### TO BE DIFFERENT OR TO BE THE SAME WHEN YOU ARE A SMALL FIRM? AN ANALYSIS OF THE BOUNDARY CONDITIONS OF STRATEGIC BALANCE

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### Abstract

This article seeks to further our understanding of the boundary conditions of the strategic balance perspective. It analyses how two key features of competitive interdependencies, namely competitive asymmetry and market overlap, shape the link between strategic similarity and firm performance. Based on a sample of small firms from the Spanish retail-banking sector during the period 2000–2006, this research finds differences in the effects of strategic similarity to their peers (symmetric competitive relationship) or the industry leader (asymmetric competitive relationship). Importantly, this research also finds that the consequences of strategic similarity differ substantially depending on the level of market overlap. In the case of peers, strategic similarity benefits small firms only when there is market overlap. In the case of the industry leader, in contrast, market overlap may override the positive effect of similarity.

### Keywords

Strategic balance, competitive asymmetry, market overlap, strategic similarity, small firms

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### **1. INTRODUCTION**

Managers and scholars have remained particularly intrigued about the best strategic position for a firm within its industry (Porter, 1989, 2008). The strategic balance perspective is a research stream in which significant efforts have been devoted to solving this enquiry (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; Porter, 1996) and institutional pressures to become similar (DiMaggio and Powell, 1983; Meyer and Rowan, 1977). Its central prescription is that a moderate level of strategic similarity to rivals balances competitive and institutional pressures and, thus, maximizes 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). Accordingly, current research suggests that the strategic balance perspective has critical boundary conditions (Gong et al., 2021; Haans, 2019; McKnight and Zietsma, 2018).

This research seeks to further our knowledge of the strategic balance perspective by deepening the role of competitive interdependencies as a boundary condition. Specifically, we incorporate two key characteristics of competitive interdependencies, namely competitive asymmetry and market overlap. Competitive asymmetry exists when "the degree and/or direction of competition between two firms is not equal", meaning that firm A recognizes firm B as an important competitor but the latter does not consider firm A as a primary rival (Desarbo, Grewal, and Wind, 2006: 103). Market overlap occurs when the market domain of a firm overlaps with the market domain of another firm (Baum and Korn, 1996, 1999).

First, to explore the moderating influence of competitive asymmetry on the relationship between strategic similarity and performance, our research focuses on small firms and considers two reference points: peers (i.e., other small firms within the industry) and the industry leader. While small firms and their peers have symmetric competitive relationships, the relationship between small firms and the industry leader is asymmetric (Chen et al., 2007). As a result, small firms face a different level of competition with each reference point. As competitive pressures are one of the two opposing forces of the strategic balance perspective, the optimal level of strategic similarity to peers and the industry leader may be different.

Second, we acknowledge that market overlap is a critical construct that affects competition between firms and we argue that it significantly conditions the outcomes of strategic similarity (Baum and Korn, 1996, 1999; Bergen and Peteraf, 2002; Chen, 1996; Peteraf and Bergen, 2003). In this research, we operationalize market overlap as the extent to which the geographical markets in which the focal small firm operates overlap with those of the reference point. Market overlap influences the extent to which firms perceive each other as rivals. This affects the intensity of competitive pressures and, therefore, alters the optimal level of strategic similarity. By considering market overlap, we respond to the recent call to incorporate the geographical component into the analysis of the strategic balance (Zhao et al. 2017).

We test our model 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 (peers or the industry leader) and on the level of market overlap with them. This result confirms that competitive asymmetry and market overlap play key roles as boundary conditions of the strategic balance perspective. Accordingly, both characteristics of competitive

interdependencies are contingencies that small firms have to consider when configuring their strategies, determining their optimal level of strategic similarity.

Our research makes three contributions to the literature on the strategic balance perspective. First, prior research has highlighted competition as an important boundary condition (Gong et al., 2021). We delve into this boundary condition by integrating competitive asymmetry and market overlap into the analysis of strategic similarity. Exploring boundary conditions is critical for theory development and contributes to knowledge accumulation (Makadok, Burton, and Barney, 2018; Tsang and Kwan, 1999). Through our research, we offer a better understanding of the competitive pressures of the strategic balance perspective and confirm that the two boundary conditions proposed critically influence the optimal level of strategic similarity.

Second, our research focuses on small firms and advances our knowledge of the consequences of strategic similarity for them. To the best of our knowledge, prior studies of this topic have not devoted attention to the particular case of small firms. Extending extant knowledge of strategy in small firms is necessary because they play an essential role in the world economy (Ebben and Johnson, 2005). Additionally, from a practitioner standpoint, the accumulation of managerial knowledge specific to the strategic position of small firms is very valuable. The reason is that finding the right strategic position within the industry may be particularly important for these firms because of the challenges derived from the *liability of smallness* (Hannan and Freeman, 1983; Upson and Green, 2017). These challenges revolve around the implications of limited availability of resources, such as a lower capability to develop in-house R&D, restricted financial resources, or difficulties in attracting specialized labour. As a result, small firms are not necessarily exposed to the same threats and opportunities as larger industry players, which motivates them to seek further opportunities to survive (Aldrich and Auster, 1986). These opportunities can be

exploited through their strategic position within the industry, which reinforces the relevance of studying the consequences of strategic similarity for small firms.

Finally, we answer the call for studies examining how firms consider multiple reference points when making strategic decisions (Barlow, Verhaal, and Angus, 2019; Giachetti and Lampel, 2010; Giachetti and Lanzolla, 2016, Gómez et al., 2021). While the strategic balance perspective tends to emphasize a single reference point to explore the impact of strategic similarity (Deephouse, 1999; McNamara et al., 2003; Zhao et al., 2017), our study considers two reference points (i.e., peers and the industry leader). This allows us to deepen the study of the competitive pressures that explain the consequences of strategic similarity.

#### 2. THE STRATEGIC BALANCE PERSPECTIVE

According to the strategic balance perspective, small firms confront two competing pressures when configuring their strategies (Deephouse, 1999). On the one hand, they face institutional pressures to conform to social expectations and be perceived as legitimate actors (DiMaggio and Powell, 1983; Meyer and Rowan, 1977). Accordingly, firms have to adopt the behaviours accepted by social audiences, becoming more strategically similar to one another. On the other hand, firms confront competitive pressures that force them to adopt a unique strategic position to protect their competitive advantages (Barney, 1991; Porter, 1996) and reduce rivalry for resources (Hannan and Freeman, 1977; Baum and Mezías, 1992). Following this logic, institutional pressures lead to a positive effect of strategic similarity on firm performance, while competitive pressures imply that the effect of strategic similarity on performance is negative. The strategic balance perspective argues that managers can reconcile these competing forces 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 the strategic balance perspective, recent developments in the literature have shown that intermediate levels of strategic similarity do not necessarily optimize firm performance. For instance, Cennamo and Santalo (2013) found that distinctive positioning has a U-shaped effect on 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, and Jennings, Jennings, and Greenwood (2009) showed that the relationship between employment-system novelty and organizational productivity is U-shaped.

The accumulation of conflicting empirical evidence has increased the interest of scholars in the boundary conditions of the strategic balance perspective. In this regard, it has been shown that the effect of strategic similarity on performance depends on contextual factors, such as the variety of strategic approaches taken by the firms operating in a category (Haans, 2019), the stage of the category life cycle (Navis and Glynn, 2010; Zhao et al., 2018), or market features, such as 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, Breton-Miller, and Lester, 2013; Zhang, Wang, and Zhou, 2020), age (Goldenstein, Hunoldt, and Oertel, 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.

Table 1 to be inserted about here

This article contributes to the research on the boundary conditions of the strategic balance perspective. Specifically, we analyse two key characteristics of competitive interdependencies among firms: competitive asymmetry and market overlap. An asymmetric competitive relationship or the absence of market overlap may prevent competition among firms even in the case of high strategic similarity (Chen, 1996). Accordingly, competitive symmetry and market overlap among firms may be essential conditions for the mechanisms associated with the competitive pressures of strategic similarity. Thus, the basic prescription of the strategic balance perspective (i.e., a Ushaped relationship between strategic similarity and firm performance) may not apply under certain circumstances explored in this research.

An important point for the development of this article is that we acknowledge that the institutional pressures towards strategic similarity are relevant for the two reference points considered. Legitimacy is enhanced both by being strategically similar to peers and by being strategically similar to the industry leader. In relation to peers, it is important to note that accepted patterns of behaviours can be specific to categories of firms (Zuckerman, 1999, 2017). Thus, similarity to peers signals conformity with social expectations that are closely related to one's own category and, in turn, to firm-specific features. On the other hand, the industry leader copes efficiently with social expectations (Volberda et al., 2012), which means that it is an appropriate example of the organizational patterns that audiences take for granted. Importantly, the industry leader may contribute to legitimate 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, strategic similarity to the industry leader is also a valid signal of conformity.

With respect to competitive pressures, from the strategic balance perspective, strategic similarity is associated with competitive tension. 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, in this research stream, *competitive tension* is pivotal to explain how strategic similarity may negatively affect firm performance. However, from a competitive dynamics perspective, similarity can also bring some benefits. In particular, it may facilitate implicit coordination and the development of rivalry-reducing dynamics (Caves and Porter, 1977). Thus, although the strategic balance perspective focuses on *legitimacy* when describing the advantages of strategic similarity (Deephouse, 1999; DiMaggio and Powell, 1983; Meyer and Rowan, 1977; Suchman, 1995), our research also considers *tacit collusion*.

Therefore, we assume that competitive pressures may lead to both *tacit collusion*, which has the potential to improve firm performance, and *competitive tension*, which may harm firm performance. Unlike *legitimacy*, we expect *tacit collusion* and *competitive tension* to operate in different ways depending on whether strategic similarity is evaluated in relation to peers or the industry leader. Similarly, we consider that market overlap between the focal small firm and the reference point may have a significant influence on *tacit collusion* and *competitive tension*. In the absence of market overlap, *tacit collusion* and *competitive tension* may be absent. We focus on these two mechanisms to provide our reasoning in the development of our hypotheses.

### **3. HYPOTHESES DEVELOPMENT**

Our theoretical framework revolves around two sets of hypotheses. Hypotheses 1a and 1b consider how competitive asymmetry shapes the effect of strategic similarity on the performance of small firms. Hypotheses 2 and 3 explore the contingent effect of market overlap.

### 3.1. Strategic similarity and competitive asymmetry

Small firms possess similar resources to their peers, which leads to a symmetric competitive relationship between them. Our contention is that *tacit collusion* is only attainable in the case of competitive symmetry among firms. The greater similarities in terms of resources between small

firms and their peers provide "a common basis with which to tacitly coordinate behaviour" (Young et al., 2000: 1224). Thus, in comparison to other industry players, the mutual understanding among peers is easier. This helps the focal small firm to better predict the competitive behaviours of the other small firms (Fuentelsaz and Gómez, 2006; Peteraf, 1993a) and, in turn, favours the development of implicit coordination practices (Caves and Porter, 1977; Giachetti et al., 2017). In line with this reasoning, prior research has claimed that firms' abilities to collude are enhanced under circumstances of symmetry (Bernheim and Whinston, 1990). Additionally, symmetry among firms leads to similar capabilities to compete (Chen, 1996). As a consequence of the reciprocal threats derived from competitive symmetry, firms may have strong incentives to forbear their peers (Gimeno, 1999), which again favours *tacit collusion*.

*Tacit collusion*, however, is not expected to arise between a small firm and the industry leader. The marked differences in the resource endowments of these firms generate an important competitive asymmetry, which makes tacit coordination more complex and problematic (Young et al., 2000). The reason is that only competitive interdependencies with other firms that have comparable resource endowments and that are bound by mutual and symmetric interdependencies are relevant for firms (Chen, 1996; Chen et al., 2007; Lieberman and Asaba, 2006). Thus, the potential benefits that the industry leader perceives from tacit collusion with small firms are limited or null (Gómez, Orcos and Palomas, 2020).

Similarly, *competitive tension* is only likely to build up when peers are taken as the reference point. 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 small firms become increasingly strategically similar to their peers, their product offerings become closer substitutes (Gimeno and Woo, 1996) and the competitive tension between them builds up. This makes peers more likely to initiate competitive moves specifically targeted against the firm that threatens their position (Chen and Miller, 1994; Chen, Su, and Tsai, 2009), with a subsequent negative effect on performance. Importantly, this increase in competitive aggressiveness only occurs when strategic similarity is sufficiently high (Chen et al., 2007; Kilduff et al., 2010). Therefore, a high level of strategic similarity to peers is needed to trigger the negative effects of increased competitive tension.

In contrast, it is more 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 the smaller ones (Mas-Ruiz et al., 2005, 2014). Therefore, in a situation of important asymmetries among firms, mutual rival recognition is difficult (Mitsuhasi and Alcantara, 2021). Two firms only recognize 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 (Cattani et al., 2017; Kilduff et al., 2010). All this suggests that the industry leader is less likely to feel threatened by small firms (Ferrier et al., 1999; Ross and Sharapov, 2015), which alleviates competitive tension. As rival recognition and competitive tension always precede competitive actions (Chen et al., 2007; Cho and Hambrick, 2006), small firms that adopt a strategic position similar to that of the industry leader are not likely to be the target of its competitive moves. This allows them to become strategically similar to the industry leader without suffering the negative consequences of increased competitive tension.

Drawing on these arguments, we expect an inverted U-shaped relationship between strategic similarity and performance in the case of industry peers. This is in line with the basic prescription of the strategic balance perspective (Deephouse, 1999). From low to medium levels of strategic

similarity to peers, small-firm performance increases with strategic similarity because of the positive effect of *legitimacy* and *tacit collusion*. However, from medium to high levels of strategic similarity, the competitive tension with these rivals builds up until it triggers competitive actions (Chen et al., 2007; Kilduff et al., 2010). That is, competitive tension becomes high enough to compensate for the aforementioned benefits, resulting in negative effects from increases in strategic similarity to peers (Deephouse, 1999). The previous reasoning leads to the first hypothesis of this research:

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

In contrast, the competitive asymmetry between the focal small firm and the industry leader hinders *tacit collusion* and *competitive tension*. Increased strategic similarity to the industry leader will neither facilitate tacit collusion nor trigger the negative effects of increased competitive tension. However, competitive asymmetry does not prevent small firms attaining *legitimacy* by resembling the industry leader. As legitimacy brings several advantages, we expect 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, thus, plays a key role in shaping competitive interdependencies between firms. In particular, competitive interdependencies become more intense in the presence of a high degree of market overlap for two main reasons. First, a higher degree of market overlap with a given competitor leads to a larger share of the markets being compromised by the competitive relationship with it. Second, market overlap is likely to enhance the competitive tension perceived by this rival (Chen, 1996; Chen et al., 2007).

Market overlap impacts on the relationship between strategic similarity to peers and smallfirm performance through two mechanisms: *tacit collusion* and *competitive tension*. First, market overlap increases the benefits of *tacit collusion*. Under a situation of high market overlap with peers, the consequences of their competitive behaviours are experienced in a larger share of markets. Thus, tacit coordination becomes more valuable for the focal small firm because it will benefit from the reduction in interfirm rivalry in a higher percentage of markets. In contrast, this firm is more harmed by the absence of tacit collusion if market overlap with peers is high because the negative consequences of competitive aggressiveness will be spread over a high share of its markets.

Second, market overlap enhances the extent to which peers perceive the focal small firm as a competitive threat. A high level of market overlap means that small firms experience a high level of structural rivalry with their peers, which is an antecedent of *competitive tension* (Chen et al., 2007). This increased competitive tension enhances the chance of peers initiating competitive actions specifically directed towards the focal small firm (Chen et al., 2007), with a subsequent negative effect on its performance. Importantly, strategic similarity and market overlap combine to build competitive tension, and their joint effect leads to a more intense interfirm rivalry (Chen, 1996; Kilduff et al., 2010). Thus, the small firm and its peers have strong incentives to engage one another in competitive exchanges when they both have similar strategic positions and operate in the same geographical markets (Chen, 1996). Therefore, on one hand, market overlap enhances the positive effect of strategic similarity to peers by allowing the small firm to benefit from *tacit collusion* in a larger share of markets. On the other hand, market overlap increases *competitive tension* when strategic similarity to peers is sufficiently high, making the negative effects of being too similar to these rivals more intense. Accordingly, our next hypothesis posits that:

# *Hypothesis* 2: Market overlap enhances the effects of strategic similarity to peers on performance (i.e., the positive slope moves upward and the negative slope moves downward).

The effect of market overlap is different in the case of the industry leader. The competitive asymmetry between a small firm and the industry leader remains even if there is market overlap between them. As discussed in Hypothesis 1b, this asymmetry prevents small firms from establishing *tacit collusion* agreements with 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. Thus, market overlap is also unlikely to increase *competitive tension* with the industry leader.

However, market overlap still moderates the effect of strategic similarity to the leader on small-firm performance by increasing *dependence on the same resource pools*. In the absence of market overlap, the industry leader and the small firm do not compete directly for market-specific resources, such as customers, specialized suppliers, qualified labour, or distribution channels. However, when there is high market overlap, the small firm has to obtain the resources required for its operations from the same resource pools as the leader (Baum and Mezías, 1992). Importantly, this competition for resources becomes more intense as strategic similarity to the industry leader increases, because the mix of market resources for which the focal small firm will

compete with the industry leader will be greater (Baum and Singh, 1994a, 1994b). Consequently, market overlap and strategic similarity complement each other and generate a stronger negative effect.

The reason why increased *dependence on the same resource pools* as the industry leader brings a negative effect on small firm performance is that small firms compete for these 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., specialized labour, investors). Second, due to its larger size, the industry leader acquires larger amounts of resources than small firms, which improves its bargaining power (Porter, 1979). Third, the industry leader has superior financial resources, allowing it to outbid smaller firms to obtain scarce resources in the market. These unfavourable conditions hinder the access of the small firm to the resources it needs in the market where it meets the industry leader. As a consequence, market overlap is expected to bring a negative effect on its performance.

Accordingly, in the case of similarity to the industry leader, *tacit collusion* and *competitive tension* are not affected by market overlap – and therefore these mechanisms remain absent. In this situation, market overlap operates as a moderator through an additional mechanism: the *dependence on the same resource pools*. The greater bargaining power of the leader places the small firm in a disadvantaged position to compete for the same resources in the shared markets, with a subsequent negative effect on its performance. This decreases the benefits of becoming more strategically similar to the industry leader if there is high market overlap. Our last hypothesis proposes the following:

*Hypothesis 3*: Market overlap reduces the positive effect of strategic similarity to the leader.

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### 4. EMPIRICAL ANALYSIS

### 4.1. The Spanish retail banking sector

Our empirical setting is the Spanish retail banking sector during the period 2000–2006. 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 organizations (Más-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 they could offer, the location of their branches, or the prices charged for their services (Gual, 1992). The limits to the provision of financial services disappeared in the 1990s after a gradual liberalization of the sector. From that point, 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 aims to determine the consequences of strategic similarity for the performance of small firms. Accordingly, our sample only includes small banks. Drawing on previous studies, we identify small banks as those whose total assets are lower than 4,450 million euros (constant euros of 1991) (Gómez, Orcos, and Palomas, 2014)<sup>1</sup>. We exclude from this selection banks whose branch network never reaches five branches during at least one of the years of the observation window. These excluded banks tend to be commercial banks that offer specialized investment services only to high-end customers and credit unions that focus on farmers in small rural areas. Since these financial intermediaries do not provide their services to the wider

<sup>&</sup>lt;sup>1</sup> Más-Ruiz et al. (2005) and Más-Ruiz and Ruiz-Moreno (2011) defined size according to total deposits and total loans. Although we define size in terms of total assets, our classification does not differ substantially from these studies.

public, we exclude them from our sample (Gómez et al., 2016, 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 is explained by two main factors. First, some banks exited the sample because their growth prevented them from being considered small firms any longer. Therefore, these firms exited the sample but were still operative. This reason explains the removal of 51.3% of the banks from the sample. Second, some banks exited the sector and/or there were several mergers and acquisitions, reducing the number of banks. This situation explains the removal of 48.7% of the firms from the sample. Finally, ten banks downsized and became small firms or were founded during the observed period, joining the sample.

Table 2 to be inserted about here

We gather the information required to perform our empirical analyses from several data sources. First, we use the financial statements that the three professional associations of the sector publish on a yearly basis to characterize the strategic position of financial intermediaries, to measure their performance, and to collect the information on different firm-level factors<sup>2</sup>. Second, we collect information on several market-level factors from the Spanish National Institute of Statistics (INE). Finally, we obtain 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 allows us to precisely measure market overlap, which is a key variable in our model.

<sup>&</sup>lt;sup>2</sup> The financial statements of all the entities of the sector are publicly available from the websites of CECA (www.ceca.es), AEB (www.aebanca.es), and UNACC (www.unacc.com). CECA, AEB, and UNACC are the professional associations of saving banks, commercial banks, and credit unions, respectively.

### 4.2. Variables and model specification

*Dependent variable*. Our dependent variable is financial performance. We measure it through an accounting-based measure, return on assets (ROA). ROA is computed as the ratio of ordinary profits over total assets. It has been used regularly as a measure of financial performance when analysing the banking sector (e.g., Gómez et al., 2020; Roberts and Amit, 2003).

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

First, we identify the strategic position of each bank through 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; Zuñiga-Vicente et al, 2004). These dimensions are *lending activities* (percentage of financial investments in the form of loans to households, and small and medium 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, normalized by total liabilities); *savings* (percentage of total liabilities in the form of private-sector saving and deposit accounts); *human capital* (personnel expenses normalized by operating income); and *safety* (net insolvencies normalized by operating income).

Second, we identify the two reference points that are considered in this research, namely, peers and the industry leader. We consider all the small firms that operate in the Spanish retail banking sector as peers and identify the leader as the largest firm of the industry in terms of total

assets. While Banco Bilbao Vizcaya Argentaria (BBVA) has the highest level of assets during six of the seven analysed years, Banco Santander owns the highest level of assets in 2006. Since BBVA holds the first position most of the time, it is considered as the leader of the industry. Additionally, during the whole period, the network of branches of BBVA clearly exceeds that of Banco Santander. Whereas from 2000 to 2006 the average number of BBVA branches is 3,557, the average number of Banco Santander branches is 2,849. This fact reinforces our selection of the leader.

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

Similarity to peers<sub>jt</sub> = 1 - 
$$\frac{\sqrt{\sum_{k=1}^{7} (x_{jkt} - x_{pkt})^2}}{Max \sqrt{\sum_{k=1}^{7} (x_{jkt} - x_{pkt})^2}}$$

where  $x_{jkt}$  refers to the position of the 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 measure similarity to the industry leader as follows:

Similarity to the leader<sub>jt</sub> = 
$$1 - \frac{\sqrt{\sum_{k=1}^{7} (x_{jkt} - x_{lkt})^2}}{Max \sqrt{\sum_{k=1}^{7} (x_{jkt} - x_{lkt})^2}}$$

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 third main independent variable is *market overlap*. We calculate two variables, namely *market overlap with peers* and *market overlap with the leader*. First, we measure *market overlap with peers* as follows:

Market overlap with peers<sub>jt</sub>=
$$\frac{\left(\frac{\Sigma p \quad \Sigma n \quad (D_{jnt}*D_{pnt})}{\Sigma \quad D_{pt}}\right)}{\Sigma \quad D_{jnt}}$$

where *p* refers to a certain peer, *n* stands for a given geographical market, and *t* is a year of the analysed period. First,  $D_{jnt}$  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. Second,  $D_{pnt}$  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 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 where 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 identify geographical markets within the Spanish retail banking sector by using ZIP codes. The ZIP code is the smallest geographical unit that can be consistently identified in Spain. It was established to divide the national territory into nearby areas in order to arrange postal services. Therefore, ZIP codes allow us to identify geographic areas that are functionally proximate. While large towns have many ZIP codes, in rural areas a single ZIP code can include a few proximate villages.

Second, we measure *market overlap with the leader* as described below:

Market overlap with the leader<sub>jt</sub> = 
$$\frac{\Sigma_l \quad \Sigma_n \quad (D_{jnt}*D_{lnt})}{\Sigma \quad D_{jnt}}$$

where *l* stands for the leader of the industry, *n* refers to a given geographical market, and *t* is a year of the examined period. First,  $D_{jnt}$  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. Second,  $D_{lnt}$  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 where 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 includes market level controls: *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* is calculated as the aggregated credits in the provinces where the bank is active.

We also include several firm-level controls. We control 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, López del Paso, and Fernández, 2003). Second, although our sample is only composed of small firms, we consider the differences in their availability to gather resources by including the variable *assets*, calculated as the volume of total assets, and *branches*, measured as the number of offices operated by the bank. We also control for years in which the focal bank was involved in mergers or acquisitions with the dummy variable *M&A*.

We control for several factors that influence the competitive pressure to which the focal firm is subject. *Rivals* is a count of the number of firms that the focal firm meets in at least one geographical market (i.e. ZIP code). We include every firm irrespective of its size. *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 control for *market overlap with peers* and *market overlap with the leader*. These four variables are meant to characterize the competitive environment in which each firm operates.

Finally, we include year dummies to control for industry-wide common shocks. All the explanatory variables are lagged one period to avoid reverse causality. Descriptive statistics and correlations are shown in Table 3.

Table 3 to be inserted about here

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**Model estimation**. We perform a number of tests to choose the appropriate specification of the model. The Breusch–Pagan Lagrange multiplier test allows us to reject the null hypothesis that the variance of the firm-level component of the error term is zero ( $\chi 2 = 258.84$ ; p < 0.00). This is 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 use the Hausman test. The test allows us to reject the null hypothesis ( $\chi 2 = 76.76$ ; p < 0.00). Accordingly, firm-level unobserved heterogeneity has to be modelled as a fixed effect. We estimate a two-way fixed effects model controlling for firm and year effects.

It is important to highlight that our sample includes many banks that concentrate their activities in one or a few regions of the country. A significant share of the small banks in our sample is composed of credit unions and saving banks. These intermediaries often locate their branches only within their home provinces. Consequently, these firms are very sensitive to the specific conditions of their home regions, such as formal institutions, culture, and demographic characteristics. This situation may lead to spatial correlation. A Pesaran test of spatial correlation allows 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, in addition to heteroskedasticity and serial correlation, is robust to spatial correlation (Driscoll and Kraay, 1998; Hoechle, 2007). Consequently, we report Driscoll and Kraay's standard errors in our estimations.

### 5. RESULTS

Table 4 provides the results of our estimations. Column 1 only includes the control variables, Column 2 adds the linear and quadratic terms of *similarity to peers*, and Column 3 includes 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. Likewise, Column 5 includes the moderating effect of market overlap into the relationship between similarity to the leader and performance. Finally, Column 6 shows the fully specified model. Table 4 to be inserted about here

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. However, to explore whether similarity to peers has an inverted U-shaped effect on small firm performance, we follow the procedure discussed in Lind and Mehlum (2010). First, we confirm that the coefficient of the quadratic term of *similarity to peers* is negative and statistically significant. Second, we check 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 *similarity to peers* ranges from 0 to 0.962. Therefore, the turning point falls outside this range, and we do not find support for a U-shaped effect.<sup>3</sup> Figure 1 shows the effect of *similarity to peers* on performance. It illustrates that there seems to be a curvilinear effect, although it is not statistically significant. Hypothesis 1a is, therefore, not supported.

Figure 1 to be inserted about here

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

We test Hypothesis 2 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*<sup>2</sup> and *market overlap with peers* is

<sup>&</sup>lt;sup>3</sup> This test can be performed in STATA through the command "utest". For more details, see Lind and Mehlum (2010).

negative and statistically significant ( $\beta = -5.606$ ; p < 0.01). Therefore, as market overlap with peers increases, both the linear and quadratic coefficients of *similarity to peers* become larger, which supports Hypothesis 2. To better understand this moderating effect, we explore the curves we obtain for different values of *market overlap with peers*. These curves are depicted in Figure 2.

Figure 2 to be inserted about here

Figure 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 them (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 for the case of perfect market overlap there seems to be a curvilinear relationship. For this last case, we confirm 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).

We test Hypothesis 3 in Column 5 of Table 4. The coefficient of *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 3). Figure 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 shows, 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.

Figure 3 to be inserted about here

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Finally, in column 6 we test all the hypotheses simultaneously. The results remain qualitatively the same.

We developed additional analyses to check the robustness of our results. First, we used three alternative identifications of the industry leader. First, two different banks, BBVA and Banco Santander, were each the largest firm in at least one period of our observation window according to total assets. Therefore, we may consider both of them as industry leaders. Second, another bank, La Caixa, is the financial entity with the greatest number of branches during the whole observation window, so we may also consider it as an alternative industry leader. Finally, we considered all of the large banks (entities whose total assets are higher than 21,500 million euros, constant euros of 1991) as industry leaders. The three alternative identifications of the industry leader yield similar results to those reported in Table 4.

Second, 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 in 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 follow Lind and Mehlum (2010) to test for the statistical significance of the curve. We confirm 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.<sup>4</sup>

### 6. DISCUSSION

Our research contributes to answering the following research question: *what are the boundary conditions of the strategic balance perspective*? We consider two key characteristics of competitive interdependencies among firms, namely competitive asymmetry and market overlap, and explore how they shape the link between strategic similarity and firm performance.

First, we explore the moderating role of competitive asymmetry. We accomplish this by focusing on small firms and taking two reference points: peers and the industry leader. This allows us to compare the consequences of strategic similarity in a situation of competitive symmetry (when peers are taken as the reference point) and in a situation of competitive asymmetry (when the industry leader is taken as the reference point). In this first analysis, we find that strategic similarity to both reference points has a positive effect on small-firm performance. Thus, we find 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

<sup>&</sup>lt;sup>4</sup> We are grateful to two anonymous reviewers for these suggestions. The estimations of the robustness test are available from the authors under request.

(Cennamo and Santalo, 2013; Jennings, Jennings, and Greenwood, 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 *tacit collusion* mostly counteract the negative effects of competitive tension that may result from being too strategically similar to a given competitor.

Second, our study shows that market overlap plays a central role in our analyses. 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 for firm performance. 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 markets. Moreover, as we explore the relationship for higher levels of market overlap, we observe that the link between strategic similarity to peers and small-firm performance initially becomes positive and eventually becomes curvilinear for high levels of market overlap. This means that the negative impact of being too similar to peers is relevant only under 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 shows 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 depending on the same type of resources as the industry leader and gathering them from the same resource pools counteracts the legitimacy advantages that small firms obtain through similarity to this prominent firm. It is noteworthy that there is also a potential alternative explanation: competitive externalities (Gómez et al., 2020). In our theoretical discussion, we explain that the industry leader has no incentive to initiate direct competitive actions against small firms. Nevertheless, 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 not, enhancing the chance of being indirectly damaged by the competitive actions that it 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.

In line with these findings on the importance of market overlap in the strategic balance, previous studies suggested that the geographical component may alter the balance between similarity and differentiation (Zhao et al., 2017). Their main argument is that social expectations regarding firms' behaviours may vary depending on the geographical area. For instance, Lounsbury (2007) found that management logics differ between New York and Boston mutual funds. This may explain the lack of significance of strategic similarity to peers that we find when there is no market overlap. The fact that social audiences in different regions may have different expectations regarding the behaviour of firms could prevent small firms from attaining legitimacy when the reference point to which they are strategically similar is located in a different geographical area. Based on the theoretical arguments of this research, two additional reasons may justify the lack of significance of strategic similarity to peers when there is no market overlap: the absence of tacit collusion if firms do not meet in the marketplace (Ciliberto and Williams, 2014) and the lack of

incentives to compete when firms do not depend on the same resource pools (Baum and Mezías, 1992).

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 examined a population of commercial banks in the Minneapolis-St. Paul (Twin Cities) metropolitan area. As he discussed, this was categorized as a single, competitive market (Deephouse, 1999: 155). Therefore, there was a high level of market overlap among the banks included in his sample. Also, due to branching restrictions in Minnesota during the observed period, arguably all the banks in the sample experienced symmetric competitive relationships. According to our findings, the high level of market overlap and the symmetric competitive relationships made his sample an ideal scenario to fully observe the effects of competitive pressures, leading to an inverted U-shaped relationship between strategic similarity and firm performance. Consequently, our results do not contradict those of Deephouse (1999). Instead, ours suggest the adequacy of his research design to explore the strategic balance proposition, while also clarifying the conditions under which an inverted U-shaped relationship should not be expected. We acknowledge that our research shows several limitations that may open the door to future analyses. First, it has been shown that the negative consequences of making a strategic choice that differs from the industry norm may be compensated by the choices made in other strategic areas (Sirmon and Hitt, 2009). Moreover, previous literature has shown that firms may be selective regarding the strategic dimensions they copy, conforming in some dimensions while deviating in others (Philipee and Durand, 2011). For instance, Zhang, Wang, and Zhou (2020) suggest that firms may achieve strategic balance by simultaneously conforming in corporate social

responsibility (CSR) scope and differentiating in CSR emphasis. Accordingly, our theoretical framework could be improved by focusing on specific strategic dimensions rather than measuring strategic similarity as a global construct. A more disaggregated approach to the analysis of strategic similarity would allow for more developed theories about how firms may achieve an optimal level of similarity by managing trade-offs between multiple strategic dimensions (Zhao et al., 2017).

Second, our research focuses on the consequences of strategic similarity without exploring its antecedents. However, 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. From a competitive dynamics perspective, an imitated firm may have more incentive to react against similar competitors that intentionally imitate their strategic positions because, in this situation, strategic similarity will be perceived as a competitive attack (Chen et al., 2007). In contrast, strategic similarity by chance may be less likely to increase interfirm rivalry as firms do not intentionally imitate their competitors but respond in a similar way to the same contingencies.

### REFERENCES

- Alcantara, L.L., & Mitsuhashi, H. (2015). Too many to handle? Two types of multimarket contacts and entry decisions. *Management Decision*, 53(2), 354-374.
- Ashforth, B. E., & Gibbs, B. W. (1990). The double-edge of organizational legitimation. *Organization science*, 1(2), 177-194.
- Bach, D., & Allen, D. (2010). What every CEO needs to know about nonmarket strategy. *MIT Sloan Management Review*, *51*(3), 41.
- Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of management, 17(1), 99-120.
- Baum, J. A.C., & Korn, H. J. (1996). Competitive dynamics of interfirm rivalry. Academy of Management journal, 39(2), 255-291.
- Baum, J. A.C., & Korn, H. J. (1999). Dynamics of dyadic competitive interaction. *Strategic management journal*, 20(3), 251-278.
- Baum, J. A.C., Li, S. X., & Usher, J. M. (2000). Making the next move: How experiential and vicarious learning shape the locations of chains' acquisitions. *Administrative Science Quarterly*, 45(4), 766-801.
- Baum, J.A.C., & Mezias, S.J. (1992). Localized Competition and Organizational Failure in the Manhattan Hotel Industry, 1898-1990. *Administrative Science Quarterly*, *37*(4), 580-604.
- Baum, J. A. C., & Singh, J. V. (1994a). Organizational niches and the dynamics of organizational founding. *Organization Science* 5(4), 483-501
- Baum, J. A. C., & Singh, J. V. (1994b). Organizational niches and the dynamics of organizational mortality. American journal of sociology, 100(2), 346-380.
- Bergen, M., & Peteraf, M. A. (2002). Competitor identification and competitor analysis: a broadbased managerial approach. *Managerial and decision economics*, 23(4-5), 157-169.
- Bikhchandani, S., Hirshleifer, D., & Welch, I. (1992). A theory of fads, fashion, custom, and cultural change as information cascades. *Journal of political economy*, 100(5), 992-1026.
- Bikhchandani, S., Hirshleifer, D., & Welch, I. (1998). Learning from the Behavior of Others: Conformity, Fads, and Informational Cascades. *Journal of Economic Perspectives*, 12(3), 151–170.
- Brouthers, L. E., O'Donnell, E., & Hadjimarcou, J. (2005). Generic product strategies for emerging market exports into triad nation markets: A mimetic isomorphism approach. *Journal of management Studies*, 42(1), 225-245.
- Carbó, S., López del Paso, R., & Rodríguez-Fernández, F. (2003). Medición de la competencia en los mercados bancarios de las regiones españolas. *Revista de economía aplicada* 32, 5-33.
- Cen, L., Chan, K., Dasgupta, S., & Gao, N. (2013). When the tail wags the dog: Industry leaders, limited attention, and spurious cross-industry information diffusion. *Management Science*, 59(11), 2566-2585.
- Caves, R. E., & Porter, M. E. (1977). From entry barriers to mobility barriers: Conjectural decisions and contrived deterrence to new competition. *The quarterly journal of economics*, 241-261.
- Chan, C. M., Makino, S., & Isobe, T. (2006). Interdependent behavior in foreign direct investment: The multi-level effects of prior entry and prior exit on foreign market entry. *Journal of International Business Studies*, 37(5), 642-665.

- Chen, M. J. (1996). Competitor analysis and interfirm rivalry: Toward a theoretical integration. *Academy of management review*, 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. *Academy of management journal*, 38(2), 453-482
- Chen, M. J., & MacMillan, I. C. (1992). Nonresponse and delayed response to competitive moves: The roles of competitor dependence and action irreversibility. *Academy of Management Journal*, *35*(3), 539-570.
- Chen, M.J., & Miller, D., (1994). Competitive attack, retaliation and performance: An expectancyvalence framework. *Strategic management journal*, 15(2), 85-102.
- Chen, M. J., Su, K. H., & Tsai, W. (2007). Competitive tension: The awareness-motivationcapability perspective. *Academy of management Journal*, 50(1), 101-118.
- Coello, J. (1994). Son las cajas y los bancos estratégicamente equivalentes?. *Investigaciones Económicas*, 18 (2), 313-332.
- Deephouse, D. L. (1999). To be different, or to be the same? It's question (and theory) of strategic balance. *Strategic management journal*, 20(2), 147-166.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American sociological review*, 147-160.
- Driscoll, J.C. & Kraay, A.C. (1998). Consistent Covariance Matrix Estimation with Spatially Dependent Panel Data. *The Review of Economics and Statistics*, 80(4), 549-560.
- Ethiraj, S. K., Levinthal, D., & Roy, R. R. (2008). The dual role of modularity: Innovation and imitation. *Management Science*, *54*(5), 939-955.
- Ethiraj, S. K., & Zhu, D. H. (2008). Performance effects of imitative entry. *Strategic Management Journal*, 29(8), 797-817.
- 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. *Academy of* management journal, 42(4), 372-388.
- Fiegenbaum, A. & Thomas, H. (1995). Strategic groups as reference groups: Theory, modeling and empirical examination of industry and competitive strategy. *Strategic Management Journal*, 16(6), 461-476.
- Fligstein, N. (1985). The Spread of the Multidivisional Form among Large Firms, 1919–1979. *American Sociological Review* 50: 377–91.
- Fosfuri, A., Motta, M., & Rønde, T. (2001). Foreign direct investment and spillovers through workers' mobility. *Journal of international economics*, 53(1), 205-222.
- Fourné, S. P., & Zschoche, M. (2020). Reducing uncertainty in follow-up foreign direct investment: Imitation by family firms. *Global Strategy Journal*, *10*(4), 839-860.
- Freeman, J., Carroll, G. R., & Hannan, M. T. (1983). The liability of newness: Age dependence in organizational death rates. *American sociological review*, 692-710.
- Fuentelsaz, L. & Gómez, J. (2006). Multipoint competition, strategic similarity and entry into geographic markets. *Strategic management journal*, 27(5),477–499.
- Giachetti, C., & Lampel, J. (2010). Keeping both eyes on the competition: Strategic adjustment to multiple targets in the UK mobile phone industry. *Strategic Organization*, 8(4), 347-376.
- Giachetti, C., Lampel, J., & Pira, S. L. (2017). Red queen competitive imitation in the UK mobile phone industry. *Academy of Management Journal*, 60(5), 1882-1914.

- 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 Planning*, *49*(2), 250-264.
- Gimeno, J., Hoskisson, R. E., Beal, B. D., & Wan, W. P. (2005). Explaining the clustering of international expansion moves: A critical test in the US telecommunications industry. *Academy of Management Journal*, 48(2), 297-319.
- Gimeno, J., & Woo, C. Y. (1996). Hypercompetition in a multimarket environment: The role of strategic similarity and multimarket contact in competitive de-escalation. *Organization science*, 7(3), 322-341.
- 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. *Journal of Evolutionary Economics*, 24,905–933.
- Gómez, J., Orcos, R., & Palomas, S. (2016). Competitors' Strategic Heterogeneity and Firm Performance. *Long Range Planning*, 49(1), 145-163.
- Gómez, J., Orcos, R., & Palomas, S. (2017). Do strategic groups explain differences in multimarket competition spillovers? *Strategic Organization*, *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. *Strategic Organization*, 18(2), 275-300.
- Gómez, J., Orcos, R., & Volberda, H.W. (in press). How imitation of multiple reference groups drives the evolution of firm strategy. *Review of Managerial Science*. DOI: 10.1007/s11846-020-00422-z
- Greve, H. R., & Seidel, M. D. L. (2015). The thin red line between success and failure: Path dependence in the diffusion of innovative production technologies. *Strategic Management Journal*, *36*(4), 475-496.
- Gual J. (1992). La Competencia en el Sector Bancario Español. Fundación BBV: Bilbao.
- Guillén, M. F. (2003). Experience, imitation, and the sequence of foreign entry: Wholly owned and joint-venture manufacturing by South Korean firms and business groups in China, 1987–1995. *Journal of International Business Studies*, *34*(2), 185-198.
- Haans, R.F.J., Pieters, C., & He, Z-L. (2015). Thinking about U: Theorizing and testing U-and inverted U-shaped relationships in strategy research. *Strategic Management Journal*, 37(7), 1177-1195.
- Haunschild, P. R., & Miner, A. S. (1997). Modes of interorganizational imitation: The effects of outcome salience and uncertainty. *Administrative Science Quarterly*, 472-500.
- Haveman, H.A. (1993). Follow the leader: mimetic isomorphism and entry into new markets. *Administrative Science Quarterly*, 38(4), 593-627.
- Henisz, W. J., & Delios, A. (2001). Uncertainty, imitation, and plant location: Japanese multinational corporations, 1990-1996. *Administrative Science Quarterly*, 46(3), 443-475.
- Hoechle, D. (2008). Robust Standard Errors for Panel Regressions with Cross-Sectional Dependence. *The Stata journal: promoting communications on statistics and Stata*, 7(3), 281-312.
- Kilduff, G.J., Elfenbein, H.A., & Staw, B.M. (2010). The psychology of rivalry: a relationally dependent analysis of competition. *Academy of Management Journal*, *53*(5), 943–969.
- Kim, J-Y., & Miner, A.S. (2007). Vicarious Learning from the Failures and Near-Failures of

Others: Evidence from the U.S. Commercial Banking Industry. *Academy of Management Journal* 50(3), 687-714.

- Lee, H., Smith, K.G., Grimm, C.M., & Schomburg, A. (2000). Timing, order and durability of new product advantages with imitation. *Strategic management journal 21*(1), 23-30.
- Lieberman, M. B., & Montgomery, D. B. (1988). First-mover advantages. *Strategic management journal*, 9(S1), 41-58
- Lieberman, M. B., & Montgomery, D. B. (1998). First-mover (dis) advantages: retrospective and link with the resource-based view. *Strategic management journal*, *19*(12), 1111-1125.
- Lieberman, M. B., & Asaba, S. (2006). Why do firms imitate each other?. *Academy of management review*, *31*(2), 366-385.
- Mas-Ruiz, F.J., & Ruiz-Moreno, F. (2011). Rivalry within strategic groups and consequences for performance: the firm-size effects. *Strategic management journal*, 32(12), 1286-1308.
- Mas-Ruiz, F.J., Ruiz-Moreno, F., Ladrón de Guevara Martínez, A. (2014). Asymmetric rivalry within and between strategic groups. *Strategic management journal*, *35*(3), 419–439.
- 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. *Strategic management journal*, *26*(8), 713–745
- 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. *Strategic Management Journal*, 24(2), 161-181.
- Meyer, K. E., & Sinani, E. (2009). When and where does foreign direct investment generate positive spillovers? A meta-analysis. *Journal of international business studies*, 40(7), 1075-1094.
- Newey, W., & West, K.D. (1987). A Simple, Positive Semi-Definite, Heteroskedasticity and Autocorrelation Consistent Covariance Matrix. *Econometrica*, 55(3), 703-708.
- Ocasio, W. (1997). Towards an attention-based view of the firm. Strategic management journal, 18(S1), 187-206
- Oehme, M., & Bort, S. (2015). SME internationalization modes in the German biotechnology industry: The influence of imitation, network position, and international experience. *Journal of International Business Studies*, 46(6), 629-655.
- Oh, W. Y., & Barker III, V. L. (2018). Not all ties are equal: CEO outside directorships and strategic imitation in R&D investment. *Journal of Management*, 44(4), 1312-1337.
- Park, K. M. (2007). Antecedents of convergence and divergence in strategic positioning: The effects of performance and aspiration on the direction of strategic change. *Organization Science*, *18*(3), 386-402.
- Peteraf, M. A., & Bergen, M. E. (2003). Scanning dynamic competitive landscapes: a marketbased and resource-based framework. *Strategic management journal*, 24(10), 1027-1041.
- Pitsakis, K., & Giachetti, C. (2020). Information-based imitation of university commercialization strategies: The role of technology transfer office autonomy, age, and membership into an association. *Strategic Organization*, *18*(4), 573-616.
- Porac, J. F., Thomas, H., & Baden-Fuller, C. (1989). Competitive groups as cognitive communities: The case of Scottish knitwear manufacturers. *Journal of Management studies*, 26(4), 397-416.
- Porac, J. F., Thomas, H., Wilson, F., Paton, D. & Kanfer, A. (1995). Rivalry and the industry

model of Scottish knitwear producers. Administrative Science Quarterly, 40(2), 203-27.

- Porter, M.E. (1979). The Structure within Industries and Companies' Performance. *The Review of Economics and Statistics*, 61(2), 214-227.
- Posen, H. E., & Martignoni, D. (2018). Revisiting the imitation assumption: Why imitation may increase, rather than decrease, performance heterogeneity. *Strategic Management Journal*, *39*(5), 1350-1369.
- Posen, H. E., Yi, S., & Lee, J. (2020). A contingency perspective on imitation strategies: When is "benchmarking" ineffective?. *Strategic Management Journal*, 41(2), 198-221.
- Prior, D., & Surroca, J. (2006). Strategic groups based on marginal rates. An application to the Spanish Banking Industry. *European journal of operational research*, *170*(1), 293-314.
- Roberts, P.W., & Amit, R. (2003). The Dynamics of Innovative Activity and Competitive Advantage: The Case of Australian Retail Banking, 1981 to 1995. *Organization Science*, 14(2), 107-225.
- Ross, J-M., & Sharapov, D. (2015). When the leader follows: avoiding dethronement through imitation. *Academy of management journal*, 58(3), 658–679.
- Rivkin, J. W. (2000). Imitation of complex strategies. Management science, 46(6), 824-844.
- Scott, W. R, (1987). The adolescence of institutional theory. *Administrative Science Quarterly*, 32: 493-511.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of management review*, 20(3), 571-610.
- Upson, J. W., & Green, K. M. (2017). Dragons, Goliaths, and Cowboys: A view of small business competition. *Organizational Dynamics*, 46(3), 171-181.
- 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. *Organization Science 23*(4), 1040-1054.
- Young S.L., & Barney J.B. (2016). Strategic imitation. In Augier, M. & Teece, D.J. (eds) *The Palgrave Encyclopedia of Strategic Management*. Palgrave Macmillan, London.
- Zuckerman, E.W. (1999). The Categorical Imperative: Securities Analysts and the Illegitimacy Discount. *American Journal of Sociology*, 104(5), 1398-1438.
- Zuckerman, E.W. (2017). The Categorical Imperative Revisited: Implications of Categorization as a Theoretical Tool. *From Categories to Categorization: Studies in Sociology, Organizations and Strategy at the Crossroads*, Emerald Publishing Limited, 31-68.
- Zúñiga-Vicente, J.A., de la Fuente-Sabaté, J.M., & Suárez-González, I. (2004). Dynamics of the strategic group membership-performance linkage in rapidly changing environments. *Journal of Business Research* 57(12), 1378-1390.

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

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	<b>Closure and M&amp;A</b>		
10	39	20	19		
Percentage of	total banks dropped	51.3%	48.7%		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Mean	0,7790	8156,8 2	130024 1	0,7060	0,6855	13,380 5	95,315 3	0,0077	48,389 4	14,202 3	0,6175	0,1426	0,7671	0,4227
S.D.	0,9948	6139,8 3	113806	0,5643	0,1641	1,1838	89,902 2	0,0876	25,336 6	8,8750	0,2856	0,1723	0,1828	0,1561
Min	-9,3903	319,02	1139,3 7	0,0005	0,00005	10,461 3	2	0	0	0	0	0	0	0
Max	3,3532	24403, 6	519409	7,5581	0,9927	15,305 9	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		

 Table 3: Descriptive statistics and correlations

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

	(1)	(2)	(3)	(4)	(5)	(6)
GDP per capita <sup>a</sup>	-0.124***	-0.094**	-0.142***	-0.007	-0.186***	-0.061
	(-3.43)	(-2.26)	(-2.86)	(-0.19)	(-4.78)	(-1.43)
Credits <sup>a</sup>	0.025	0.025	0.022	0.027	0.020	0.023
	(1.23)	(1.20)	(1.03)	(1.35)	(0.99)	(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***	0.358	0.843***	0.182	0.962***	0.275
	(3.58)	(1.25)	(3.79)	(0.79)	(4.62)	(1.11)
Assets	-0.357***	-0.333**	-0.452***	-0.475***	-0.442***	-0.537***
	(-2.53)	(-2.54)	(-3.96)	(-3.68)	(-4.01)	(-4.15)
Branches	-0.002**	-0.004***	-0.002**	-0.003***	-0.001**	-0.002*
	(-2.33)	(-5.27)	(-2.57)	(-2.76)	(-2.00)	(-1.83)
M&A	0.218***	0.299***	0.238***	0.265***	0.225**	0.248***
	(3.24)	(3.46)	(2.84)	(3.27)	(2.53)	(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 contact <sup>2</sup>	0.000406** (2.27)	0.000855*** (3.22)	0.000471 (1.66)	0.000804*** (3.43)	0.000435 (1.50)	0.000411*** (3.22)
Market overlap with the leader	-0.507***	-0.473**	-0.461***	-0.346	-0.0882	0.0720
	(-2.90)	(-2.49)	(-2.94)	(-1.57)	(-0.40)	(0.32)
Market overlap with peers	0.613***	0.676***	0.538***	-2.099***	0.563***	-2.266***
	(8.13)	(8.87)	(6.83)	(-2.83)	(6.19)	(-2.76)
Year effects	Yes	Yes	Yes	Yes	Yes	Yes
Similarity to peers		(3.29)		(0.39)		(0.18)
Similarity to peers <sup>2</sup>		-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 peers <sup>2</sup> *Market overlap with peers				-5.606*** (-9.63)		-4.675*** (-6.92)
Similarity to the leader*Market overlap with the leader					-1.015*** (-3.72)	-0.974*** (-3.61)
N	647	647	647	647	647	647
R <sup>2</sup>	0.233	0.255	0.245	0.272	0.250	0.280

**Table 4**: Estimations of similarity to peers and industry leaders

*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



Figure 1. The effect of similarity to peers on performance

Figure 2. The moderating effect of market overlap into the relationship between similarity to peers and performance



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

