



Analysis of the Mondragon case's competitiveness from a systemic perspective

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Abstract

Purpose: This study analyses some of the aspects that contribute to the better performance of Mondragon Corporation compared to other cooperatives and to the rest of the companies in the Basque Country from a systemic perspective.

Design/methodology: First, a systematic review of the literature on the factors that can explain the higher competitiveness of Mondragon cooperatives compared to the rest of the firms was performed. Then, a draft framework representing the existing relationship between the factors was proposed based on the previously analysed studies. Next, a contrast with five experts having different perspectives of Mondragon Corporation was made. The contributions of the experts to the proposal yielded the final framework.

Findings: A framework that links the factors and establishes precondition relationships among them is proposed. This framework assigns a special role to the basic inter-cooperative agreement structure as a condition for developing intercompany synergies.

Research limitations/implications: In this study, a specific case of Mondragon Corporation was analysed, and the framework was tested by a limited number of experts. This study adds a new systemic perspective to the rich literature on the factors that explain Mondragon cooperatives' competitiveness.

Practical implications: This paper provides insights into the factors that should be considered when trying to replicate the experience of Mondragon Corporation in other socioeconomic contexts.

Social implications: This study stresses the relevance of a shared set of values, basic agreements and governance institutions as a base for the construction of strong synergetic relationships among companies.

Originality/value: The existing literature related to the key factors for Mondragon cooperatives' competitiveness analysed them from an individual factor perspective. This research advances the knowledge to understand the systemic interrelationships among them.

Keywords: Mondragon, Productivity, Competitiveness, COVID-19, Cooperatives

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1. Introduction

This paper analyses the relationship between inter-firm cooperation and company competitiveness. According to Gulati (1998), inter-firm cooperation refers to voluntary arrangements between firms involving the exchange, sharing or co-development of products, technologies or services. As we will see through this literature review, during the last few decades, the analysis of inter-firm cooperation has acquired a broader and more general scope. Inter-firm cooperation refers to the collaboration between two or more firms to achieve a common goal, such as increasing efficiency, reducing costs or developing new products or services.

This field of knowledge has been addressed from different viewpoints, such as its relationship with competitiveness, the reasons for cooperation and its strategic sense, the benefits of cooperation and its difficulties, the life cycles of cooperation relationships, the requirement of establishing trust between organisations or the role of meta-organisations. Regarding the nature of the synergies obtained, the literature has addressed, among others, the cooperation for innovation activities with universities and research centres, sharing existing resources in companies, such as industrial assets, financial resources and knowledge or people or the effect of cooperation on the internationalisation of companies. Without being exhaustive, in what follows, some studies on the issues related to inter-firm cooperation, which will be addressed in the framework of the Mondragon Corporation (MC), are presented.

The influence of inter-firm cooperation and alliances on competitiveness has been extensively studied. Through the seminal contributions of Contractor and Lorange (1988), Buckley and Casson (1988), Cunningham and Calligan (1991), Hamel (1991), Auster (1994) and Doz (1996), this issue has been addressed from different perspectives. For instance, Todeva and Knoke (2005) explained the formation, implementation and consequences of strategic alliances and extracted conclusions on the specific topics of partner selection, similarity and complementarity in partner choice, network partners and processes, fusion of partners, development dynamics and performance outcomes.

Inter-firm cooperation can significantly impact competitiveness, as it allows firms to leverage their respective strengths and resources to create synergies and achieve better outcomes than they could on their own. By working together, firms can pool their knowledge, expertise and technology, as well as share risks and costs (Chang & Hong, 2000).

Szaller, Fries and Kádár (2023) stated that cooperation is a key factor for the success of firms. Kongmanila and Takahashi (2009) concluded that cooperation with subcontractors, business associates and distant buyers influences firm performance.

Nevertheless, the success of inter-firm cooperation in enhancing competitiveness depends on several factors, including the strategic fit between firms, the strength of their relationship and the levels of trust, commitment and relational capabilities between them (Alves, Segatto & De-Carli, 2016). Tunisini and Marchiori (2020) identified several factors, such as individual, structural, legitimacy, interaction and governance variables, as the reasons for the failure of networks.

Osarenkhoe (2010) showed that managerial leadership and the development of trust are the key success factors for competition strategies.

Networks of cooperating companies are not static and reflect developments throughout their life cycles. Publications have analysed this aspect and the different phases of the life cycle of a cooperation network. Some have studied the life cycle of networks (Johnston & Hausman, 2006), others have analysed specifically the start-

up phase (Håkansson & Ford, 2002) and some have underlined the difficulties in the relationships (Doz, 1996; Dwyer, Schurr & Oh, 1987) and the end of the network relationship (Havila & Salmi, 2009).

From the viewpoint of the purpose of cooperation, Yström, Olilla, Agogue and Coghlan (2019) explained the evolution from a cooperation driven by reduction in transaction costs to a transformational interaction (driven by interorganisational development) and the role that an action learning approach can play in that change.

Inter-firm cooperation can take various forms. Mierzejewska and Dziurski (2020) identified several types of intra-group cooperation and the main areas in which this cooperation occurs. The various types of cooperation include horizontal cooperation among affiliates and marketing, R&D, finance and human resources. Such cooperation can take many forms (Coghlan & Coughlan, 2015), including strategic alliances, joint ventures and other types of partnerships.

In some cases, such as Mondragon, the cooperation is coordinated by a meta-organisation whose members are other cooperatives. Ahrne and Brunsson (2005) proposed a theory for meta-organisations, that is, how such organisations are created and sustained, the sources and reactions to the conflicts and the question of organisational change. Coghlan and Coughlan (2015) explored the evolution of the forms of learning of a network in the transportation equipment industry through an empirical case. Clauss and Ritala (2023) underlined the importance of network governance institutions in facilitating or suppressing conflicts in networks and concluded that affective conflicts are harmful, while cognitive conflicts are beneficial. How firms reach a quality of cooperation is through the form of coordinate power, which is an important factor in improving business performance (Fink & Kessler, 2010).

Meanwhile, inter-firm cooperation can also pose challenges, such as the need to manage differences in culture, strategy and governance. Trust between partners is a key issue in achieving effective cooperation between firms and represents a big challenge that can affect formal coordination and control, interorganisational performance and interpretations that managers can attribute to the behaviour of their partners (Vlaar, Van den Bosch & Volberda, 2007). Several practices have been identified as contributing to the success of the collaboration, such as suspending disbelief, defining a shared purpose that everyone can sign up to, developing accountability for a shared purpose, exploring diversity, building trust, designing purposeful structural change and supporting courageous and systemic leadership (Kennedy et al., 2018). Chu (2001) concluded that firms combining economic, structural and cultural approaches outperform the rest of the firms.

Nevertheless, when organisations cooperate with common goals and, for instance, explore solutions that integrate environmental, economic and social sustainability dimensions in the local and regional contexts, they may also strive to preserve or enhance their organisational interests (Sharma & Kearins, 2011). This can be a source of conflict.

Cooperation between firms occurs in the implementation of various cooperation mechanisms, depending on the objective pursued. International Electrotechnical Commission (IEC, 2015) presents crowd sourcing, anything-as-a-service and symbiotic ecosystems as key orientations for the future of factories. It defines crowd sourcing as the sharing of people, materials, assets and methods between firms as a source of new business models based on the opportunities offered by information and communication technologies.

The literature addressing the topic of cooperation between university and industry is very broad. Filipetti and Savona (2017) analysed the existing publications and the heterogeneity of such collaborations. There may be concerns about protecting intellectual property in inter-firm R&D cooperations (Gassmann & Bader, 2006). According to this reference, it is important to reach an early and explicit agreement between the partners on how to share ownership and exploitation of the rights of the resulting intellectual property.

The authors have also treated the interest of the benefits of cooperating to achieve financial synergies. Szaller et al. (2023) studied the financial aspects of a cooperation where firms can request resources (in case of shortage) or offer them (in case of surplus) through a central platform. Almeida, Chang and Hwanki (2015) examined the experience of Korean business groups that reallocated capital among firms during the 1997 financial crisis in

Asia. They concluded that these firms performed better than the control firms. Similar conclusions were obtained in a study of group-affiliated companies in Korea (Chang & Hong, 2000). Furthermore, cooperation and its different narratives [Luca Antonazzo] support resilience and resistance to cope with economic crises and open up a sustainable and cooperative labour-driven economy.

Finally, the cooperation between firms to foster their internationalisation has been analysed for several decades from different perspectives, such as the experience of multinational groups (Bartlett & Ghoshal, 1990; Cerrato, 2006). Gondim de Almeida, Blanchet and Yan (2021) conducted a literature review on how firms (SMEs) cooperate to gain better access to international markets.

As a result of the state-of-the-art review of the various aspects of business-to-business cooperation and the impact on competitiveness, the reviewed publications addressed the issue from different partial viewpoints but did not integrate the different aspects of cooperation that may be related, such as culture, values, synergies, governance of cooperation, common operating mechanisms and rules established by all members of the cooperation.

As explained later in this paper, Mondragon, as a unique case of inter-business cooperation, includes in a local and concentrated network all aspects that have been described in the state-of-the-art. Mondragon has developed an ecosystem aimed at improving competitiveness through cooperation, integrating many mechanisms and principles collected in the literature and implemented in a practical, comprehensive and pragmatic manner. This unique case, therefore, allows us to study the relationships between these elements in the literature through a unique and real case.

This is precisely the added value of this publication. In this paper, we relate the opportunities gathered in the review of the state-of-the-art, giving a comprehensive view of how the variables treated in the literature relate to each other and contribute to an increase in competitiveness. In addition, preconditions are established to develop synergies, such as the existence of shared culture, mission and values. This is done through a detailed study of the characteristics of Mondragon, the proposal of a hypothesis of a framework and a contrast with experts familiar with this ecosystem to propose a framework that interrelates the different elements analysed.

In addition, the integrated treatment of the relationship between the variables affecting cooperation and competitiveness provide insights that can help deepen the knowledge on the conditions necessary for the successful replicability of inter-firm cooperation processes.

2. Mondragon Corporation's competitiveness

Mondragon Corporation (hereafter MC) is recognised as a socioeconomic reality inspired by the principles of the cooperative experience (Forcadell, 2005). These cooperatives are defined as a business project created around shared values. In 2020, Basque Cooperatives represented 1,744 firms and 53,625 jobs. According to the World Cooperative Monitor (2020), MC is considered the largest industrial cooperative in the world due to the aggregate turnover of its cooperatives. MC accounts for 95 cooperatives, 80,000 employees and a US \$11.40 billion turnover (Mondragon, 2022).

MC is divided into four areas: finance, industry, retail and knowledge. The industrial area, with a diversified set of activities, represents 48% of the total employment. The retail, finance and knowledge (education and R&D) areas account for 47.7%, 2.7% and 1.6% of employment, respectively. MC investments in 2019 accounted for €389 million (Mondragon, 2022).

The experience of Mondragon has been analysed by numerous scientific publications from different viewpoints: from a descriptive view of the specificity and success of the corporation (Whyte, 1995) to the relationship between democracy in management and success (Forcadell, 2005), the impact of management training on competitiveness (Basterretxea & Albizu, 2010a), the model of innovation (Freundlich, Arando, Gago, Jones & Kato, 2013), the applications of basic principles to the day-to-day life in the cooperatives (Heras-Saizarbitoria, 2014), the cooperative entrepreneurship model (Gallego & Avila, 2016) and the evolution of the cooperatives (Azkarraga & Cheney, 2019).

More recent studies on Mondragon include analyses on sustainability (Levi & Luiz Pasold, 2022), commitment of people (Rodríguez-Oramas, Burgues-Freitas & Joanpere, 2022), business ethics (Douglas Beets, 2022), resilience (Ellis, Colin-Jones & Zugasti, 2021), the inclusive-participatory business model (Sinde, 2021), the ideological basis (Stickers, 2020) and corporative social responsibility (Agirre & Nieto, 2022).

After this introduction, a section is included that discusses MC's performance and its response to COVID. The research questions, objectives, and applied methodology are then explained. The subsequent section provides a review of the existing literature on the impact of individual factors on the competitiveness of MC. The "framework development" section describes then the draft framework proposed by the authors based on the literature.

Next, the composition of the panel of experts who evaluated the draft framework is described, along with their main contributions. Finally, a "discussion and conclusions" section is included to address the research questions and provide direction for future research.

2.1. MC's Performance

When considering the impact of MC, the World Cooperative Monitor (2020) explored the economic and social impacts of the world's largest cooperatives and mutuals. MC is the world's leading cooperative group in the industry and public service sectors in the ranking by sector. According to the OECD (2021), Spanish cooperatives tend to be more productive than other firms, with the largest difference being in the Basque Country. Basterretxea (2011) also mentioned that despite some methodological difficulties, the majority of the literature coincides with stressing its success and pointing out that the economic development of its cooperatives has been greater than that of the companies in its capitalist environment.

This conclusion is supported by Colina's (2009) study, where the productivity of the companies of MC was found to be higher than that of the companies that do not belong to other companies related to social economy groups. Antonazzo (2019) accorded the performance of cooperatives to strictly economic reasons. He underlined the capacity of cooperatives to make investments with an ROI that would not be interesting enough for capitalist model companies.

From the innovation viewpoint, Retegi (2006) established that MC performs better than the rest of the firms in Spain or in the Basque Country within the same sectors and firm sizes. These data show that MC is highly competitive within the capitalist market (Flecha & Santa Cruz, 2011).

2.2 MC's response to the COVID-19 crisis

The resilience of Mondragon cooperatives and the tools available to the corporation to deal with crisis situations have been studied from different perspectives. Elortza, Alzola and López (2012) analysed the corporation's performance in defiance of the consequences of the 2008 financial crisis and the ways to cope with the unemployment situation. Basterretxea and Albizu (2010b) emphasised employment security and training policies to increase the resilience of cooperatives. The concept of flexicurity (i.e. a combination of job security and flexibility for both individuals and organisations) is a key tool for dealing with crises (Santos-Larrazabal & Basterretxea, 2022).

The effects of the COVID-19 pandemic have represented a major challenge for the economy in general, and MC has not been an exception. The sectors of the economy have been affected differently depending on their exposure to pandemic expansion factors (Retegi, Carrillo, Gil de San Vicente & Salado, 2020), and MC, being a highly diversified corporation, has suffered differently depending on the division and the addressed market. Recent studies, such as those of Billiet, Dufays, Friedel and Staessens (2021) and Brown, Jones, Meadows and Murphy (2021), have affirmed that cooperatives provide better resilience against a crisis like COVID-19 and are better prepared to absorb shocks.

Despite the 6.1% reduction in Mondragon's total revenues, the economic results (earnings before interest, taxes, depreciation and amortisation, EBITDA) have increased by 5.7%, reaching a positive amount of €1,324 million,

while the average employment has only decreased by 1.9% (Mondragon, 2021). In this period, the Industrial Production Index of the Basque Country decreased by –13.1%.

Similar to non-cooperative firms, MC has used the Record of Temporary Employment Regulation for non-member employees, maintaining contractual relationships among the cooperative, employees and know-how through a combination of flexibility and security (Santos-Larrazabal & Basterretxea, 2022). The internal flexibility of working hours of the members of a cooperative recovering lost hours in a higher workload period, the relocation of people between the cooperatives operating in the most affected sectors to the ones less affected, the use of common unemployment financial funds and the restructuring of results between the cooperatives have helped them face the crisis.

Moreover, cooperation between firms has allowed MC to be extremely fast in launching new businesses during the worst period of the pandemic, such as a new mask manufacturing activity. This activity started its operations in May 2020 and is the result of a common project among Onnera, Bexen medical, Mondragon Assembly and Cikautxo, all of them being part of MC. Other products, such as assisted breathing equipment, have also been developed.

In a case study carried out by Arregi, Gago and Legarra (2022) in October 2020, the new forms of work incorporated as a response to the COVID-19 pandemic changed people's perception of participation in decision-making in the company. Normalisation of the health situation is expected to change this perception.

3. Research objectives and methodology

MC's experience has been analysed from several viewpoints. Nevertheless, even if some articles have mentioned several factors that could foster competitiveness in MC (Flecha & Santa Cruz, 2011), there are two issues that have not been analysed in the literature.

- How do the specific aspects that seem to contribute to Mondragon's better performance relate to each other? Are they independent?
- Second, is this model replicable in other cooperative or social economy contexts? Which are the main substantial aspects necessary to transfer an experience, such as Mondragon's?

This last one is a key issue addressed by Morlà-Folch, Aubert, Burgués de Freitas and Hernández-Lara (2021), who proposed that focusing on the transferability of successful cooperative actions requires qualitative research approaches to obtain social impact.

To address these objectives, the present research proposes a three-step methodology. First, key factors related to the competitiveness of MC were identified in the literature. Second, based on the literature, as the first hypothesis for further contrast during this research, the draft of the framework was developed by the authors. Finally, the framework was tested with experts.

To identify the components of the MC competitiveness framework, a systematic review of the literature was performed following Denyer and Tranfield's (2009) method.

In the first step, the articles were identified using various data bases, such as Scopus and Web of Science. The research was carried out during November 2021 with the following search string: 'Mondragon' AND ('productivity' OR 'competitive*' OR 'covid') in the title, abstract and keyword fields. As a result, the authors identified 60 articles. After the elimination of duplicate articles, the number was reduced to 43. The titles and abstracts of the selected articles were read, and those relevant to the research questions were retained and included in the literature review. Only articles linking cooperative specificities and performance indicators were analysed.

In the second step, more specific articles addressing the components of the framework were analysed. As a result, references to 81 papers are included in this paper.

4. Components of MC's competitiveness

Research on the competitiveness of cooperative enterprises in capitalist and changing environments has become a topic of great interest. Thus, several studies have analysed the factors that help MC remain an industrial benchmark and maintain its competitiveness in environments and sectors subject to significant tensions and challenges. As indicated by Cheney, Santa Cruz, Peredo and Nazareno (2014), 'the MC case has brought new elements both to the traditional form of worker cooperative organisation and to the so-called alternative organisational forms in general. The organisational particularities of MC have allowed cooperatives to adapt to market changes and become competitive enterprises in their respective markets, while realising their objectives of worker control of enterprises and employment generation'.

However, in a socioeconomic context such as the current one, some authors continue to insist on the need for further research on the resources, structures and practices that contribute to the resilience of worker cooperatives. Thus, it is necessary to identify which worker cooperative organisations are successful, with a particular interest in those that compete in global markets, such as MC (Cheney et al., 2014).

4.1. Values and management model

Mondragon Cooperatives share the same values that have been approved by the Mondragon Cooperative Congress, by which all of them are represented: cooperation, participation, social responsibility and innovation. Chalupnicek (2019) mentioned that, nowadays, Mondragon retains the values—among others—of democratic organisation, subordination of capital to labour, participatory management and wage solidarity. Moreover, a management model that puts the basic principles and people at the centre of it is agreed upon and adapted to the different contexts of each cooperative. Charterina, Albizu and Landeta (2007) concluded that the quality level of cooperative management is higher than that shown in the non-cooperative sector and that this difference is more conclusive considering the subgroup of cooperatives incorporated in MC.

Some studies have confirmed that the cooperative members' dual condition of worker and owner constitutes a distinctive element that could generate sustainable competitive advantages resulting from such participation. In this sense, Agirre Reinares and Freundlich (2015) found Mondragon's management model, organisational commitment, market orientation and business performance to be related. In a study on the relationship between employee ownership and performance in the retail sector, Arando, Gago, Jones and Kato (2015) found that employee-owned hypermarkets and small supermarkets outperform those with limited employee ownership and voice.

Cultural aspects seem to be a factor in inter-firm cooperation. Popov, Stoffers and Simonova (2019) established those cultural properties, such as freedom of choice, norms of equal dissemination of power, low perceived uncertainty, strategic orientation and norms of humanistic orientation, foster inter-firm cooperation.

4.2. People engagement

A study based on a series of in-depth interviews conducted with 15 MC managers (Basterretxea & Albizu, 2010a) showed that an active training policy linked to employment protection and flexibility contributes to a competitive advantage (people's involvement).

Some studies have established that Mondragon's management training policy, supported by its corporate training centres, is internally perceived as a source of competitive advantages to cooperatives in the attraction, development and retention of managers (Basterretxea & Albizu, 2010b). In addition to the role of training, mechanisms for participation in co-operative decisions and business results are two of the other key elements for the engagement of people in decisions about the future of the co-operative.

4.3. Size

Size is at the same time a factor for competitiveness and its result. As in Italy, the productivity of Spanish cooperatives is strongly related to enterprise size (OECD, 2021).

In Figure 1, the distribution of the size of Mondragon’s cooperatives in the Basque Country and that of the rest of the cooperatives are shown. The y-axis indicates the percentage of the number of cooperatives in each subset of size in relation to the total number of cooperatives in the category. The basic data were obtained from DIRAE, the economic activity directory of Basque Country.

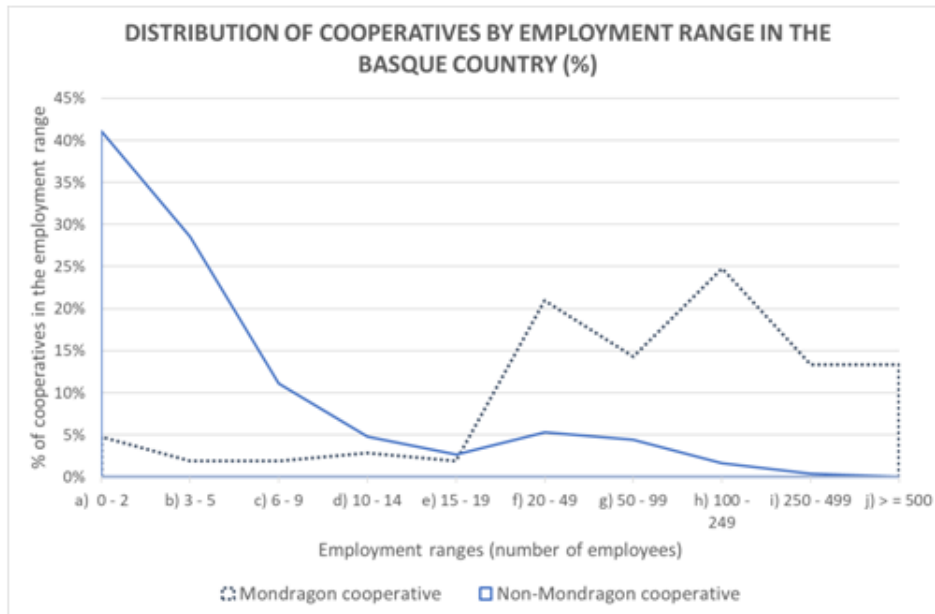


Figure 1. Distribution of Basque cooperatives based on their size

The average size of Mondragon’s cooperatives is higher than that of the remaining cooperatives in Basque Country. While MCs represent 6% of the total number of cooperatives in Basque Country, they constitute 47% of cooperative employment in the region.

4.4. Subsidiary principles

The structure of Mondragon is very different from that of other corporations based on capitalistic control. In the case of MC, the individual cooperatives at the base of the structure have decision-making power over the corporation. Mondragon’s structure is strongly based on the subsidiarity principle, which establishes that a “larger and greater” body should not exercise functions that can be carried out efficiently by a “smaller and lesser” body, but rather the former should support the latter and help coordinate its activity with those of the whole community (Mele, 2004). Considering this, the base cooperatives have knowledge of their markets and the final power over their own decisions and are fully responsible for their profit and loss account, balance sheet and strategic decisions.

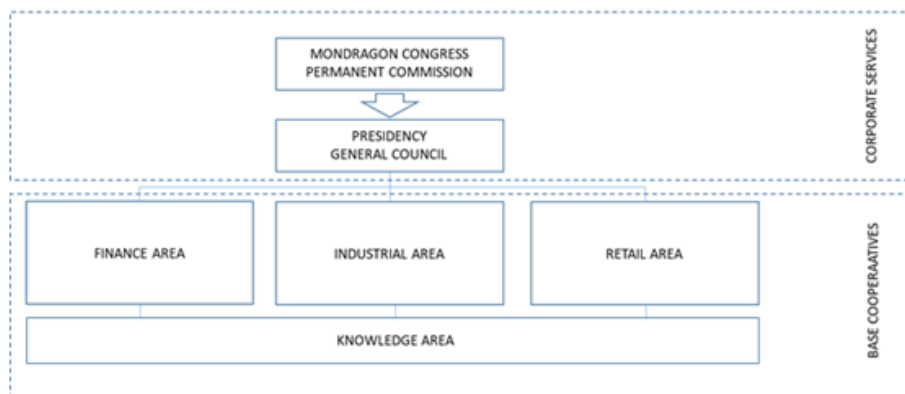


Figure 2. Basic structure of MC

To achieve synergy, cooperatives voluntarily joining MC accept assigning to the corporate services the decision-making power for some aspects, such as basic strategic axis definition, innovation promotion, investment in new markets/projects, financial management, relationship with government bodies, legislative promotion, synergic projects and general support to cooperatives in areas such as training and executive development or common purchasing units (Forcadell, 2005). Thus, some projects that are difficult to promote on an individual cooperative basis can be put in place, adding resources for all members.

4.5. Internationalisation

The capacity for internationalisation is key to achieving high levels of productivity and competitiveness. According to Siedschlag and Zhang (2015), the most recent international trade and investment literature has established that firms with international activities have higher productivity compared to those that serve only domestic markets. MC is a highly internationalised group of cooperatives, with 70% of sales in more than 150 countries other than Spain, more than 15,000 employees in subsidiaries and international offices, 9 corporate offices and 94 production plants. MC supports cooperatives in the international expansion of their markets and the location of new production facilities.

4.6. Inter-cooperative solidarity and financial support

Inter-cooperative solidarity is a key factor that fosters the productivity and competitiveness of MCs. The relocation of people and the restructuring of economic results are two examples of this. The relocation of people allows cooperatives suffering from a low amount of work to relocate some of their workers to other cooperatives where the amount of work is high (Elortza et al., 2012). The contractual relationship remains linked to the cooperative of origin to maintain know-how when the temporary situation is over and the employees return to their initial job. In 2021, 648 people were relocated to MC cooperatives (Mondragon, 2022).

Although relocation brings strengths and worker-members perceive the job security provided by Mondragon positively, it can also be perceived as more precarious, depending on the number of people involved and their qualifications (Santos-Larrazabal & Basterretxea, 2021). Another mechanism of inter-cooperative solidarity is the restructuring of results (a minimum of 13%), which allows for partial compensation for the losses of some cooperatives with the profits of others. Other mechanisms, including the Corporate Solidarity Fund (FSC) and the Inter-cooperative Central Fund (FCI), are also available for cooperatives (Elortza et al., 2012).

These mechanisms of inter-cooperative solidarity are managed by MC and LagunAro, which is a welfare protection scheme for cooperative members created within the cooperative movement as a response to a historical situation of lack of protection (Tkacz, Arando & Pacut, 2015). In 2021, LagunAro had 28,228 members from 122 cooperatives, 15,212 pension beneficiaries and 56,799 healthcare beneficiaries (Mondragon, 2022).

Several projects directly or indirectly contributing to Mondragon's competitiveness are the result of a shared effort based on the ability to join forces and take advantage of the scale of joint action. Providing some examples, these opportunities based on the scale of the corporation are concretised in the existence of a cooperative university (Oliveri, 2012), cooperative technological centres like Ikerlan (Elorza, 2000) or a joint purchase portal like Ategi (2023), created in 2001 to articulate the cooperation on purchases of cooperatives. Ategi mediated an amount of €437M in 2021.

Mondragon also has a new business promotion centre within its structure. During 2021, 25 cooperatives were involved in new business projects and another 45 were involved in the analysis of business opportunities. Eight new companies were created during 2020 and 2021 (Mondragon, 2022). The origin of the promotion of new activities as a corporation came from the creation of LKS (TU Lankide, 1986).

The existence of a financial entity within the corporation has been an element of great added value. Throughout the history of Mondragon, Laboral Kutxa (credit cooperative, formerly called the Caja Laboral Popular) has

played an important role in the development of the corporation's cooperative enterprises. The cooperatives of Mondragon Group are members of Laboral Kutxa.

Laboral Kutxa has contributed to Mondragon's cooperatives through two channels: the financing of the cooperatives' business projects and the contributions to the corporate funds mentioned above. In 2018, the financing of investment in cooperatives amounted to 702 M€ and the contribution through corporate funds was 20 M€ (Laboral Kutxa, 2018)

4.7. Ecosystem for training and innovation

Over decades, MC has created an ecosystem for training and innovation composed of a university, research centres and the R&D units of the cooperatives working together to maintain stakes in the competitive race. At present, this ecosystem employs 2,189 researchers and 14 research centres or R&D units with an annual budget of €189M (Mondragon, 2022).

Moreover, the relevance of the value of innovation, the role of divisions in the management model and the compulsory assigning of funds to R&D contribute to fostering innovation in the cooperatives (Retegi, 2006). Iturrioz, Aragón and Narvaiza (2015) considered MC an excellent example of innovation networks that, supported by cooperative principles, operate efficiently in the market and present a relevant strategic orientation to innovation.

The Mondragon ecosystem for the training of its people is formed by the University of Mondragon, basic and vocational training centres and a corporate training centre for cooperative training that are articulated within the knowledge division. It employs 1,515 people and has a budget of approximately €125M (Mondragon, 2022). Mondragon cooperatives dedicated 788.000 h to training in 2021.

5. Framework development

Shehabudden, Probert, Phaal and Platts (1999) established that a framework supports understanding and the communication of structure and relationship within a system for a defined purpose. In this case, the purpose of the framework is to put into context the relationships among the identified factors for MC competitiveness.

Frameworks are increasingly used within the management discipline as a way of translating complex issues into a simple and analysable format. We consider frameworks to be a good approach to represent the relationships among competitiveness factors of MC and facilitate discussion of this complex issue. In this context, the proposed framework is used to show the underlying assumptions.

The draft framework of MC competitiveness presented in Figure 3 proposes the links and hierarchy between the factors leading to better competitiveness that are described in this paper. In fact, the characteristics describing MC are not independent; certain elements appear as preconditions for the development of others.

As a first hypothesis for further contrast during this research, the draft of the framework was developed by the authors based on the sources of competitive advantage listed by Basterretxea (2011) and Santos-Larrazabal and Basterretxea (2022). This draft framework represents a first hypothesis of the factors explained in the previous section and links them, considering the potential relationships.

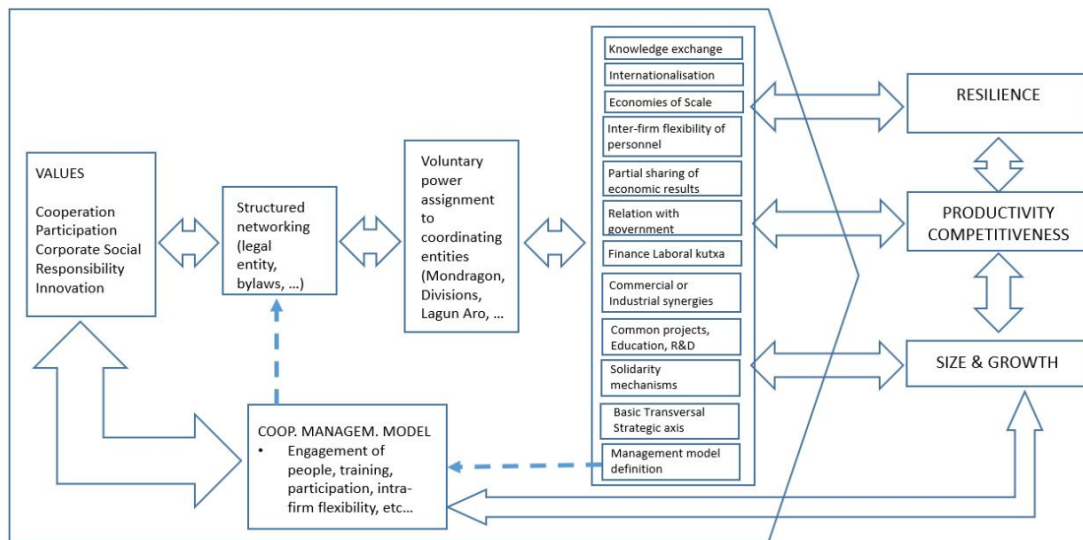


Figure 3. Draft of a framework linking values, synergies and competitiveness

On the left side of the figure, the values agreed upon in MC are presented. These values are the pillars for establishing a management model based on the cooperation, participation and engagement of people that will contribute to the competitiveness of each cooperative.

Moreover, if there is a critical mass of cooperatives and strong leadership, certain basic agreements can be reached to prepare for the establishment of projects and to foster synergies between cooperatives.

If a cooperative agrees to join MC, it accepts the basic rules of inter-cooperative agreements; these include the values, the structured networking supported by legal entities and the corresponding bylaws, the solidarity mechanisms, common projects in the education or R&D areas and the voluntary assignment of power to the coordinating entities of the corporation.

The explicit declaration of these inter-cooperative basic agreements is very relevant. For instance, to be effective, it is not possible to wait for a specific situation to occur to decide on the level of inter-cooperative solidarity to be applied. The different situations and the actions to be taken in the face of these situations must be defined and agreed upon beforehand as precisely as possible.

Moreover, these agreements are located and supported by specific legal entities and corresponding bylaws. Subsidiaries of the corporation or other cooperative participating firms, such as LagunAro, can ensure the respect and development of the basic agreements (Elortza et al., 2012). They are responsible for adapting to any successive legal or context changes during the time of these agreements.

These basic inter-cooperative agreements are central and essential for the development of synergies that lead to further synergies. They build a sense of trust, solidarity and community between the cooperatives. Considering the approval procedures in the cooperatives, a sufficient majority of the individual cooperative members need to share the establishment of these basic agreements.

If these basic agreements are accepted, which is necessary to be part of the corporation, other synergic projects can be promoted, such as R&D joint centres, commercial platforms, lobbying structures related to public administration, internationalisation platforms, joint innovation projects, employee flexibility, and the partial sharing of results and economies of scale, for instance, in purchasing platforms. Such projects have been presented in the previous section.

Finally, regarding the implementation of the proposed framework, the promotion of these inter-enterprise cooperation projects requires a given level of trust between cooperatives and strong leadership at the enterprise level. The implementation of this framework is not a linear process and has cycles of progress and regression,

depending on the projects and the specific situation of the project partners. It is hoped that the development of these requirements will contribute to the productivity, competitiveness and growth of cooperatives.

6. Expert evaluation

Following the proposed methodology, a draft of the framework was evaluated by five experts with good knowledge of the cooperative group at its different levels. This draft was sent to five MC experts with a set of questions and modified to give, as a result, the proposed framework. In the appendix of this article, the background and experience of the experts participating in the contrast phase are presented.

For the selection of the experts, we sought to have people with over 25 years of experience in Mondragon who together covered a wide spectrum of the functions and activities of the corporation.

As can be seen in the appendix, the panel of experts, composed of people of experience and knowledge in the reality of Mondragon, includes expertise from different areas of interest in this research: industrial cooperatives, education cooperatives, corporate services, financial tools, dissemination of cooperative culture, Mondragon's international plants, development of new businesses, technological area, management of people or the financial administrative area. Due to the experience of the panel lists, they have been part of the construction of the ecosystem of Mondragon as it is known today, the panel of experts was suitable for the evaluation and proposition of improvements in the draft framework.

The evaluation was then made by the experts once they received the literature review and the draft of the framework with a set of questions addressing the following topics, among others:

- Does the framework correctly describe the topics that can contribute to the better performance of the cooperatives and their relationship?
- Do you believe that Mondragon's model can be reproduced in other contexts?

These were the main comments of the consulted experts: Expert #1 stated that the framework appropriately represents the main factors that can contribute to better performance. He distinguished among factors that can solve problems in the short term and other factors that give a long-lasting competitive position to the cooperatives. At the short-term level, the partial sharing of economic results, the flexibility of personnel due to the internal tools used in the cooperative and the relocation of people to other cooperatives with a shared set of values are critical factors in understanding the competitive position of MCs. Expert #1 regarded the financial tools as well as investment-participating companies (Mondragon Investments) as critical.

At the long-term level, the shared values and the management model were considered relevant by the expert. This expert agreed that the existence of a university that shares the corporation's ways of adopting cooperative culture is particularly relevant. This leads to a situation in which students finishing their studies and working into the cooperatives share the same culture as that of the firms. Integration is easier in this case, contributing to the better performance of the working teams in the companies. This fact is fostered by the relationship of the university with the firms of the group and the possibility for the students to match their studies with working experience.

Expert #1, with a commercial background, underlined the value of the shared Mondragon brand as a sign of strength and volume before national and international actors. The use of the common brand opens doors to contacts that would be difficult to obtain on an individual firm basis. The consolidation of purchasing capacity as a source of economies of scale is also considered a powerful tool for the group.

Expert #2 mentioned that to reflect the real context of the cooperative group in a framework, the subordinate character of productivity and competitiveness to social responsibility should be included. Corporate tools, such as FSC and FCI, are also important for firms.

Expert #2 also expressed that the leadership necessary to develop a system like that of MC is not only entrepreneurial or firm leadership. It also requires people able to lead with a view of regional development based on cooperative values.

Expert #3 emphasised the importance of the shared will to create value and share it with the surrounding region. He agreed with the proposed framework and made the following observations. It is important to implement a coordination structure that fosters synergies; at the same time, however, it is important to allow individual cooperatives a degree of flexibility that speaks to the plurality of the corporation.

He also mentioned that the response of MC to the big challenges that companies have had to face during the last decade (financial and industrial crises, energy crises, supply chain disruptions and the Ukraine war) has been clearly different from the response offered by the rest of the companies of the Basque Country.

He expressed the need to properly address two main challenges soon: talent acquisition and financing of cooperatives. He stated that to successfully address these challenges, the corporation needs more capacity to propose projects and more power to make decisions. Overall, he observed that the framework represents the links between Mondragon's strength factors for competition.

He mentioned that the answer to the question 'Is it possible to reproduce a model like that of the MC?' can be split into several questions, such as 'Do we have a significant group of people committed to fostering cooperative values?' 'Do we have a common participative and integrating management model?' 'Do we have research and innovation tools to respond to technological challenges?' 'Are the base companies able to balance the individual and common interests?' 'Are the cooperatives managed with pragmatic and realistic financial management?' If the answers to these partial questions are positive, then the possibility of reproducing a model like that of MC can be real. All these questions are addressed in the framework.

Expert #4 observed that the proposed framework represents the reality of MC. He emphasised participation and commitment of the members of the cooperatives, the possibility of creating meta-organisations that are guided by an appropriate set of rules and the inter-cooperation between cooperatives that share markets, regions or technology.

Expert #5 mentioned that the full dedication and professional specialisation of the managers of the cooperatives is a key issue for understanding the alignment between the membership and managerial sides of the cooperatives.

This expert observed that the fact that the cooperative members of an individual cooperative live relatively close to each other makes the actions and benefits of the cooperative in the region more visible to them. This is an important aspect that contributes to the commitment of workers and the balance between individual and community interests.

As a result of these opinions, the framework was adapted and completed. The results are shown in Figure 4.

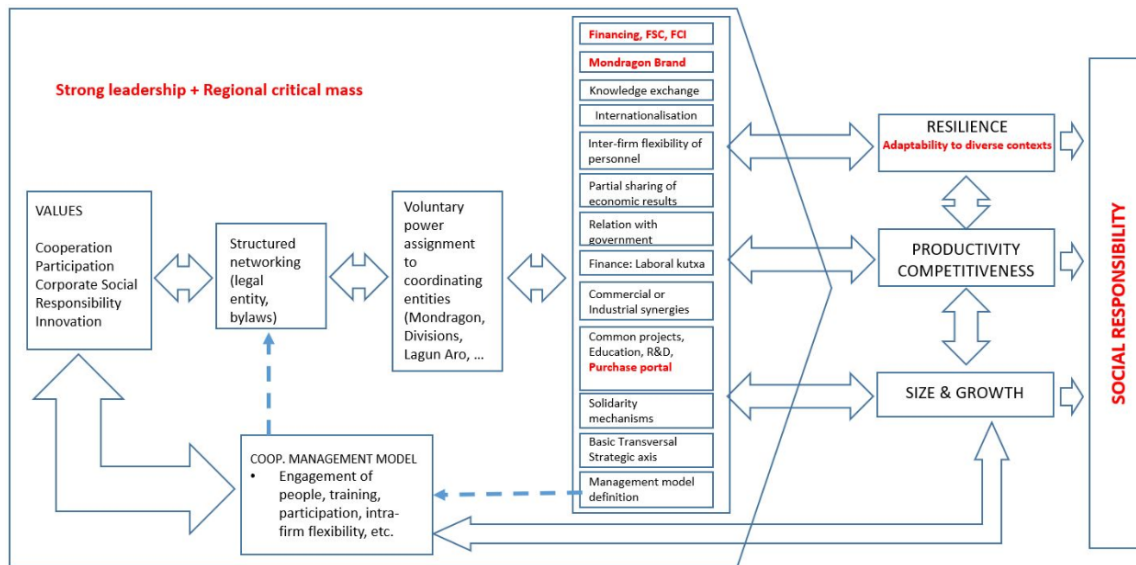


Figure 4. Proposed framework linking values, synergies and competitiveness

As a result of the evaluation of the experts and in addition to the qualitative comments presented in this section, the following main changes were made in the framework:

- The adaptability to diverse contexts, such as geographic location, sectoral characteristics, or historic background, is considered a key aspect.
- The subordinate character of productivity, competitiveness, flexibility, resilience, size and growth to social responsibility as a key value is reflected in the framework.
- The relevance of financing tools in MC, such as FSC and FCI, are included explicitly.
- The value and power of the Mondragon brand is also considered an important asset that is used by the cooperatives when it is appropriate.

7. Discussion and conclusions

In section 3, we presented the research questions related to this study that have not been addressed so far. They are as follows:

- How do the specific aspects that seem to contribute to Mondragon's better performance relate to each other? Are they independent?
- Is this model replicable in other cooperative or social economy contexts? Which are the main substantial aspects necessary to transfer an experience, such as Mondragon's?

Regarding the first research question, we can conclude that the different factors analysed that contribute to the competitiveness of Mondragon cooperatives do not act independently and that they are related. The relationship between inter-firm cooperation and competitiveness is widely found in the literature. In this paper, several seminal references to this conclusion are presented.

The levers through which such collaboration results in better competitiveness, resilience and employment are also collected in the reviewed literature. Among others, sharing knowledge and technology, cooperative research, sharing risks and costs, access to financial resources, flexibility tools, human resources and solidarity mechanisms are mentioned.

We can also state that there are relationships of pre-conditions among the factors. The literature establishes, for example, the need for establishing trust between entities for cooperation between companies to be effective.

Several authors (Todeva & Knoke, 2005; Alves et al., 2016; Tunisini & Marchiori, 2020) have established the need for a suitable strategic fit between firms, the strength of their relationship, level of trust, commitment and relational capabilities. This means that governance and its structure are key issues in cooperation. This fact has been clearly confirmed by experts #3, #4 and #5 when analysing the case of Mondragon. At the long-term level, the shared values and the management model were considered by all the experts to be very relevant. According to experts #1 and #3, in the case of Mondragon, the values of the cooperatives are directly linked with those of their members and special attention should be paid to the management model of cooperatives.

The role of network governance institutions or meta-organisations and their regulative, normative and cultural-cognitive dimensions is very relevant in the long-term performance of a cooperation. This is confirmed by the literature (Ahrne & Brunsson, 2005; Coghlan & Coghlan, 2015; Clauss & Ritala, 2023; Fink & Kessler, 2010) and the opinion of the experts (#2, #4 and #5), which allows us to move from transactional cost-based cooperation to a transformation interaction. The experts (#1 and #2) also stated that this trust is necessary, and that the basic agreements between companies that are collected in statutory documents and managed by third parties are essential for the obtained synergies to become stable over time. In this sense, Chu (2001) concludes that firms combining economic, structural and cultural approaches outperform the rest of the firms.

In a network not based on capital property, there is a challenge when establishing the capacity to propose projects and the decision-making power of the meta-organisation.

In a network based on subsidiarity rather than capital ownership, there is a challenge for the meta-organisation in establishing the project proposal capacity and decision-making power of the meta-organisation.

Leadership was perceived as necessary by the experts (#2, #3, #4 and #5) to develop a system like that of MC, not only entrepreneurial or firm leadership. It requires people able to lead with a view of regional development based on cooperative values.

These relationships of pre-condition are represented in an initial framework hypothesis that is refined with the opinion of the experts, resulting in a final framework of this research. Future research should refine the factors and relationships between them more precisely.

The second research question that has frequently arisen in debates about cooperatives is the reproducibility of a case such as that of MC. As mentioned in this paper, MC is the result of a process that started in the 1950s under specific political, economic and protected market conditions in Spain. In the actual context, these special conditions cannot be met again.

Nevertheless, we asked the experts what are the main factors that should be present in a new experience to be able to reproduce an ecosystem oriented to foster sustainable competitiveness in a network of companies.

According to the proposed framework, there are several basic conditions that must be met to develop an ecosystem like that of MC:

- A critical mass of cooperatives or social economy entities sharing the same values. If the geographic area of the cooperatives has a 'small' extent, it will help clarify the process as a contribution to regional development (Experts #2, #4 and #5).
- Strong leadership to reach basic agreements and establish synergic projects (Experts #2, #3, #4 and #5).
- Time to reach the necessary level of trust between the cooperatives. The process of reaching the necessary level of trust requires time and cooperation on successful projects (Experts #1, #2, #4).

As mentioned before, expert #4 expressed that the answer to the question 'Is it possible to reproduce a model like that of the MC?' can be split into several questions concerning the existence of a critical mass, a management model, R&D entities, and financial tools between others.

There were some issues highlighted by the expert #4, for which we did not find any reflection or collateral reflections in the literature. These elements refer to the specificities of Mondragon regarding a network of non-cooperative enterprises with the philosophy of Mondragon. Considering that in the case of cooperatives, decisions are made by members, the importance of the commitment of individuals to values is key to maintaining trust and structuring cooperation. This requires a strong training effort and a management model at the cooperative and corporate levels consistent with cooperative values.

All the experts underlined the importance of understanding cooperation between companies to impact society from the perspective of transformation and not only from an environmental, economic and social sustainability perspective. They also mentioned the relevance of having a critical mass to have a relevant impact on society.

According to the proposed framework, if these factors are present, the replicability of a model contributing to the productivity of cooperatives can be a reality at present. Now, several questions arise based on the analysis of this framework: Are the basic conditions of values exclusive to social economy firms? Is it possible to replicate these conditions in a non-social economy firm context? Can the government support the creation of these conditions through policy? How does this framework relate to value chain relationships in sectors? Can this framework form the basis for subregional development? Is it possible to develop a partially effective ecosystem developing only part of the cooperation options? These questions can be the subject of future research.

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Appendix

Expert	Background and experience
Expert #1	Age: 50–60 years. Person with initial engineering training and professional development oriented to the commercial field. He has held positions such as the management of a business unit, commercial management, the management of an industrial cooperative, the management of an international subsidiary within Mondragon or the management of a non-cooperative enterprise. About 25 years of experience working at MC.
Expert #2	Age: 60–70 years. Person with initial business administration training. He has served in the Financial Administrative Department of an industrial cooperative. Member of the Governing Council of the company for more than 15 years and member of the governing bodies of meta-organisations. Over 30 years of work experience in the cooperative area of Mondragon.
Expert #3	Age: 75–85 years. Person with initial engineering training. He has performed his duties in the field of education, the corporate sector in Mondragon and in the development of new businesses. During this period, he worked in the public sector. Over 30 years of work experience in the cooperative area of Mondragon.
Expert #4	Age: 50–60 years. Person with initial training in human resources management. He has been active in the corporate sector, including financial funds management, in Mondragon and in the management of industrial cooperatives. Over 30 years of work in the cooperative area of Mondragon.
Expert #5	Age: 50–60 years. Person with initial engineer training and a degree in Sociology. Personnel Manager. Member of a cooperative for more than 10 years. He is involved in Mondragon's cooperative outreach programme. More than 25 years of work experience at MC.

Table 1. Background and experience of experts

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