, pp. 1040-1055, doi: [10.1108/bfj-06-2019-0467](https://doi.org/10.1108/bfj-06-2019-0467).
- Paul, J., Parthasarathy, S. and Gupta, P. (2017), "Exporting challenges of SMEs: a review and future research agenda", *Journal of World Business*, Vol. 52 No. 3, pp. 327-342, doi: [10.1016/j.jwb.2017.01.003](https://doi.org/10.1016/j.jwb.2017.01.003).
- Podsakoff, P.M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *The Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903, doi: [10.1037/0021-9010.88.5.879](https://doi.org/10.1037/0021-9010.88.5.879).
- Qi, X., et al. (2020), "Motivations for selecting cross-border e-commerce as a foreign market entry mode", *Industrial Marketing Management*, Vol. 89, pp. 50-60, doi: [10.1016/j.indmarman.2020.01.009](https://doi.org/10.1016/j.indmarman.2020.01.009).
- Rahman, F.B.A., et al. (2023), "Social commerce adoption: a study on consumer's online purchase behaviour of perishable pastry products", *British Food Journal (Croydon, England)*, Vol. 125 No. 1, pp. 318-344, doi: [10.1108/bfj-07-2021-0796](https://doi.org/10.1108/bfj-07-2021-0796).

- Rasiah, R., Shahrivar, R.B. and Yap, X.-S. (2016), "Institutional support, innovation capabilities and exports: evidence from the semiconductor industry in Taiwan", *Technological Forecasting and Social Change*, Vol. 109, pp. 69-75, doi: [10.1016/j.techfore.2016.05.015](https://doi.org/10.1016/j.techfore.2016.05.015).
- Reijonen, H., Saastamoinen, J. and Tammi, T. (2022), "The importance of SMEs' network partners in consortium bidding for public sector tenders", *International Journal of Public Sector Management*, Vol. 35 No. 1, pp. 1-15, doi: [10.1108/ijpsm-04-2021-0082](https://doi.org/10.1108/ijpsm-04-2021-0082).
- Reis, P.R.C. and Cabral, S. (2015), "Public procurement strategy: the impacts of a preference programme for small and micro businesses", *Public Money and Management*, Vol. 35 No. 2, pp. 103-110, doi: [10.1080/09540962.2015.1007704](https://doi.org/10.1080/09540962.2015.1007704).
- Reuber, A.R., et al. (2018), "International entrepreneurship: the pursuit of entrepreneurial opportunities across national borders", *Journal of International Business Studies*, Vol. 49 No. 4, pp. 395-406, doi: [10.1057/s41267-018-0149-5](https://doi.org/10.1057/s41267-018-0149-5).
- Romanello, R. and Veglio, V. (2022), "Industry 4.0 in food processing: drivers, challenges and outcomes", *British Food Journal (Croydon, England)*, Vol. 124 No. 13, pp. 375-390, doi: [10.1108/bfj-09-2021-1056](https://doi.org/10.1108/bfj-09-2021-1056).
- Rossi, S.P.S., Bonanno, G., Giansoldati, M. and Gregori, T. (2021), "Export starters and exiters: do innovation and finance matter?", *Structural Change and Economic Dynamics*, Vol. 56, pp. 280-297, doi: [10.1016/j.strueco.2020.11.004](https://doi.org/10.1016/j.strueco.2020.11.004).
- Roy, A., Sekhar, C. and Vyas, V. (2016), "Barriers to internationalisation: a study of small and medium enterprises in India", *Journal of International Entrepreneurship*, Vol. 14 No. 4, pp. 513-538.
- Rwehumbiza, D.A. (2020), "Locus and revenue of export manufacturers: why extra-regional markets?", *Journal of African Business*, Vol. 21 No. 4, pp. 560-577, doi: [10.1080/15228916.2019.1695186](https://doi.org/10.1080/15228916.2019.1695186).
- Petrolo, D., Fakhra Manesh, M., Pellegrini, M.M. and Flamini, G. (2022), "Agri-food entrepreneurship. Harvesting, growing and reseeded the orchard through a bibliometric study", *British Food Journal (Croydon, England)*, Vol. 124 No. 7, pp. 2396-2426, doi: [10.1108/bfj-08-2021-0954](https://doi.org/10.1108/bfj-08-2021-0954).
- PNRR: digitalizzazione, innovazione, competitività, cultura e turismo (2021), available at: <https://www.governo.it/it/approfondimento/digitalizzazione-innovazione-competitivita-e-cultura/16701> (accessed 12 August 2023).
- Saastamoinen, J., Reijonen, H. and Tammi, T. (2017), "The role of training in dismantling barriers to SME participation in public procurement", *Journal of Public Procurement*, Vol. 17 No. 1, pp. 1-30, doi: [10.1108/jopp-17-01-2017-b001](https://doi.org/10.1108/jopp-17-01-2017-b001).
- Saastamoinen, J., Reijonen, H. and Tammi, T. (2018), "Should SMEs pursue public procurement to improve innovative performance?", *Technovation*, Vol. 69, pp. 2-14, doi: [10.1016/j.technovation.2017.10.003](https://doi.org/10.1016/j.technovation.2017.10.003).
- Saastamoinen, J., Reijonen, H. and Tammi, T. (2020), "SMEs' market orientation toward public sector customers in public procurement", *International Journal of Public Sector Management*, Vol. 34 No. 1, pp. 1-16, doi: [10.1108/ijpsm-05-2020-0131](https://doi.org/10.1108/ijpsm-05-2020-0131).
- Saratchandra, M., Shrestha, A. and Murray, P.A. (2022), "Building knowledge ambidexterity using cloud computing: longitudinal case studies of SMEs experiences", *International Journal of Information Management*, Vol. 67 No. 102551, 102551, doi: [10.1016/j.ijinfomgt.2022.102551](https://doi.org/10.1016/j.ijinfomgt.2022.102551).
- Sarstedt, M. and Mooi, E. (2014), *A Concise Guide to Market Research: the Process, Data, and Methods Using IBM SPSS Statistics*, Springer-Verlag GmbH, Heidelberg.
- Schmidt, C.G. and Wagner, S.M. (2019), "Blockchain and supply chain relations: a transaction cost theory perspective", *Journal of Purchasing and Supply Management*, Vol. 25 No. 4, 100552, doi: [10.1016/j.pursup.2019.100552](https://doi.org/10.1016/j.pursup.2019.100552).
- Schmitt, A., Probst, G. and Tushman, M.L. (2010), "M@n@gement in times of economic crisis: insights into organizational ambidexterity", *M@n@gement*, Vol. 13 No. 3, p. 128, doi: [10.3917/mana.133.0128](https://doi.org/10.3917/mana.133.0128).
- Simionescu, S. and Bica, E. (2014), "Controversies and comparisons of definition for small and medium-sized enterprises at level of European Union", *Journal of Advanced Research in Management*, Vol. 5 No. 2, pp. 74-80.

- Singh, V., Kumar, A. and Singh, T. (2018), "Impact of TQM on organisational performance: the case of Indian manufacturing and service industry", *Operations Research Perspectives*, Vol. 5, pp. 199-217, doi: [10.1016/j.orp.2018.07.004](https://doi.org/10.1016/j.orp.2018.07.004).
- Sparkes, A. and Thomas, B. (2001), "The use of the Internet as a critical success factor for the marketing of Welsh agri-food SMEs in the twenty-first century", *British Food Journal (Croydon, England)*, Vol. 103 No. 5, pp. 331-347, doi: [10.1108/00070700110395368](https://doi.org/10.1108/00070700110395368).
- Spowart, M. and Wickramasekera, R. (2012), "Explaining internationalisation of small to medium sized enterprises within the Queensland food and beverage industry", *International Journal of Business and Management*, Vol. 7 No. 6, doi: [10.5539/ijbm.v7n6p68](https://doi.org/10.5539/ijbm.v7n6p68).
- Stefko, R., Jencova, S., Vasanicova, P. and Litavcova, E. (2019), "An evaluation of financial health in the electrical engineering industry", *Journal of Competitiveness*, Vol. 11 No. 4, pp. 144-160, doi: [10.7441/joc.2019.04.10](https://doi.org/10.7441/joc.2019.04.10).
- Suhonen, N., Tammi, T., Saastamoinen, J., Pesu, J., Turtiainen, M. and Okkonen, L. (2019), "Incentives and risk-sharing in public procurement of innovations: towards contracting strategy framework", *Journal of Public Procurement*, Vol. 19 No. 2, pp. 129-145, doi: [10.1108/jopp-06-2019-029](https://doi.org/10.1108/jopp-06-2019-029).
- Sukaatmadja, I., Yasa, N., Rahyuda, H., Setini, M. and Dharmanegara, I. (2021), "Competitive advantage to enhance internationalisation and marketing performance woodcraft industry: a perspective of resource-based view theory", *Journal of Project Management*, Vol. 6 No. 1, pp. 45-56.
- Swoboda, B. and Sinning, C. (2022), "Effects of internationalization rhythm and speed on E-commerce firms' growth and the role of institutional distances", *Management International Review*, Vol. 62 No. 2, pp. 169-201, doi: [10.1007/s11575-022-00463-4](https://doi.org/10.1007/s11575-022-00463-4).
- Tabachnick, B.G., Fidell, L.S. and Ullman, J.B. (2007), *Using Multivariate Statistics*, Pearson, Boston, MA.
- The World Bank (2022), "Food exports (% of merchandise exports) - Italy, France, United Kingdom, United States, Canada, Germany, Japan", available at: <https://data.worldbank.org/indicator/TX.VAL.FOOD.ZS.UN?end=2021&locations=IT-FR-GB-US-CA-DE-JP&start=1982> (accessed 12 August 2023).
- Tolstoy, D., Jonsson, A. and Sharma, D.D. (2016), "The influence of a retail firm's geographic scope of operations on its international online sales", *International Journal of Electronic Commerce*, Vol. 20 No. 3, pp. 293-318, doi: [10.1080/10864415.2016.1121760](https://doi.org/10.1080/10864415.2016.1121760).
- Tolstoy, D., Nordman, E.R., Hänell, S.M. and Özbek, N. (2021), "The development of international e-commerce in retail SMEs: an effectuation perspective", *Journal of World Business*, Vol. 56 No. 3, 101165, doi: [10.1016/j.jwb.2020.101165](https://doi.org/10.1016/j.jwb.2020.101165).
- Tushman, M.L. and Reilly, I. (1996), "Ambidextrous organisations: managing evolutionary and revolutionary change", *California Management Review*, Vol. 38 No. 4, pp. 8-29.
- Vakulenko, Y., Shams, P., Hellström, D. and Hjort, K. (2019), "Service innovation in e-commerce last mile delivery: mapping the e-customer journey", *Journal of Business Research*, Vol. 101, pp. 461-468, doi: [10.1016/j.jbusres.2019.01.016](https://doi.org/10.1016/j.jbusres.2019.01.016).
- Vavrecka, V., Zauskova, A., Privara, A., Civelek, M. and Gajdka, K. (2021), "The propensity of SMEs regarding the usage of technology enabled marketing channels: evidence from the Czech, Slovak and Hungarian SMEs", *Transform. Bus. Econ.*, Vol. 20, pp. 223-240.
- Verbeke, A. and Greidanus, N. (2009), "The end of the opportunism versus trust debate: bounded reliability as a new envelope concept in research on MNE governance", *Journal of International Business Studies*, Vol. 40, pp. 1472-1495.
- Vesperi, W. and Coppolino, R. (2022), "Inter-organisational relationships in agri-food sector: a bibliometric review and future directions", *British Food Journal*, Vol. 125 No. 1, pp. 82-95, doi: <https://doi.org/10.1108/BFJ-06-2021-0712>
- Vrontis, D., Bresciani, S. and Giacosa, E. (2016), "Tradition and innovation in Italian wine family businesses", *British Food Journal (Croydon, England)*, Vol. 118 No. 8, pp. 1883-1897, doi: [10.1108/bfj-05-2016-0192](https://doi.org/10.1108/bfj-05-2016-0192).

-
- Wang, C., Walker, E. and Redmond, J. (2007), "Explaining the lack of strategic planning in SMEs: the importance of owner motivation", *International Journal of Organization Theory and Behavior*, Vol. 12 No. 1, pp. 1-16.
- Wilkinson, T. and Brouters, L.E. (2006), "Trade promotion and SME export performance", *International Business Review (Oxford, England)*, Vol. 15 No. 3, pp. 233-252, doi: [10.1016/j.ibusrev.2006.03.001](https://doi.org/10.1016/j.ibusrev.2006.03.001).
- Williamson, O.E. (1975), *Markets and Hierarchies: Analysis and Antitrust Implications*, Free Press.
- Williamson, O.E. (1985), *The Economic Institutions of Capitalism*, Macmillan, London.
- Zahra, S.A. (2021), "International entrepreneurship in the post Covid world", *Journal of World Business*, Vol. 56 No. 1, 101143, doi: [10.1016/j.jwb.2020.101143](https://doi.org/10.1016/j.jwb.2020.101143).
- Zaridis, A., Vlachos, I. and Bourlakis, M. (2021), "SMEs strategy and scale constraints impact on agri-food supply chain collaboration and firm performance", *Production Planning and Control*, Vol. 32 No. 14, pp. 1165-1178, doi: [10.1080/09537287.2020.1796136](https://doi.org/10.1080/09537287.2020.1796136).
- Zhu, F. and Liu, Q. (2018), "Competing with complementors: an empirical look at Amazon.com", *Strategic Management Journal*, Vol. 39 No. 10, pp. 2618-2642, doi: [10.1002/smj.2932](https://doi.org/10.1002/smj.2932).

Further reading

- Herhausen, D., Miočević, D., Morgan, R.E. and Kleijnen, M.H.P. (2020), "The digital marketing capabilities gap", *Industrial Marketing Management*, Vol. 90, pp. 276-290, doi: [10.1016/j.indmarman.2020.07.022](https://doi.org/10.1016/j.indmarman.2020.07.022).

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