To be different or to be the same when you are a small firm? Competitive interdependence as a boundary condition of the strategic balance perspective

Beatriz Domínguez [a,*], Raquel Orcos [b], Sergio Palomas [c]

[a] *University of Zaragoza, Gran Vía 2, 50005, Zaragoza, Spain*
[b] *University of La Rioja, Calle La Cigüeña, 60, 26006, Logroño, Spain*
[c] *University of Zaragoza, Calle María de Luna, 3, 50018, Zaragoza, Spain*

ARTICLE INFO

ABSTRACT

This article deepens the analysis of the strategic balance perspective's boundary conditions through the lens of competitive dynamics, focusing on the particular case of small firms. We propose that competitive interdependence shapes the link between strategic similarity and small-firm performance. Specifically, we examine this boundary condition in terms of competitive asymmetry and market overlap between a small firm and two reference points, namely the industry leader and peers. We find that the effect of strategic similarity differs depending on whether there is competitive asymmetry and on the level of market overlap.

1. Introduction

Both academics and managers have paid great attention to the consequences of firms' strategic positioning (Porter, 1979, 2008). The strategic balance perspective is a stream of research in which important efforts have been devoted to analysing this issue (Deephouse, 1999; Zhao et al., 2017; Zuckerman, 2016). This perspective is based on the existence of two opposing forces, namely competitive pressures to differentiate (Barney, 1991) and institutional pressures to become similar (DiMaggio and Powell, 1983). Its central prescription is that a moderate level of strategic similarity to rivals balances the competitive and institutional pressures and thus maximises the firm performance (Deephouse, 1999; Zhao et al., 2017). However, recent studies have shown that a moderate level of strategic similarity is not always the best option (e.g., Cennamo and Santalo, 2013; Zott and Amit, 2007) and that the strategic balance perspective has critical boundary conditions (Gong et al., 2021; McKnight and Zietsma, 2018). Previous studies have shown that these boundary conditions can be both firm-specific factors, such as age (Goldenstein et al., 2019; Pan et al., 2019) or ownership (Pan et al., 2019; Zhang et al., 2020), and market-specific factors, such as competition (Gong et al., 2021) and category density (Goldenstein et al., 2019).

This research deepens the study of the strategic balance perspective's boundary conditions by using the lens of competitive dynamics at the dyad level. Specifically, we investigate how competitive interdependence influences the optimal level of strategic similarity. Competitive interdependence between a pair of firms refers to a situation in which the actions of one firm have a direct effect on the performance of the other firm (Luoma et al., 2017). Our research focuses on two main drivers of competitive interdependence: competitive asymmetry and market overlap (Chen, 1996). On the one hand, *competitive asymmetry* exists when 'the degree

---

* Corresponding author.
E-mail addresses: bdguez@unizar.es (B. Domínguez), raquel.orcos@unirioja.es (R. Orcos), spalomas@unizar.es (S. Palomas).

and/or direction of competition between two firms is not equal'; that is, firm A recognises firm B as an important competitor, but the latter does not consider firm A as a primary rival (Desarbo et al., 2006: 103). Thus, the intensity of competitive interdependence between two firms will be different depending on the competitive asymmetry. On the other hand, *market overlap* occurs when the market domain of a given firm overlaps with the market domain of another firm (Baum and Korn, 1996, 1999). Thus, market overlap increases competitive interdependence, making firms perceive each other as direct and immediate rivals (Chen, 1996) and shaping the competition for resources (Markman et al., 2009). Our research explores how each driver of competitive interdependence (i.e., competitive asymmetry and market overlap) shapes the optimal level of strategic similarity for small firms.

We focus on the particular case of small firms for three main reasons. First, small and medium firms represent about 90 percent of business worldwide and are important contributors to job creation and global economic development (UNCTAD, 2022). Second, strategic positioning is a key decision for small firms because they are highly exposed to competitive pressures (Chen and Hambrick, 1995). Third, optimal strategic positioning may help small firms to overcome the liability of smallness (Upson and Green, 2017). In particular, this research seeks to answer the following research questions: *How much should small firms differentiate from the industry leader and other small firms to maximise their performance? How is this affected by market overlap?*

We explore these research questions by using a sample of firms in the Spanish retail banking sector during the period 2000–2006. We find that the effect of strategic similarity on small-firm performance varies depending on the reference point considered (peers or the industry leader) and the level of market overlap. This result confirms that both drivers of competitive interdependence, namely competitive asymmetry and market overlap, serve as a boundary condition for the strategic balance perspective. Accordingly, small firms should consider both when configuring their strategies.

Our research makes three contributions to the strategic balance perspective. First, prior research has highlighted competition as an important boundary condition of the strategic balance perspective (Gong et al., 2021). We apply the lens of competitive dynamics at the dyad level to delve into this idea. Specifically, we investigate competitive interdependence as a boundary condition of the optimal level of strategic similarity. An exploration of boundary conditions is critical for theory development and contributes to knowledge accumulation (Makadok et al., 2018; Tsang and Kwan, 1999). Through our research, we offer a better understanding of the pressures underlying the strategic balance perspective and confirm that competitive interdependence critically influences the optimal level of strategic similarity.

Our second contribution is that we advance the knowledge of the consequences of strategic similarity for the particular case of small firms. This is important because small firms are not necessarily exposed to the same threats and opportunities as larger industry players (Aldrich and Auster, 1986) but usually face specific challenges. These challenges are known as the *liability of smallness* and revolve around the implications of limited resource availability, such as a lower capability to develop in-house R&D, restricted financial resources or difficulties in attracting specialised labour. As a result, finding the right strategic position within the industry may be especially important for these firms (Upson and Green, 2017). To the best of our knowledge, prior studies on the strategic balance perspective have not devoted attention to the specific case of small firms. Small firms play a key role in the global economy; therefore, there is a need to expand our knowledge about the strategy of these firms (Ebben and Johnson, 2005).

Our third contribution is that the lens of competitive dynamics allows us to pay attention to firm dyads and consider two reference points. Our findings reveal that the consequences of strategic similarity for small-firm performance are different in each case (i.e., peers and the industry leader). We thus answer the call for studies investigating how firms consider multiple reference points when making strategic decisions (Barlow et al., 2019; Giachetti and Lanzolla, 2016; Gómez et al., 2021). While the strategic balance perspective tends to emphasise a single reference point to explore the impact of strategic similarity (Deephouse, 1999; McNamara et al., 2003; Zhao et al., 2017), our approach deepens the study of the competitive pressures underlying the strategic balance perspective by incorporating multiple reference points.

2. The strategic balance perspective

According to the strategic balance perspective, firms confront two competing pressures in configuring their strategies (Deephouse, 1999). On the one hand, they face institutional pressures to 'be the same' as other firms. These pressures are usually described by the institutional theory, which indicates that firms adopt taken-for-granted behaviours as a means to obtain legitimacy (DiMaggio and Powell, 1983; Meyer and Rowan, 1977). Legitimacy is the 'generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions' (Suchman, 1995: 574). Thus, *legitimacy* is the main mechanism that explains the positive effect of strategic similarity on firm performance.

On the other hand, firms confront competitive pressures that force them to 'be different' from other firms (Barney, 1986, 1991; Peteraf, 1993). In this case, strategic similarity is associated with increased *competitive tension*. Competitive tension is 'the strain between a focal firm and a given rival that is likely to result in the firm taking action against the rival' (Chen et al., 2007: 102). As firms become more similar, the competitive tension between them is likely to increase, which may precipitate competitive actions that hinder their performance (Chen et al., 2007). Thus, *competitive tension* is the main mechanism that explains the negative impact of strategic similarity on firm performance.

The strategic balance perspective asserts that managers can reconcile these competing pressures by adopting moderate levels of strategic similarity; that is, 'firms should be as different as legitimately possible' (Deephouse, 1999: 147). Despite the wide acceptance of this perspective, recent developments in the literature have shown that intermediate levels of strategic similarity do not necessarily optimise firm performance. For instance, Cennamo and Santalo (2013) found that distinctive positioning has a U-shaped effect on firms' platform market share and concluded that a moderate level of distinctiveness is associated with the worst results. Similarly, Zott and Amit (2007) found that distinctiveness in business model design has a U-shaped effect on the market value of entrepreneurial

firms. Jennings et al. (2009) showed that the relationship between employment system novelty and organisational productivity is U-shaped, and van Angeren et al. (2022) identified a U-shaped relationship between distinctiveness and performance for free mobile apps.

The accumulation of conflicting empirical evidence has increased the interest of scholars in the boundary conditions of the strategic balance perspective. Prior studies on this topic have shown that the effect of strategic similarity on performance depends on market-specific factors, such as the variety of strategic approaches taken by the firms operating in a category[1] (Haans, 2019), the stage of the category life cycle (Navis and Glynn, 2010; Zhao et al., 2017), the category density (Goldenstein et al., 2019) and the level of competition and uncertainty (Gong et al., 2021). The relationship between strategic similarity and performance also varies according to firm-specific features, such as ownership (Miller et al., 2013; Zhang et al., 2020), age (Goldenstein et al., 2019), international presence and prior experience (McKnight and Zietsma, 2018). Table 1 shows a summary of relevant studies on the boundary conditions of the strategic balance perspective.

This article aims to deepen our understanding of the strategic balance perspective's boundary conditions by exploring the role of competitive interdependence. We argue that competitive interdependence determines the intensity of the competitive pressures underlying the strategic balance perspective and thereby that it alters the optimal level of strategic similarity for small firms. Based on the logic of competitive dynamics, we argue that strategic similarity does not always lead to greater *competitive tension*, as suggested by the strategic balance perspective. Instead, strategic similarity may encourage *forbearance* (Caves and Porter, 1977; McNamara et al., 2003). *Forbearance* refers to the 'purposeful, mindful decision not to counterattack a rival' (Andrevski and Miller, 2022: 60) and thus prevents competitive escalation among firms.[2] The strategic balance perspective exclusively focuses on *legitimacy* in describing the advantages of strategic similarity (Deephouse, 1999; Suchman, 1995). We propose that, next to legitimacy, *forbearance* is an important additional advantage of strategic similarity.

In this research, we examine the role of competitive interdependence as a boundary condition of the strategic balance perspective through its two main drivers, namely competitive asymmetry and market overlap. Specifically, we argue that an asymmetric competitive relationship between the focal small firm and the reference point and the absence of market overlap between these firms may override the mechanisms of *competitive tension* and *forbearance*. This means that the basic prescription of the strategic balance perspective (i.e., an inverted U-shaped relationship between strategic similarity and firm performance) may not apply under certain combinations of competitive asymmetry and market overlap.

3. Hypothesis development

Our theoretical framework revolves around two sets of hypotheses. Hypotheses 1a and 1b investigate the contingent effect of competitive asymmetry by separately analysing the effects of strategic similarity to peers and to the industry leader. Hypotheses 2a and 2 b analyse the contingent effect of market overlap on the link between strategic similarity and small-firm performance.

3.1. Strategic similarity and competitive asymmetry

3.1.1. Strategic similarity to peers

Legitimacy and *forbearance* are the main mechanisms that explain the positive effect of similarity to peers on small-firm performance. First, in relation to *legitimacy*, it is important to note that the accepted patterns of behaviours can be specific to groups of firms that share features relevant to stakeholders, such as organisational form, industry or firm size (Zuckerman, 1999, 2017). Strategic similarity to firms that belong to the same group (i.e., peers) signals conformity to the accepted patterns of behaviours. Thus, small firms that are strategically similar to other small firms may perform better because greater conformity allows them to increase their legitimacy.

Second, and related to *forbearance*, it is important to note that small firms and their peers have similar resources and capabilities, which provide 'a common basis with which to tacitly coordinate behaviour' (Young et al., 2000: 1224). This helps the focal small firm to predict the competitive behaviours of its peers better (Fuentelsaz and Gómez, 2006; Peteraf, 1993), which, in turn, favours the development of mutual understanding (Caves and Porter, 1977; Giachetti et al., 2017). In line with this reasoning, prior research has claimed that symmetry favours forbearance among firms (Bernheim and Whinston, 1990). Additionally, competitive symmetry implies that firms have similar capabilities to compete (Chen, 1996) and therefore that they are capable of posing credible threats to each other. As a consequence, a small firm may have strong incentives to forbear its peers (Gimeno, 1999). Thus, strategic similarity to peers may also reinforce small-firm performance due to *forbearance*.

However, strategic similarity may also negatively affect small-firm performance as a result of *competitive tension*. Strategic similarity may increase the extent to which peers perceive the focal small firm as an important threat and therefore may lead to increased *competitive tension* (Chen, 1996; Chen et al., 2007). As a small firm becomes increasingly strategically similar to its peers, their product offerings become closer substitutes (Gimeno and Woo, 1996) and the competitive tension between them builds. This makes peers more

---

[1] Category research has posited that, in a given setting, there are different categories of firms, each associated with a widely shared behavioural pattern (Hannan, 2010; Negro et al., 2010).

[2] We do not use the label *mutual forbearance* because it has traditionally been linked to multimarket contact theory (Andrevski and Miller, 2022: 60). Although firms may forbear strategically for a number of reasons, we focus on the case in which firms focus on mitigating rivalry (for an analysis of the reasons to forbear, see Andrevski and Miller, 2022).

Table 1
Main studies on the boundary conditions of the strategic balance perspective.

Article	Boundary conditions	Research stream	Research setting	Findings
Firm-specific factors				
Goldenstein et al. (2019)	Firm age	Category research	Metal bands from the United Kingdom	The U-shaped relationship between distinctiveness and failure risk is attenuated by the new venture age.
Pan et al. (2019)		Strategic management and institutional theory	Chinese listed firms	Age positively moderates the curvilinear relationship between firms' similarity in technological diversification and performance.
Zhang et al. (2020)	Ownership	Corporate social responsibility literature	Chinese listed firms	Conformity has the strongest effect on analyst coverage for state-owned firms.
Pan et al. (2019)		Strategic management and institutional theory	Chinese listed firms	State ownership negatively moderates the curvilinear relationship between firms' similarity in technological diversification and performance.
Miller et al. (2013)		Family business literature	Fortune 1000 firms	Family involvement is related to greater conformity.
Taeuscher and Rothe (2021)	Affiliations with high-status complementors	Institutional theory	Platforms in the market for Massive Open Online Courses	Platforms' access to high-status complementors shapes the relationship between platforms' distinctiveness and user growth.
Zhang et al. (2020)	Visibility	Corporate social responsibility literature	Chinese listed firms	Conformity has the strongest effect on analyst coverage for firms with high visibility.
McKnight and Zietsma (2018)	Differentiation framing, collaborative strategy, prior experience, presence in international markets, radical technology and incumbent dependency	Entrepreneurship	Canadian clean technology firms	Differentiation framing and radical technology improve a firm's ability to differentiate but make obtaining legitimacy more difficult. A collaborative strategy enables firms to obtain legitimacy but makes differentiation more difficult. Prior experience and presence in international markets have positive effects on both legitimacy and differentiation. Incumbent dependency makes it difficult for a firm to attain legitimacy, but it does not affect its differentiation.
Van Angeren et al. (2022)	Revenue model and monetisation transparency	Business model literature	Apple App Store	The authors found a U-shaped relationship between distinctiveness and economic performance for free products. This curvilinear relationship is reversed in the case of products with a privacy statement that use a freemium revenue approach.
Fisher et al. (2016)	Firm life cycle	Entrepreneurship	Technology ventures	Entrepreneurial ventures confront different legitimacy thresholds as they evolve and grow.
Market-specific factors				
Gong et al. (2021)	Market competition, market munificence and market uncertainty	Strategic management and institutional theory	Manufacturing industries in China	The U-shaped relationship between similarity and performance is stronger in cases of fierce competition, uncertainty and market munificence.
Haans (2019)	Category heterogeneity	Category research	Organisational websites from the Dutch creative industries	The relationship between distinctiveness and performance is U-shaped in homogeneous categories. This U-shaped effect flattens out and disappears in heterogeneous categories.
Zhao et al. (2018)	Category life cycle	Category research	U.S. console video game industry	In the early stages of the category, conformity is positively associated with the sales volume of new entrants. As the category evolves, a moderate level of differentiation becomes important for enhancing sales.
Navis and Glynn (2010)		Entrepreneurship and category research	U.S. satellite radio market	Identity claims vary along the category life cycle. First, they aim to legitimate the category. After that, they emphasise distinctiveness from rivals.
Goldenstein et al. (2019)	Category density	Category research	Metal bands from the United Kingdom	The density within a category strengthens the U-shaped relationship between distinctiveness and failure risk.

Table 1 (*continued*)

Article	Boundary conditions	Research stream	Research setting	Findings
Taeuscher et al. (2021)	Market category familiarity	Entrepreneurship	Crowdfunding campaigns	The familiarity of a market category positively moderates the relationship between distinctiveness and resource acquisition.

likely to initiate competitive moves specifically targeted against the firm that threatens their position (Chen and Miller, 1994; Chen et al., 2007), with a subsequent negative effect on performance. Importantly, increased *competitive tension* only occurs when strategic similarity is sufficiently high (Chen et al., 2007; Kilduff et al., 2010). When strategic similarity is low or medium, competitive tension is insufficient to unleash the negative effects of rivalry on the results.

Drawing on these arguments, we expect to observe an inverted U-shaped relationship between strategic similarity to peers and small-firm performance. From low to medium levels of strategic similarity to peers, small-firm performance increases with strategic similarity because of *legitimacy* and *forbearance*. However, from medium to high levels of strategic similarity, *competitive tension* builds up until it triggers competitive actions (Chen et al., 2007; Kilduff et al., 2010). That is, *competitive tension* becomes high enough to override the aforementioned benefits, resulting in negative effects from high strategic similarity to peers (Deephouse, 1999). The previous reasoning leads to the first hypothesis of this research:

Hypothesis 1a. Strategic similarity to peers has an inverted U-shaped effect on small-firm performance.

3.1.2. Strategic similarity to the industry leader

In the case of the industry leader, we contend that strategic similarity influences small-firm performance through *legitimacy* but not through *forbearance* and *competitive tension*. Regarding *legitimacy*, the industry leader copes efficiently with social expectations and therefore is an appropriate example to follow (Volberda et al., 2012). The industry leader may contribute to the legitimation of new practices and behaviours because of its high visibility and status (Scott, 1987). For instance, it has been shown that the entry of the industry leader into new markets legitimates these markets for other firms (Haveman, 1993). Therefore, similarity to the industry leader is a means to attain *legitimacy*, which positively influences firm performance (Deephouse, 1999; Suchman, 1995).

In contrast, the asymmetric competitive relationship between the focal small firm and the industry leader prevents the mechanisms of *forbearance* and *competitive tension* from unleashing their effects. First, *forbearance* is not expected to arise between a small firm and the industry leader because the marked differences in their resource endowments complicate their mutual understanding (Young et al., 2000). Forbearance is relevant only for rivals that have comparable resource endowments and are bound by mutual and symmetric interdependence (Chen, 1996; Chen et al., 2007; Lieberman and Asaba, 2006). Thus, the potential benefits that the industry leader perceives from forbearance with small firms are limited or null (Gómez et al., 2020).

Second, it is difficult for *competitive tension* to build up if the industry leader is taken as the reference point. Firms tend to focus their attention on those situations with greater potential for negative consequences (Alcantara and Mitsuhashi, 2015), which means that large and successful firms, like the industry leader, tend to ignore smaller ones (Mas-Ruiz et al., 2005, 2014). Two firms only recognise each other as important rivals if they have similar attributes that may lead one firm to substitute for the other and thus pose an actual threat (Kilduff et al., 2010). Therefore, in a situation of competitive asymmetry, mutual rival recognition is difficult (Mitsuhashi and Alcantara, 2021). Accordingly, the industry leader is less likely to feel threatened by a small firm (Ferrier et al., 1999; Ross and Sharapov, 2015), which alleviates *competitive tension* even when in the case of high strategic similarity. As rival recognition and competitive tension always precede competitive actions (Chen et al., 2007; Cho and Hambrick, 2006), a small firm that adopts a strategic position similar to that of the industry leader is not likely to be the target of its competitive moves. This allows the small firm to benefit from the *legitimacy* derived from being strategically similar to the industry leader without suffering the negative consequences of increased *competitive tension*.

Based on this reasoning, we expect to find a monotonically positive effect of strategic similarity to the industry leader on small-firm performance.

Hypothesis 1b. Strategic similarity to the industry leader has a positive effect on small-firm performance.

3.2. Strategic similarity and market overlap

Market overlap captures the extent to which a rival is present in the markets of the focal firm and implies that firms compete for resources and production factors in the common markets (Markman et al., 2009; Peteraf and Bergen, 2003). As this competition can be particularly relevant when the strategic similarity between firms is high (Peteraf, 1993; Peteraf and Bergen, 2003), the inclusion of market overlap in the analysis of strategic similarity requires the consideration of an additional mechanism, *competition for resources*, which refers to firms competing for resources, inputs and factors (Markman et al., 2009). Therefore, in this second set of hypotheses, we also base our reasoning on *competition for resources*.

3.2.1. Strategic similarity to industry peers

Market overlap significantly influences the competitive interdependence between firms (Chen, 1996). Consequently, it conditions *forbearance* and *competitive tension*. On the one hand, market overlap increases the benefits of *forbearance*. In a situation of high market

overlap with peers, the consequences of firms' competitive behaviours are experienced in a large share of markets. Thus, forbearance with these rivals becomes more valuable for the focal small firm because it will benefit from rivalry reduction in more markets. In contrast, the absence of *forbearance* will be particularly harmful for the focal small firm if the market overlap with peers is high because the negative consequences of competitive aggressiveness will be spread over a large share of its markets.

On the other hand, market overlap may enhance the extent to which peers perceive the focal small firm as a competitive threat. High market overlap means that the focal small firm experiences a greater threat from its peers, which builds *competitive tension* (Chen et al., 2007). Greater *competitive tension* increases the chance of peers initiating competitive actions specifically directed towards the focal firm (Chen et al., 2007), with a subsequent negative effect on its performance. Importantly, strategic similarity and market overlap combine to build up *competitive tension*, and their joint effect leads to more intense interfirm rivalry (Chen, 1996; Kilduff et al., 2010). Thus, the small firm and its peers may have strong incentives to engage one another in competitive actions if they have similar strategic positions and operate in the same geographical markets (Chen, 1996).

Market overlap also influences the impact of strategic similarity on small-firm performance through *competition for resources*. In the absence of market overlap, small firms do not compete directly with their peers for market-specific resources, such as specialised suppliers, qualified labour, real estate parcels, advertising venues or distribution channels. However, when there is market overlap, small firms have to obtain the resources required for their operations from the same markets as their peers (Barney, 1986; Peteraf, 1993). This *competition for resources* becomes detrimental as the strategic similarity to peers increases because the mix of market-specific resources for which the focal small firm will compete with its peers will be greater (Markman et al., 2009; Peteraf, 1993). Market overlap and strategic similarity complement each other to generate a stronger negative effect on small-firm performance; that is, this negative effect is more intense in the presence of both high market overlap and high strategic similarity.

Market overlap thus enhances the positive effect of low–medium strategic similarity to peers by allowing the small firm to benefit from *forbearance* in a large share of markets. In a situation of high strategic similarity to peers, market overlap makes the increase in *competitive tension* even more pronounced and the negative effects of being too similar to these rivals more intense. *Competition for resources* thus unleashes its negative effects under high strategic similarity to peers, which reinforces the negative effects on performance. Therefore, we expect the relationship between strategic similarity to peers and small-firm performance to have a more pronounced inverted U-shape in the presence of market overlap. Accordingly, our next hypothesis posits that:

Hypothesis 2a. Market overlap enhances the effects of strategic similarity to peers on performance (i.e., the positive slope moves upwards, and the negative slope moves downwards).

3.2.2. Strategic similarity to the industry leader

The competitive asymmetry between small firms and the industry leader remains even if there is market overlap between them. This asymmetry prevents the focal small firm from benefiting from the *forbearance* of the industry leader, and this is also true when the market domains of the two firms overlap. Likewise, the inability of the small firm to represent a competitive threat to the leader persists whatever the level of market overlap. Market overlap is thus unlikely to increase the *competitive tension* with the industry leader.

Market overlap, however, still influences the effect of strategic similarity to the industry leader through *competition for resources*. This type of competition takes place unconsciously, without requiring firms to identify each other as rivals or perceive a competitive threat. The mere dependence on the same resource pool leads to competition for resources. The negative effect of this mechanism on small-firm performance is greater than in the case of peers, and it is relevant to any level of similarity to the leader. The reason for this is that small firms compete with the leader for resources from a disadvantaged position. First, the industry leader has a stronger reputation and status, making it more appealing to some resource holders (e.g., specialised labour and investors). Second, due to its larger size, the industry leader acquires larger amounts of resources than the small firm, which improves its bargaining power (Porter, 1979). Third, the industry leader has superior financial resources, thereby allowing it to outbid the small firm to obtain scarce resources in the market. These unfavourable conditions prevent the small firm from accessing the resources that it needs in the market in which it meets the industry leader.

It is important to note that *competition for resources* is triggered by strategic similarity, and it potentially unfolds for any level of strategic similarity. However, when small firms experience high levels of market overlap with the industry leader, they gather market-specific resources from the same resource pools (Markman et al., 2009), exacerbating the harmful effect of competition for resources derived from their disadvantaged position. As a consequence, market overlap is expected to produce a negative effect of strategic similarity on performance.

In the case of similarity to the industry leader, *forbearance* and *competitive tension* are not affected by market overlap; therefore, these mechanisms remain absent. In this situation, market overlap operates as a moderator through the mechanism of *competition for resources*. The greater bargaining power of the leader places the small firm in a disadvantaged position when competing for the same market-specific resources in their shared markets, with a subsequent negative effect on the small firm's performance. This reduces the benefits of becoming more strategically similar to the industry leader if there is high market overlap. Our last hypothesis is as follows:

Hypothesis 2b. Market overlap reduces the positive effect of strategic similarity to the leader.

4. Empirical analysis

4.1. The Spanish retail banking sector

Our empirical setting is the Spanish retail banking sector during the period 2000–2006. Our observation window starts in 2000

because the firm that we identified as the industry leader, *Banco Bilbao Vizcaya Argentaria* (BBVA), consolidated its leadership in that year. This bank was the result of the merger of two large banks, *Banco Bilbao Vizcaya* and *Argentaria*. This merger took place in 1999, and 2000 was therefore its first full calendar year of operation. The last year of our observation window is 2006 because the Great Recession started at the end of 2007, which would be a confounding factor in our analyses.

During these years, the sector was made up of three types of banks, namely commercial banks, savings banks and credit unions. Whereas commercial banks are public companies, savings banks and credit unions are non-profit organisations (Mas-Ruiz et al., 2005). During most of its history, the Spanish retail banking sector has been regulated. Traditionally, there were legal restrictions on the activities that each type of bank could perform, such as the products that they could offer, the location of their branches or the prices that they charged for their services (Gual, 1992). The limits to the provision of financial services disappeared in the 1990s after the gradual liberalisation of the sector. From that point on, commercial banks, savings banks and credit unions became rivals as they were allowed to carry out the same operations and offer the same services to the same market segments (Coello, 1994).

Our research aimed to determine the consequences of strategic similarity for the performance of small firms; thus, our sample only contained small banks. Drawing on previous studies, we identified small banks as those banks with total assets lower than 4450 million euros (constant euros of 1991) (Gómez et al., 2014).[3] We excluded from this selection banks with a branch network that never reached five branches during at least one of the years of the observation window. These excluded banks tended to be commercial banks that offer specialised investment services only to high-end customers as well as credit unions that focus on farmers in small rural areas. Since these financial intermediaries do not provide their services to the wider public, we excluded them from our sample (Gómez et al., 2017). The number of firms included in our sample ranges from 82 to 107, depending on the year, as shown in Table 2. This fluctuation can be explained by two main factors. First, some banks exited the sample because their growth prevented them from continuing to be considered as small firms; these firms were omitted from the sample but were still operative. This reason applies to 51.3% of the cases in which we removed a bank from the sample. Second, some banks exited the sector and/or several mergers and acquisitions took place, reducing the number of banks. This situation explains 48.7% of the firms removed from the sample. Finally, 10 banks downsized and became small firms or were founded during the observed period and thus joined the sample.

We gathered the information required to perform our empirical analyses from several data sources. First, we used the financial statements published annually by the three professional associations of the sector to characterise the strategic position of financial intermediaries, measure their performance and collect information on different firm-level factors.[4] Second, we collected information on several market-level factors from the Spanish National Institute of Statistics (INE). Finally, we obtained the addresses of all the branches of the Spanish retail banking sector from the *Guia de la Banca, Cooperativas de Crédito y Cajas de Ahorro*, which is published annually by Editorial Maestre-Ediban. This information allowed us to measure market overlap precisely, and this is a key variable in our model.

4.2. Variables and model specification

Dependent variable. Our dependent variable is financial performance. We measured it through an accounting-based measure known as the return on assets (ROA). The ROA is computed as the ratio of ordinary profits over total assets. It has been used regularly as a measure of financial performance in analysing the banking sector (e.g., Gómez et al., 2021; Roberts and Amit, 2003).

Independent variables. Our main independent variables are *similarity to peers* and *similarity to the industry leader*. To measure them, we needed (1) to characterise the strategic position of each bank in the sector, (2) to identify the peers and the industry leader and (3) to measure the degree of strategic similarity between the focal firm and both the peers and the leader of the industry.

To begin with, we identified the strategic position of each bank by means of seven dimensions that have been employed in previous studies of the Spanish retail banking sector (Fuentelsaz and Gómez, 2006; Gómez et al., 2017; Prior and Surroca, 2006). These dimensions are *lending activities* (percentage of financial investments in the form of loans to households and to small and medium-sized enterprises); *investment banking* (percentage of financial investments in stock markets); *public banking* (percentage of financial investments in the form of lending to the public sector and other banks); *net position in the financial system* (difference between lending and borrowing operations in the interbank market, normalised by total liabilities); *savings* (percentage of total liabilities in the form of private-sector saving and deposit accounts); *human capital* (personnel expenses normalised by operating income); and *safety* (net insolvencies normalised by operating income).

Next, we identified the two reference points that were considered in this research, namely peers and the industry leader. We considered all the small firms that operate in the Spanish retail banking sector as peers and identified the leader as the largest firm in the industry in terms of total assets. While Banco Bilbao Vizcaya Argentaria (BBVA) had the most assets during six of the seven analysed years, Banco Santander owned the most assets in 2006. Since BBVA held the first position most of the time, it was considered as the leader of the industry. Additionally, during the whole period, BBVA's network of branches clearly exceeded that of Banco Santander. From 2000 to 2006, the average number of BBVA branches was 3,557, while the average number of Banco Santander branches was 2849. This fact reinforces our selection of the leader.

---

[3] Mas-Ruiz and Ruiz-Moreno (2011) and Mas-Ruiz et al. (2005) defined size according to total deposits and total loans. Although we defined size in terms of total assets, our classification does not differ substantially from that in these studies.

[4] The financial statements of all the entities of the sector are publicly available from the websites of the CECA (www.ceca.es), AEB (www.aebanca.es) and UNACC (www.unacc.com). The CECA, AEB and UNACC are the professional associations of saving banks, commercial banks and credit unions, respectively.

Table 2
Description of the dataset.

Year		Number of firms	
2000		107	
2001		102	
2002		96	
2003		83	
2004		89	
2005		88	
2006		82	
Total banks added	Total banks dropped	Growth in size	Closure and M&A
10	39	20	19
	Percentage of total banks dropped	51.3%	48.7%

To measure strategic similarity, we started by measuring the Euclidean distance between the strategic position of the focal firm and that of the considered reference point. Then we normalised it by the maximum distance observed in the sample to scale this distance between 0 and 1. To conclude, we subtracted this distance from 1 to obtain a measure of similarity. In particular, we measured *similarity to peers* as follows:

$$Similarity\ to\ peers_{jt} = 1 - \frac{\sqrt{\sum_{k=1}^{7} \left(x_{jkt} - x_{pkt}\right)^2}}{Max\ \sqrt{\sum_{k=1}^{7} \left(x_{jkt} - x_{pkt}\right)^2}}$$

where x_{jkt} refers to the position of firm j (the focal firm) in each of the k strategic dimensions at time t, and x_{pkt} stands for the average position of all the p small firms of the sector in the k strategic dimensions at time t. The denominator reflects the largest strategic distance that separates a firm from its peers in the analysed year. This variable takes a value of 0 when the level of strategic similarity is the lowest of the year and 1 in the case of perfect coincidence along the seven strategic dimensions.

Likewise, we measured similarity to the industry leader as follows:

$$Similarity\ to\ the\ leader_{jt} = 1 - \frac{\sqrt{\sum_{k=1}^{7} \left(x_{jkt} - x_{lkt}\right)^2}}{Max\ \sqrt{\sum_{k=1}^{7} \left(x_{jkt} - x_{lkt}\right)^2}}$$

where x_{lkt} refers to the position of the industry leader (l) in the same k strategic dimensions at time t. The denominator reflects the largest strategic distance that separates a firm from the industry leader in the analysed year. This variable takes the value of 0 when the level of strategic similarity to the leader is the lowest of the year and 1 in the case of total coincidence with the strategic position of the leader.

Our last main independent variable is *market overlap*. We calculated two variables, namely *market overlap with peers* and *market overlap with the leader*. We measured *market overlap with peers* as follows:

$$Market\ overlap\ with\ peers_{jt} = \frac{\left(\frac{\sum_p \sum_n \left(D_{jnt} * D_{pnt}\right)}{\sum D_{pt}}\right)}{\sum D_{jnt}}$$

where p refers to a certain peer, n stands for a given geographical market and t is a year in the analysed period. D_{jnt} is a dummy variable that takes the value of 1 if firm j (the focal firm) operates in market n at time t and 0 otherwise, while D_{pnt} is a dummy variable that takes the value of 1 if firm p, an industry peer, operates in market n at time t and 0 otherwise. Finally, D_{pt} is a dummy variable that takes the value of 1 for peers that the focal firm encounters in at least one geographical market at time t, and D_{jnt} is a dummy that takes the value of 1 for geographical markets in which the focal firm is present at time t. The variable *market overlap with peers* takes a value of 0 if a firm does not compete with any peer in any of its markets and 1 if every peer is present in all the markets of the focal firm.

We identified geographical markets within the Spanish retail banking sector by using ZIP codes. The ZIP code is the smallest geographical unit that can be identified consistently in Spain. It was established to divide the national territory into nearby areas to arrange postal services. Therefore, ZIP codes allowed us to identify geographic areas that are functionally proximate. While large towns have many ZIP codes, rural areas might have a single ZIP code that includes a few proximate villages.

We measured *market overlap with the leader* as follows:

$$\textit{Market overlap with the leader}_{jt} = \frac{\sum_l \sum_n \left(D_{jnt} * D_{lnt}\right)}{\sum D_{jnt}}$$

where l stands for the leader of the industry, n refers to a given geographical market and t is a year in the examined period. D_{jnt} is a dummy variable that takes the value of 1 if firm j (the focal firm) operates in market n at time t and 0 otherwise, while D_{lnt} is a dummy variable that takes the value of 1 if the leader of the industry operates in market n at time t and 0 otherwise. Finally, D_{jnt} is a dummy variable that takes a value of 1 for those geographical markets in which the focal firm is present at time t. The variable *market overlap with the industry leader* takes a value of 0 if a small firm does not compete with the industry leader in any market and 1 if the industry leader operates in all the markets of the small firm.

Control variables. The model included two market-level controls, those of *GDP* per capita as a proxy for the wealth of potential customers and *credits* as a measure of the potential market size. *GDP* per capita is the ratio of the aggregated gross domestic product divided by the population in the provinces where the focal firm operates. *Credits* was calculated as the aggregated credits in the provinces where the bank is active.

We also included several firm-level controls. We controlled for *risk*, calculated as the ratio of total credits to total assets, and *inefficiency*, measured as the ratio of operating costs to ordinary margin (Carbó et al., 2003). Although our sample was only composed of small firms, we considered differences in size by including the variable *assets*, calculated as the volume of total assets. We also included a control for the capability of banks to gather resources. In retail banking, soft information is critical to obtain the trust of customers and to adjust services to them. This information is better acquired through local branches (Radecki, 1998; Simons and Stavins, 1998). In addition, both individuals and small- and medium-sized firms tend to obtain their retail banking services from proximate branches (Cole and Wolken, 1995; Kwast et al., 1997; Radecki, 1998). We thus controlled for the capability of small banks to acquire resources through the variable *branches*, measured as the number of offices operated by the bank. We also controlled for years in which the focal bank was involved in mergers or acquisitions with the dummy variable *M&A*.

We controlled for several factors that influence the competitive pressure to which the focal firm is subjected. *Rivals* is a count of the number of firms, irrespective of size, that the focal firm meets in at least one geographical market (i.e., ZIP code). Therefore, this variable acts as a proxy for competition from the rivals that the focal firm faces in the marketplace by considering not only peers (i.e., other small firms) but also medium-sized and large firms. *Multimarket contact* refers to the average number of geographical markets in which the focal firm meets its multimarket rivals (Fuentelsaz and Gómez, 2006; Gómez et al., 2017). We also controlled for *market overlap with peers* and *market overlap with the leader*. These four variables were meant to characterise the competitive environment in which each firm operates.

Finally, we included year dummies to control for industry-wide common shocks. All the explanatory variables were lagged by one period to prevent reverse causality. The descriptive statistics and correlations are shown in Table 3.

Model estimation. We performed a number of tests to choose the appropriate specification of the model. The Breusch–Pagan Lagrange multiplier test allowed us to reject the null hypothesis that the variance of the firm-level component of the error term is zero ($\chi2 = 258.84$; $p < 0.00$). This can be interpreted as evidence of the existence of firm-level unobserved heterogeneity (Wooldridge, 2002). In this scenario, the use of panel data techniques is recommended. Firm-level unobserved heterogeneity can be modelled as a random effect or as a fixed effect. To choose the appropriate specification, we used the Hausman test, which allowed us to reject the null hypothesis ($\chi2 = 76.76$; $p < 0.00$). Accordingly, firm-level unobserved heterogeneity had to be modelled as a fixed effect. We estimated a two-way fixed-effect model controlling for firm and year effects.

It is important to highlight that our sample included many banks that concentrated their activities in one or a few regions of the country. A significant share of the small banks in our sample was composed of credit unions and saving banks. These intermediaries often locate their branches only within their home province. Consequently, these firms are very sensitive to the specific conditions of their home region, such as formal institutions, culture and demographic characteristics, a situation that may lead to spatial correlation. A Pesaran test of spatial correlation enabled us to reject the null hypothesis that cross-sectional units are uncorrelated in our sample. When spatial correlation is present, ordinary least squares (OLS) estimations are consistent, but the estimated standard errors may be biased. Driscoll and Kraay (1998) proposed a methodology based on the estimator of Newey and West (1987) that is robust not only to heteroskedasticity and serial correlation but also to spatial correlation (Driscoll and Kraay, 1998; Hoechle, 2007). Consequently, we report Driscoll and Kraay's standard errors in our estimations.

As an additional note, it is noteworthy that the hypotheses of this research must be tested in different ways. Hypotheses 1a and 1 b refer to the direct effect of strategic similarity to peers and to the industry leader, respectively. Hypothesis 1a proposes a curvilinear effect and hypothesis 1b a linear effect. Curvilinear relationships can be complex to interpret and test (Lind and Mehlum, 2010), especially in the presence of moderating effects (Haans et al., 2016). To test the curvilinear effect of strategic similarity to peers, we introduced a linear and a quadratic term. According to Hypothesis 1a, the direct effect of *similarity to peers* is expected to be positive and the effect of the quadratic term negative. We tested hypothesis 1b by incorporating the linear term of *similarity to the leader*, which we expected to have a positive effect.

Hypothesis 2a and 2 b incorporate the moderating effect of market overlap. Hypothesis 2a predicts that *market overlap with peers* makes the curvilinear effect of *similarity to peers* even more pronounced. We tested this effect by introducing interaction terms between the moderator, *market overlap with peers* and the linear and quadratic terms of *similarity to peers*. We expected the interaction of *market overlap with peers* with the linear term of *similarity to peers* to have a positive sign and the interaction with the quadratic term to have a negative sign. We tested Hypothesis 2b by introducing the interaction term between *market overlap with the leader* and *similarity to the leader*. We anticipated a negative effect of this interaction.

Table 3

Descriptive statistics and correlations.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Mean	0,7790	8156,82	1300241	0,7060	0,6855	13,3805	95,3153	0,0077	48,3894	14,2023	0,6175	0,1426	0,7671	0,4227
S.D.	0,9948	6139,83	113806	0,5643	0,1641	1,1838	89,9022	0,0876	25,3366	8,8750	0,2856	0,1723	0,1828	0,1561
Min	−9,3903	319,02	1139,37	0,0005	0,00005	10,4613	2	0	0	0	0	0	0	0
Max	3,3532	24403,6	519409	7,5581	0,9927	15,3059	586	1	137	44,25	1	1	0,9619	0,8734
ROA (1)	1													
GDP per capita (2)	0.0867*	1												
Credits (3)	−0.1354*	−0.6961*	1											
Inefficiency (4)	−0.3861*	−0.0828*	0.1028*	1										
Risk (5)	0.2931*	0.0990*	−0.1557*	−0.0738	1									
Assets (6)	0.1814*	−0.5921*	0.4941*	−0.0749	0.1420*	1								
Branches (7)	0.1981*	−0.4067*	0.1908*	−0.0558	0.2369*	0.7596*	1							
M&A (8)	0.0169	−0.0632	−0.0008	−0.0100	0.0521	0.0917*	0.2592*	1						
Rivals (9)	−0.1104*	−0.7389*	0.8456*	0.0834*	−0.1537*	0.6429*	0.3913*	0.0579	1					
Multimarket contact (10)	0.2117*	−0.3619*	0.1491*	−0.0514	0.2798*	0.6969*	0.8511*	0.1950*	0.3118*	1				
Market overlap with the leader (11)	−0.1536*	−0.0651	0.3833*	0.0881*	−0.1657*	−0.0772*	−0.2950*	−0.0558	0.3381*	−0.1643*	1			
Market overlap with peers (12)	−0.0126	0.4824*	−0.2967*	0.0041	−0.1711*	−0.5375*	−0.4436*	−0.0545	−0.3957*	−0.4287*	0.2921*	1		
Similarity to peers (13)	0.1729*	0.2774*	−0.4844*	−0.1692*	0.2551*	0.0226	0.2948*	0.0124	−0.3841*	0.2561*	−0.4760*	−0.1152*	1	
Similarity to the leader (14)	0.0886*	−0.1899*	0.0236	−0.0526	0.0519	0.3273*	0.2776*	−0.0029	0.0891*	0.2706*	−0.1146*	−0.1379*	0.3275*	1

5. Results

Table 4 provides the results of our estimations. Column 1 only contains the control variables, while Column 2 adds the linear and quadratic terms of *similarity to peers* and Column 3 the effect of *similarity to the leader* on small-firm performance. Column 4 incorporates the moderating effect of market overlap into the curvilinear relationship between similarity to peers and performance. Column 5 includes the moderating effect of market overlap on the relationship between similarity to the leader and performance. Finally, Column 6 shows the fully specified model.

The model in Column 2 shows a positive and statistically significant coefficient for *similarity to peers* ($\beta = 3.083$; $p < 0.01$) and a negative and statistically significant coefficient for the quadratic term of *similarity to peers* ($\beta = -1.587$; $p < 0.05$). These parameters are consistent with an inverted U-shape. We followed the procedure discussed by Lind and Mehlum (2010) to explore whether similarity to peers has an inverted U-shaped effect on small-firm performance. First, we confirmed that the coefficient for the quadratic term of *similarity to peers* is negative and statistically significant. Second, we checked whether the turning point of the curve is located within the range of values of the independent variable. The turning point is located at the value of 0.971. As shown in Table 3, the variable s*imilarity to peers* ranges from 0 to 0.962. Therefore, the turning point falls outside this range, and we did not find support for a U-shaped effect.[5] Fig. 1 illustrates the effect of *similarity to peers* on performance. It shows that there seems to be a curvilinear effect, although it is not an inverted U-shape. Hypothesis 1a is therefore not supported.

Column 3 of Table 4 shows that the coefficient for *similarity to the leader* is positive and statistically significant ($\beta = 0.795$; $p < 0.10$). This result supports Hypothesis 1b.

The results related to Hypothesis 2a are shown in Column 4. The coefficient of the interaction term between *similarity to peers* and *market overlap with peers* is positive and statistically significant ($\beta = 8.102$; $p < 0.01$), and the interaction term between *similarity to peers*^{2} and *market overlap with peers* is negative and statistically significant ($\beta = -5.606$; $p < 0.01$). Therefore, as market overlap with peers increases, both the linear and the quadratic coefficient of *similarity to peers* become larger, supporting Hypothesis 2a. To understand this moderating effect better, we explored the curves that we obtained for different values of *market overlap with peers*. These curves are depicted in Fig. 2.

Fig. 2 shows the relationship between strategic similarity to peers and small-firm performance for firms with no market overlap with peers (market overlap = 0), firms with perfect overlap with peers (market overlap = 1) and firms with the mean market overlap (market overlap = 0.14). As the graph shows, as market overlap increases, the curve becomes more concave; that is, the slope becomes more accentuated at both ends of the curve. Particularly in the case of firms with no market overlap, the relationship is close to a straight line with a small positive slope (statistically non-significant), and, in the case of perfect market overlap, there seems to be a curvilinear relationship. For this last case, we confirmed that the turning point (0.791) falls within the range of observations and that the negative slope for the higher values of similarity is negative and statistically significant (slope = −1.867, $p < 0.10$). Consequently, the relationship between strategic similarity to peers and firm performance becomes curvilinear for high levels of market overlap (consistent with Hypothesis 1a).

The results related to Hypothesis 2b are shown in Column 5 of Table 4. The coefficient for *similarity to the leader* is positive and statistically significant ($\beta = 1.560$; $p < 0.01$), and *market overlap with the leader* negatively moderates the relationship between strategic similarity to the leader and performance ($\beta = -1.015$; $p < 0.01$). Accordingly, market overlap reduces the benefits of strategic similarity to the industry leader (supporting Hypothesis 2b). Fig. 3 shows the effect of strategic similarity to the leader for no market overlap with the leader (market overlap = 0), perfect market overlap (market overlap = 1) and mean market overlap with the industry leader (market overlap = 0.62). As the figure indicates, small firms can benefit from strategic similarity to the industry leader but only if they have low levels of market overlap with the leader. In the absence of market overlap with the leader, there is a strong, statistically significant, positive effect on firm performance. Contrarily, a perfect market overlap with the leader makes the effect flatter and not statistically significant.

Finally, Column 6 shows the results of testing all the hypotheses simultaneously. The results remained qualitatively the same.

5.1. Robustness checks

We developed additional analyses to check the robustness of our results. First, we used three alternative identifications of the industry leader. Two different banks, BBVA and Banco Santander, qualified as the largest firm according to total assets in at least one period of our observation window, which enabled us to consider both of them as industry leaders. Another bank, La Caixa, was the financial entity with the greatest number of branches during the whole observation window, enabling us to consider it as an alternative industry leader. We also considered all of the large banks (entities with total assets higher than 21,500 million euros, constant euros of 1991) as industry leaders. The three alternative identifications of the industry leader yielded similar results to those reported in Table 4.

Second, our research focused on small firms. Therefore, we excluded from the sample firms that grew over the size threshold that we used to identify small firms (they became medium-sized firms). As fast-growing firms are more likely to find themselves in this situation, we explored the possibility that their exclusion biased our results. In particular, we incorporated a dummy variable, *high growth*, that took the value of 1 when a small firm was growing above the industry average and 0 otherwise. This variable should

---

[5] This test can be performed in STATA through the command 'utest'. For more details, see Lind and Mehlum (2010).

Table 4
Estimations of similarity to peers and industry leaders.

	(1)	(2)	(3)	(4)	(5)	(6)
GDP per capita[a]	−0.124***	−0.094**(-2.26)	−0.142***	−0.007(-0.19)	−0.186***	−0.061(-1.43)
	(-3.43)		(-2.86)		(-4.78)	
Credits[a]	0.025(1.23)	0.025(1.20)	0.022(1.03)	0.027(1.35)	0.020(0.99)	0.023(1.11)
Inefficiency	−0.173***	−0.171***	−0.164***	−0.169***	−0.165***	−0.168***
	(-6.67)	(-7.25)	(-6.29)	(-6.62)	(-6.41)	(-6.53)
Risk	1.046***(3.58)	0.358(1.25)	0.843***(3.79)	0.182(0.79)	0.962***(4.62)	0.275(1.11)
Assets	−0.357***	−0.333**(-2.54)	−0.452***	−0.475***	−0.442***	−0.537***
	(-2.53)		(-3.96)	(-3.68)	(-4.01)	(-4.15)
Branches	−0.002**	−0.004***	−0.002**	−0.003***	−0.001**	−0.002*(-1.83)
	(-2.33)	(-5.27)	(-2.57)	(-2.76)	(-2.00)	
M&A	0.218***(3.24)	0.299***(3.46)	0.238***(2.84)	0.265***(3.27)	0.225**(2.53)	0.248***(3.04)
Rivals	−0.0113***	−0.00958***	−0.0105***	−0.0109***	−0.0114***	−0.0117***
	(-3.83)	(-3.32)	(-3.25)	(-4.22)	(-3.63)	(-4.95)
Multimarket contact	−0.0348**	−0.0565***	−0.0402**	−0.0557***	−0.0411**	0.000771***
	(-2.59)	(-3.27)	(-2.31)	(-3.53)	(-2.53)	(3.51)
Multimarket contact2	0.000406**	0.000855***	0.000471(1.66)	0.000804***	0.000435(1.50)	0.000411***
	(2.27)	(3.22)		(3.43)		(3.22)
Market overlap with the leader	−0.507***	−0.473**(-2.49)	−0.461***	−0.346(-1.57)	−0.0882(-0.40)	0.0720(0.32)
	(-2.90)		(-2.94)			
Market overlap with peers	0.613***(8.13)	0.676***(8.87)	0.538***(6.83)	−2.099***	0.563***(6.19)	−2.266***
				(-2.83)		(-2.76)
Year effects	Yes	Yes	Yes	Yes	Yes	Yes
Similarity to peers		3.083***(3.29)		0.530(0.39)		0.311(0.18)
Similarity to peers2		−1.587**(-2.54)		0.149(0.17)		0.0143(0.01)
Similarity to the leader			0.795*(1.68)		1.560***(3.00)	1.245**(1.98)
Similarity to peers*Market overlap with peers				8.102***(6.52)		7.500***(5.88)
Similarity to peers2*Market overlap with peers				−5.606***		−4.675***
				(-9.63)		(-6.92)
Similarity to the leader*Market overlap with the leader					−1.015***	−0.974***
					(-3.72)	(-3.61)
N	647	647	647	647	647	647
R²	0.233	0.255	0.245	0.272	0.250	0.280

t statistics in parentheses. Standard errors robust to heteroscedasticity, autocorrelation and spatial correlation.
$p < 0.10$, $p < 0.05$, $p < 0.01$.
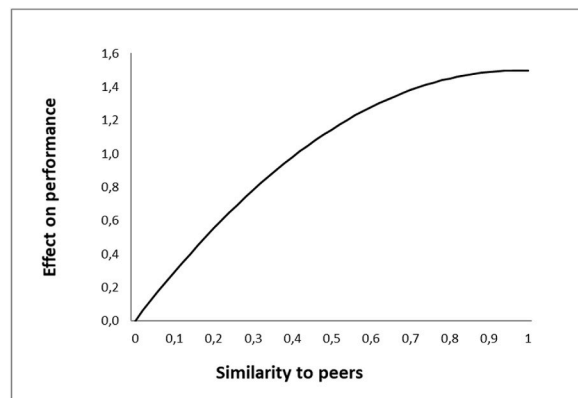[a] Divided by 10,000.

Fig. 1. The effect of similarity to peers on performance.

control for the effect of these firms and their growth rates on our main theoretical variables. Our results remained qualitatively the same after the incorporation of the new control variable, which suggests that these firms (or their exclusion from the sample) did not bias our results.

Third, we tested for the existence of a curvilinear relationship between strategic similarity to the industry leader and small-firm performance. We incorporated the quadratic term of *strategic similarity to the industry leader* into the model shown in Column 3 of Table 4. We observed a negative but statistically non-significant parameter for the linear term ($\beta = -0.837$, n.s.) and a positive and statistically significant parameter for the quadratic term ($\beta = 2.169$, $p < 0.01$). These parameters are consistent with a U-shaped relationship (instead of the inverted U-shape found for *strategic similarity to peers*). We followed Lind and Mehlum (2010) to test for the
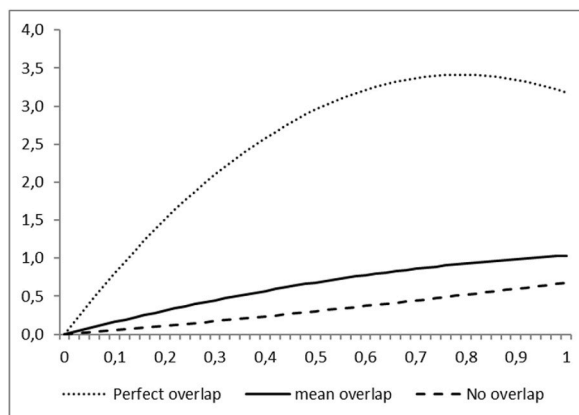
Fig. 2. The moderating effect of market overlap into the relationship between similarity to peers and performance.
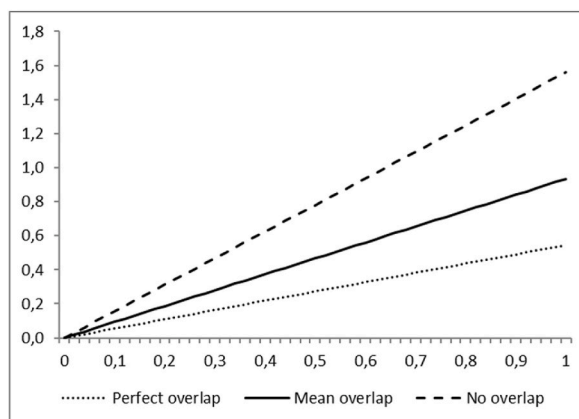

Fig. 3. The moderating effect of market overlap into the relationship between similarity to the leader and performance.

statistical significance of the curve. We confirmed that the turning point falls within our data range (0.193). However, the slope for low values of the variable is not statistically significant. Accordingly, this robustness test is consistent with the existence of a monotonically positive effect of *strategic similarity to the industry leader* on small-firm performance, supporting Hypothesis 1b.[6]

6. Discussion

Our research analyses the validity of the main prescription of the strategic balance perspective (Deephouse, 1999) for the particular case of small firms. We answer the following research questions: *How much should small firms differentiate from the industry leader and other small firms to maximise their performance? How is this affected by market overlap?* To address these questions, we explored the role of competitive interdependence as a boundary condition of the strategic balance perspective. Specifically, we examined competitive interdependence through its two main drivers, competitive asymmetry and market overlap, and considered how each of them shapes the link between strategic similarity and small-firm performance.

We first explored the moderating role of competitive asymmetry by focusing on small firms and taking two reference points: peers and the industry leader. This approach allowed us to compare the consequences of strategic similarity in a situation of competitive symmetry (i.e., when peers were taken as the reference point) and in a situation of competitive asymmetry (i.e., when the industry leader was taken as the reference point). In this first analysis, we found that strategic similarity to both reference points has a positive effect on small-firm performance. Thus, we identified additional empirical evidence that shows that the basic prescription of the strategic balance perspective (i.e., an inverted U-shaped effect of similarity on performance) does not always apply (Cennamo and Santalo, 2013; Jennings et al., 2009; Zott and Amit, 2007). In our context, the balance between similarity and differentiation is weighted in favour of similarity. It seems that, for small firms operating in the Spanish retail banking sector, *legitimacy* and *forbearance*

---

mostly counteract the negative effects of *competitive tension* that may result from being too strategically similar to a given competitor.

Our study also shows that market overlap plays a central role in understanding the consequences of strategic similarity. In the case of strategic similarity to peers, our results indicate that market overlap is a critical factor underlying the effects of similarity on small-firm performance. In the absence of market overlap with peers, strategic similarity to these competitors appears irrelevant. This suggests that, in a situation of competitive symmetry, the mechanisms behind the effect of strategic similarity are activated only if firms operate in the same market. Moreover, as we explored the relationship for higher levels of market overlap, we observed that the link between strategic similarity to peers and small-firm performance initially became positive and eventually became curvilinear for high levels of market overlap. This means that the negative impact of being too similar to peers is relevant only in a situation of high market overlap. Consequently, a minimum level of market overlap is required to trigger the negative effects of increased competitive tension among similar firms with symmetric competitive relationships.

In the case of the industry leader, our research showed an entirely different impact of market overlap. Market overlap seems to counteract the benefits of strategic similarity to the industry leader. This is consistent with our reasoning that dependence on the same type of resources as the industry leader and obtaining them from the same resource pools counteract the legitimacy advantages that small firms obtain through similarity to this prominent firm. In addition to this effect on the supply side, it is reasonable to understand that market overlap with the industry leader could trigger negative effects on small-firm performance due to the need to compete with this rival for the same customers (i.e., demand-side effect). Since the industry leader has a stronger position in common markets, it could attract customers more easily than small firms, having a negative impact on their results. Thus, both demand- and supply-side considerations lead to the same negative effect of market overlap on the relationship between similarity to the industry leader and small-firm performance.

There is also a potential alternative explanation for the negative effect of strategic similarity to the industry leader: competitive externalities (Gómez et al., 2020). In our theoretical discussion, we explained that the industry leader has no incentive to initiate direct competitive actions against small firms, but the competitive actions of the leader may still have a negative impact on small firms even if these firms are not directly targeted by the leader as a result of competitive externalities (Gómez et al., 2020). Market overlap increases the exposure of small firms to the competitive behaviour of the leader, intentionally or otherwise, enhancing the chance of being indirectly damaged by the competitive actions that the leader launches against other firms located in the same markets. This means that market overlap might be an essential driver of competitive externalities that negatively affect firm performance. These externalities might override the benefits of strategic similarity to the industry leader and therefore contribute to explaining our results. Fig. 4 summarises our findings for the combination of different levels of competitive asymmetry and market overlap.

Comparing our results with those reported in the seminal paper of Deephouse (1999), it is interesting to highlight the relevance of market overlap and competitive asymmetry within the literature on strategic balance. Deephouse (1999) also analysed the banking sector. His sample was a population of commercial banks in the Minneapolis–St. Paul (twin cities) metropolitan area. As he discussed, this was categorised as a single, competitive market (Deephouse, 1999: 155). There was thus a high level of market overlap among the banks included in his sample. In addition, branching restrictions in Minnesota during the observed period arguably resulted in all the
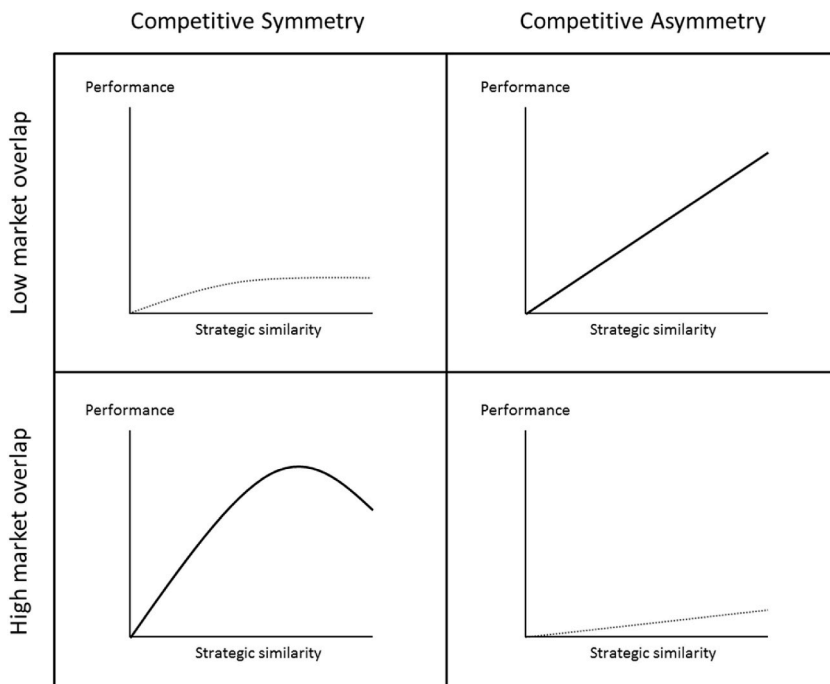

Fig. 4. Summary of the effect of strategic similarity.

14

banks in the sample experiencing symmetric competitive relationships. According to our findings, the high level of market overlap and the symmetric competitive relationships make his sample an ideal scenario in which to observe fully the effects of competitive pressures, which lead to an inverted U-shaped relationship between strategic similarity and firm performance (see the bottom-left quadrant in Fig. 4). Our results do not contradict those of Deephouse (1999) but instead suggest the adequacy of his research design for exploring the strategic balance proposition while also clarifying the conditions under which an inverted U-shaped relationship should not be expected.

This research has expanded our knowledge about the boundary conditions of the strategic balance perspective, which is a flourishing avenue of research (Zhao et al., 2017). Previous literature in this research stream has focused on exploring the role of market- and firm-specific factors (see, for instance, Gong et al., 2021; Haans, 2019; Zhang et al., 2020). In this research, we used the lens of competitive dynamics and focused on the dyad level. This approach allowed us to explore how competitive interdependence between small firms and their reference points determines the optimal level of strategic similarity for these firms, thus complementing the contingent effect of market- and firm-specific factors. Using the lens of competitive dynamics also enabled us to enrich the theoretical reasoning on the advantages of strategic similarity through a new mechanism, *forbearance*. Thus, we also contributed to enhancing the debate on the benefits of similarity, which was mainly based on *legitimacy* (see, for instance, Fisher et al., 2016; Miller et al., 2013).

We acknowledge that our research has several limitations that may open the door to future analyses. First, our measure of competitive asymmetry is based on firm size. However, under some circumstances, small firms may outcompete large firms. There are several real cases that illustrate this, for instance Netflix vs. Blockbuster, Amazon vs. Barnes and Noble, Nike vs. Converse in the 1970s and General Motors vs. Ford in the 1920s (Wernerfelt, 2022). Future research could explore the impact of competitive asymmetry through other constructs, such as relative technological capabilities, expertise in determined technological fields, innovative business models or dynamic capabilities. Second, we measured market overlap using geographical markets. For the period of our research, this seemed to be a reasonable experimental design. However, with the digitalisation of the banking sector and the consolidation of e-banking in the last decade, the geographical boundaries of markets have blurred. Future research may operationalise market overlap considering product types, which now can be offered frictionless across different geographical markets. Third, our research focused on the consequences of strategic similarity without exploring its antecedents. The effect of similarity might vary depending on whether firms are similar by chance (i.e., they offer the same responses to environmental contingencies) or on purpose (i.e., they decide to imitate the strategic position of others). Future research might explore whether the intentionality of firms in the achievement of strategic similarity defines the impact of this similarity on performance.

Our findings have implications for the managers of small firms. The first implication is that small firms are simultaneously involved in two different competitive contexts, each with its own rules and competitive logic. When defining strategic positioning, it is essential to analyse both the positioning of the firm in relation to peers and the positioning in relation to the industry leader because of their different consequences. Firms can only have one strategic position, and this will have a level of strategic similarity with respect to leaders and peers. Therefore, the positioning decisions concerning each reference point cannot be managed as independent decisions. Firms must compensate for the potential advantages from becoming similar to one of these reference points with the possible consequences of differentiating from the other reference point. The second implication is that the strategic positioning and location decisions are highly related. According to the results of our research, small firms should avoid market overlap with rivals that have a similar strategic position. By manipulating the level of market overlap with peers and the industry leader, small firms can increase the potential benefits from strategic similarity while avoiding its negative effects. Understanding how boundary conditions play out in a specific context is critical for any organization to determine its optimal level of differentiation, and this is especially true in the case of small firms. We hope that our findings help to increase the understanding of these firms and their unique competitive conditions.

Author statement

The three authors have contributed equally to the different parts of the paper.

Data availability

The data that has been used is confidential.

Acknowledgements

References

Alcantara, L.L., Mitsuhashi, H., 2015. Too many to handle? Two types of multimarket contacts and entry decisions. Manag. Decis. 53 (2), 354–374.

Aldrich, H., Auster, E.R., 1986. Even dwarfs started small: liabilities of age and size and their strategic implications. In: Cummings, L.L., Staw, Barry M. (Eds.), Research in Organizational Behavior, vol. 8. JAI Press, Greenwich, CT, pp. 165–198.

Andrevski, G., Miller, D., 2022. Forbearance: strategic nonresponse to competitive attacks. Acad. Manag. Rev. 47 (1), 59–74.

Barlow, M.A., Verhaal, J.C., Angus, R.W., 2019. Optimal distinctiveness, strategic categorization, and product market entry on the Google Play app platform. Strat. Manag. J. 40 (8), 1219–1242.

Barney, J.B., 1986. Strategic factor markets: expectations, luck, and business strategy. Manag. Sci. 32 (10), 1231–1241.

Barney, J., 1991. Firm resources and sustained competitive advantage. J. Manag. 17 (1), 99–120.

Baum, J.A.C., Korn, H.J., 1996. Competitive dynamics of interfirm rivalry. Acad. Manag. J. 39 (2), 255–291.

Baum, J.A.C., Korn, H.J., 1999. Dynamics of dyadic competitive interaction. Strat. Manag. J. 20 (3), 251–278.

Bernheim, B.D., Whinston, M.D., 1990. Multimarket contact and collusive behavior. Rand J. Econ. 1–26.

Carbó, S., López del Paso, R., Rodríguez-Fernández, F., 2003. Medición de la competencia en los mercados bancarios de las regiones españolas. Rev. Econ. Apl. 32, 5–33.

Caves, R.E., Porter, M.E., 1977. From entry barriers to mobility barriers: conjectural decisions and contrived deterrence to new competition. Q. J. Econ. 241–261.

Cennamo, C., Santalo, J., 2013. Platform competition: strategic trade-offs in platform markets. Strat. Manag. J. 34 (11), 1331–1350.

Chen, M.J., 1996. Competitor analysis and interfirm rivalry: toward a theoretical integration. Acad. Manag. Rev. 21 (1), 100–134.

Chen, M.J., Hambrick, D.C., 1995. Speed, stealth, and selective attack: how small firms differ from large firms in competitive behavior. Acad. Manag. J. 38 (2), 453–482.

Chen, M.J., Miller, D., 1994. Competitive attack, retaliation and performance: an expectancy-valence framework. Strat. Manag. J. 15 (2), 85–102.

Chen, M.J., Su, K.H., Tsai, W., 2007. Competitive tension: the awareness-motivation-capability perspective. Acad. Manag. J. 50 (1), 101–118.

Cho, T.S., Hambrick, D.C., 2006. Attention as the mediator between top management team characteristics and strategic change: the case of airline deregulation. Organ. Sci. 17 (4), 453–469.

Coello, J., 1994. Son las cajas y los bancos estratégicamente equivalentes? Invest. Econ. 18 (2), 313–332.

Cole, R.A., Wolken, J.D., 1995. Financial services used by small businesses: evidence from the 1993 national survey of small business finances. Fed. Reserv. Bull. 81, 629.

Deephouse, D.L., 1999. To be different, or to be the same? It's a question (and theory) of strategic balance. Strat. Manag. J. 20 (2), 147–166.

DeSarbo, W.S., Grewal, R., Wind, J., 2006. Who competes with whom? A demand-based perspective for identifying and representing asymmetric competition. Strat. Manag. J. 27 (2), 101–129.

DiMaggio, P.J., Powell, W.W., 1983. The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. Am. Socio. Rev. 147–160.

Driscoll, J.C., Kraay, A.C., 1998. Consistent covariance matrix estimation with spatially dependent panel data. Rev. Econ. Stat. 80 (4), 549–560.

Ebben, J.J., Johnson, A.C., 2005. Efficiency, flexibility, or both? Evidence linking strategy to performance in small firms. Strat. Manag. J. 26 (13), 1249–1259.

Ferrier, W.J., Smith, K.G., Grimm, C.M., 1999. The role of competitive action in market share erosion and industry dethronement: a study of industry leaders and challengers. Acad. Manag. J. 42 (4), 372–388.

Fisher, G., Kotha, S., Lahiri, A., 2016. Changing with the times: an integrated view of identity, legitimacy, and new venture life cycles. Acad. Manag. Rev. 41 (3), 383–409.

Fuentelsaz, L., Gómez, J., 2006. Multipoint competition, strategic similarity and entry into geographic markets. Strat. Manag. J. 27 (5), 477–499.

Giachetti, C., Lanzolla, G., 2016. Product Technology imitation over the product Diffusion cycle: which Companies and product innovations do competitors imitate more quickly? Long. Range Plan. 49 (2), 250–264.

Giachetti, C., Lampel, J., Pira, S.L., 2017. Red queen competitive imitation in the UK mobile phone industry. Acad. Manag. J. 60 (5), 1882–1914.

Gimeno, J., 1999. Reciprocal threats in multimarket rivalry: staking out 'spheres of influence' in the US airline industry. Strat. Manag. J. 20 (2), 101–128.

Gimeno, J., Woo, C.Y., 1996. Hypercompetition in a multimarket environment: the role of strategic similarity and multimarket contact in competitive de-escalation. Organ. Sci. 7 (3), 322–341.

Goldenstein, J., Hunoldt, M., Oertel, S., 2019. How optimal distinctiveness affects new ventures' failure risk: a contingency perspective. J. Bus. Ventur. 34 (3), 477–495.

Gómez, J., Orcos, R., Palomas, S., 2014. The evolving patterns of competition after deregulation: the relevance of institutional and operational factors as determinants of rivalry. J. Evol. Econ. 24, 905–933.

Gómez, J., Orcos, R., Palomas, S., 2017. Do strategic groups explain differences in multimarket competition spillovers? Strat. Organ. 15 (3), 367–389.

Gómez, J., Orcos, R., Palomas, S., 2020. Operating under the radar in spheres of influence: taking advantage of industry leaders' market domains. Strat. Organ. 18 (2), 275–300.

Gómez, J., Orcos, R., Volberda, H.W., 2021. How imitation of multiple reference groups drives the evolution of firm strategy. Rev. Manag. Sci. 1–32.

Gong, T.J., Yu, C.M.J., Huang, K.F., 2021. Strategic similarity and firm performance: multiple replications of Deephouse (1999). Strat. Organ. 19 (2), 207–236.

Gual, J., 1992. La Competencia en el Sector Bancario Español. Fundación BBV, Bilbao.

Haans, R.F.J., 2019. What's the value of being different when everyone is? The effects of distinctiveness on performance in homogeneous versus heterogeneous categories. Strat. Manag. J. 40 (1), 3–27.

Haans, R.F., Pieters, C., He, Z.L., 2016. Thinking about U: theorizing and testing U-and inverted U-shaped relationships in strategy research. Strat. Manag. J. 37 (7), 1177–1195.

Hannan, M.T., 2010. Partiality of memberships in categories and audiences. Annu. Rev. Sociol. 36, 159–181.

Haveman, H.A., 1993. Follow the leader: mimetic isomorphism and entry into new markets. Adm. Sci. Q. 38 (4), 593–627.

Hoechle, D., 2007. Robust standard errors for panel regressions with cross-sectional dependence. STATA J.: Promot. Commun. Stat. Stata 7 (3), 281–312.

Jennings, J.E., Jennings, P.D., Greenwood, R., 2009. Novelty and new firm performance: the case of employment systems in knowledge-intensive service organizations. J. Bus. Ventur. 24 (4), 338–359.

Kilduff, G.J., Elfenbein, H.A., Staw, B.M., 2010. The psychology of rivalry: a relationally dependent analysis of competition. Acad. Manag. J. 53 (5), 943–969.

Kwast, M.L., Starr-McCluer, M., Wolken, J.D., 1997. Market definition and the analysis of antitrust in banking. Antitrust Bull. 42 (4), 973–995.

Lieberman, M.B., Asaba, S., 2006. Why do firms imitate each other? Acad. Manag. Rev. 31 (2), 366–385.

Lind, J.T., Mehlum, H., 2010. With or without U? The appropriate test for a U-shaped relationship. Oxf. Bull. Econ. Stat. 72 (1), 109–118.

Luoma, J., Ruutu, S., King, A.W., Tikkanen, H., 2017. Time delays, competitive interdependence, and firm performance. Strat. Manag. J. 38 (3), 506–525.

Makadok, R., Burton, R., Barney, J., 2018. A practical guide for making theory contributions in strategic management. Strat. Manag. J. 39 (6), 1530–1545.

Markman, G.D., Gianiodis, P.T., Buchholtz, A.K., 2009. Factor-market rivalry. Acad. Manag. Rev. 34 (3), 423–441.

Mas-Ruiz, F.J., Ruiz-Moreno, F., 2011. Rivalry within strategic groups and consequences for performance: the firm-size effects. Strat. Manag. J. 32 (12), 1286–1308.

Mas-Ruiz, F.J., Nicolau-Gonzálbez, J.L., Ruiz-Moreno, F., 2005. Asymmetric rivalry between strategic groups: response, speed of response and ex ante vs. ex post competitive interaction in the Spanish bank deposit market. Strat. Manag. J. 26 (8), 713–745.

Mas-Ruiz, F.J., Ruiz-Moreno, F., Ladrón de Guevara Martínez, A., 2014. Asymmetric rivalry within and between strategic groups. Strat. Manag. J. 35 (3), 419–439.

McKnight, B., Zietsma, C., 2018. Finding the threshold: a configurational approach to optimal distinctiveness. J. Bus. Ventur. 33 (4), 493–512.

McNamara, G., Deephouse, D.L., Luce, R.A., 2003. Competitive positioning within and across a strategic group structure: the performance of core, secondary, and solitary firms. Strat. Manag. J. 24 (2), 161–181.

Meyer, J.W., Rowan, B., 1977. Institutionalized organizations: formal structure as myth and ceremony. Am. J. Sociol. 83 (2), 340–363.

Miller, D., Breton-Miller, I.L., Lester, R.H., 2013. Family firm governance, strategic conformity, and performance: institutional vs. strategic perspectives. Organ. Sci. 24 (1), 189–209.

Mitsuhashi, H., Alcantara, L.L., 2021. Off the rivals' radar in emerging market segments: non-mutual rival recognition between new firms and incumbents. Long. Range Plan. 54 (2) https://doi.org/10.1016/j.lrp.2019.06.001.

Navis, C., Glynn, M.A., 2010. How new market categories emerge: temporal dynamics of legitimacy, identity, and entrepreneurship in satellite radio, 1990–2005. Adm. Sci. Q. 55 (3), 439–471.

Negro, G., Koçak, Ö., Hsu, G., 2010. Research on categories in the sociology of organizations. In: Categories in Markets: Origins and Evolution. Emerald Group Publishing Limited.

Newey, W., West, K.D., 1987. A simple, positive semi-definite, heteroskedasticity and autocorrelation consistent covariance matrix. Econometrica 55 (3), 703–708.

Pan, X., Chen, X., Li, X., 2019. To fit in or stand out? How optimal distinctiveness in technological diversification affects firm performance. Eur. Manag. J. 37 (1), 67–77.

Peteraf, M.A., 1993. The cornerstones of competitive advantage: a resource-based view. Strat. Manag. J. 14 (3), 179–191.

Peteraf, M.A., Bergen, M.E., 2003. Scanning dynamic competitive landscapes: a market-based and resource-based framework. Strat. Manag. J. 24 (10), 1027–1041.

Porter, M.E., 1979. The structure within industries and companies' performance. Rev. Econ. Stat. 61 (2), 214–227.

Porter, M.E., 2008. The five competitive forces that shape strategy. Harv. Bus. Rev. 86 (1), 78–93.

Prior, D., Surroca, J., 2006. Strategic groups based on marginal rates. An application to the Spanish Banking Industry. Eur. J. Oper. Res. 170 (1), 293–314.

Radecki, L.J., 1998. The expanding geographic reach of retail banking markets. Econ. Pol. Rev. 4 (2).

Roberts, P.W., Amit, R., 2003. The dynamics of innovative activity and competitive advantage: the case of Australian retail banking, 1981 to 1995. Organ. Sci. 14 (2), 107–225.

Ross, J.-M., Sharapov, D., 2015. When the leader follows: avoiding dethronement through imitation. Acad. Manag. J. 58 (3), 658–679.

Scott, W.R., 1987. The adolescence of institutional theory. Adm. Sci. Q. 32, 493–511.

Simons, K., Stavins, J., 1998. Has antitrust policy in banking become obsolete? N. Engl. Econ. Rev. 13–26.

Suchman, M.C., 1995. Managing legitimacy: strategic and institutional approaches. Acad. Manag. Rev. 20 (3), 571–610.

Taeuscher, K., Rothe, H., 2021. Optimal distinctiveness in platform markets: leveraging complementors as legitimacy buffers. Strat. Manag. J. 42 (2), 435–461.

Taeuscher, K., Bouncken, R., Pesch, R., 2021. Gaining legitimacy by being different: optimal distinctiveness in crowdfunding platforms. Acad. Manag. J. 64 (1), 149–179.

Tsang, E.W., Kwan, K.M., 1999. Replication and theory development in organizational science: a critical realist perspective. Acad. Manag. Rev. 24 (4), 759–780.

UNCTAD, 2022. Resilience and Rebuilding: MSMEs for Sustainable Development at the forefront of building back better and stronger from the impacts of the COVID-19 pandemic, Climate crisis and Conflicts. Available at: https://unctad.org/system/files/information-document/20220627_MSMEs_Day.pdf.

Upson, J.W., Green, K.M., 2017. Dragons, Goliaths, and Cowboys: a view of small business competition. Organ. Dynam. 46 (3), 171–181.

van Angeren, J., Vroom, G., McCann, B.T., Podoynitsyna, K., Langerak, F., 2022. Optimal distinctiveness across revenue models: performance effects of differentiation of paid and free products in a mobile app market. Strat. Manag. J. 1–35. https://doi.org/10.1002/smj.3394.

Volberda, H.W., van der Weerdt, N., Verwaal, E., Stienstra, M., 2012. Contingency fit, institutional fit, and firm performance: a metafit approach to organization—environment relationships. Organ. Sci. 23 (4), 1040–1054.

Wernerfelt, B., 2022. When does the underdog win? Strat. Sci. 7 (1), 1–9.

Wooldridge, J.M., 2002. Econometric Analysis of Cross Section and Panel Data. MIT press.

Young, G., Smith, K.G., Grimm, C.M., Simon, D., 2000. Multimarket contact and resource dissimilarity: a competitive dynamics perspective. J. Manag. 26 (6), 1217–1236.

Zhang, Y., Wang, H., Zhou, X., 2020. Dare to be different? Conformity versus differentiation in corporate social activities of Chinese firms and market responses. Acad. Manag. J. 63 (3), 717–742.

Zhao, E.Y., Fisher, G., Lounsbury, M., Miller, D., 2017. Optimal distinctiveness: broadening the interface between institutional theory and strategic management. Strat. Manag. J. 38 (1), 93–113.

Zhao, E.Y., Ishihara, M., Jennings, P.D., Lounsbury, M., 2018. Optimal distinctiveness in the console video game industry: an exemplar-based model of proto-category evolution. Organ. Sci. 29 (4), 588–611.

Zott, C., Amit, R., 2007. Business model design and the performance of entrepreneurial firms. Organ. Sci. 18 (2), 181–199.

Zuckerman, E.W., 1999. The categorical imperative: securities analysts and the illegitimacy discount. Am. J. Sociol. 104 (5), 1398–1438.

Zuckerman, E.W., 2016. Optimal distinctiveness revisited: an integrative framework for understanding the balance between differentiation and conformity in individual and organizational identities. In: Schultz, M., Ashforth, B.E., Ravasi, D. (Eds.), *Handbook Of Organizational Identity*, Pratt MG. Oxford University Press, Oxford, UK.

Zuckerman, E.W., 2017. The categorical imperative revisited: implications of categorization as a theoretical tool. In: From Categories to Categorization: Studies in Sociology, Organizations and Strategy at the Crossroads. Emerald Publishing Limited, pp. 31–68.

Beatriz Domínguez is Associate Professor at University of Zaragoza (Spain). Her research focuses on first mover advantages, competitive dynamics and foreign location choice. Her research has appeared in Long Range Planning, Business Strategy and the Environment, Cross Cultural and Strategic Management, and Business Research Quarterly, among others.

Raquel Orcos is currently working at Universidad de la Rioja (Spain). Her research is articulated around two main research lines. The first one explores competitive dynamics by paying special attention to multimarket competition and strategic positioning. The second one analyzes the impact and diffusion of certified management standards. Her articles have appeared in Long Range Planning, Journal of World Business, Business Strategy and the Environment and Strategic Organization, among other outlets.

Sergio Palomas is Associate Professor of Strategic Management at University of Zaragoza, where he also received a PhD. His research has been published in journals such as Research Policy, Long Range Planning, or Journal of Evolutionary Economics, among others. His research interests include multimarket competition, competitive dynamics, and management of technology and innovation.