

# INTER-COOPERATION MECHANISMS IN MONDRAGON: MANAGING THE CRISIS OF FAGOR ELECTRODOMÉSTICOS

Saioa Arando and Iñaki Arenaza Bengoa

## ABSTRACT

*The closure of Fagor Electrodomésticos in October 2013, the most iconic cooperative in the Mondragon Group, not only cast doubt on the economic and social management of the cooperative itself but also called into question the very viability of the overall cooperative model. In addition to describing the evolution of this cooperative in its last years in business, this chapter offers a comprehensive review of the mechanisms of inter-cooperation in the Mondragon Group and the way in which they were applied in the crisis at Fagor Electrodomésticos.*

*The methodology applied is a qualitative research methodology mainly based on semi-structured interviews.*

*The main conclusion of the chapter is that the closure of the cooperative was largely caused by market conditions. The chapter also highlights the validity of the mechanisms of inter-cooperation applied in managing*

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*employment which contributed to a rapid resumption of the employment situation of surplus personnel from Fagor Electrodomésticos.*

*The main contribution of this chapter comprises a detailed description of the methods used by the Mondragon Group to manage employment adjustment at the time of closure of its largest industrial cooperative during the recent general economic crisis (2008–2014), and thus avoid large-scale unemployment, its concomitant problems, and deeper deterioration of social capital in the Mondragon area. Further research is needed to compare this process with other international experiences based on cooperation.*

**Keywords:** Cooperatives; inter-cooperation; crisis; home appliances

## INTRODUCTION

The closure of the Fagor Electrodomésticos Group (hereafter FED) in October 2013, the most iconic cooperative of the Mondragon experience, not only cast doubts on the economic and social management of the cooperative itself but also called into question the viability of the cooperative model in general and the validity of the cooperative principles on which it was built.

Mondragon has always aroused great interest among researchers as a very successful cooperative movement that has shown itself capable of adapting to continuous changes in the market while retaining its intrinsic democratic and social character (Bakaikoa Errasti, & Begiristain, 2004; Whyte and Whyte, 1991). FED was the first cooperative to be set up under the leadership of Jose María Arizmendiarieta, and formed the embryo of the Mondragon Cooperative Experience (Ormaechea, 2003) and its largest industrial cooperative. As a result, FED has been a special appealing subject of study (Errasti et al., 2017).

Following the closure of FED, a number of studies have been published examining the internal and external causes of the firm's failure. From the perspective of degeneration theory, the closure of FED is viewed as a natural process to be expected for a cooperative; according to this theory, the cooperative model is not sustainable in the long term and consequently cooperatives will tend to disappear or be transformed into capitalist companies (Alustiza, 2015). Other studies, however, have concluded that the factors leading to the extinction of the cooperative tended to be the same as those that cause the failure of capitalist firms, and indeed the specific characteristics of the cooperative model (such as labor stability, democracy, solidarity, and inter-cooperation) contribute to a higher survival rate (Errasti et al., 2017).

This chapter, as well as describing the evolution of the FED Group in its final years, seeks to appraise the cooperative principles on which the Mondragon cooperative experience is based, focusing specifically on the principle of inter-cooperation. Inter-cooperation is viewed as one of the pillars of the Mondragon cooperative experience and the one that has historically contributed to the competitiveness of cooperatives through the instruments of business cooperation and to their harmonized evolution, thanks to the mechanisms of solidarity it sets in motion.

This chapter has the following three objectives: (a) To make an exhaustive analysis of the mechanisms of inter-cooperation existing in the Mondragon Group; (b) to describe the evolution of FED in its final years in business, and (c) to analyze how these mechanisms were applied to the crisis at FED, both during its final phase of operations and in the phase subsequent to its closure.

The methodology used to analyze the case of FED is qualitative, mainly based on semi-structured interviews with members of the Department of Human Resources of the Mondragon Group who were involved in managing solutions for surplus members at FED,<sup>1</sup> and on an analysis of internal group reports and public documents relating to the subject.

The chapter is organized as follows: First, we analyze the principle of inter-cooperation within the Mondragon experience and the way it was manifested through different mechanisms of solidarity and instruments of business cooperation. This is followed by a description of the evolution of FED in its final years in business, with economic and financial indicators reflecting its situation at that time. The next section provides a study of the mechanisms of solidarity activated during the final stages of FED, as well as the measures adopted immediately after closure, enabling an assessment of the mechanisms of inter-cooperation that exist in the Mondragon Group. The chapter ends with a series of conclusions based on the lessons derived from the closure of FED.

## **MECHANISMS OF INTER-COOPERATION IN THE MONDRAGON GROUP**

Inter-cooperation has been one of the pillars of the Mondragon experience. Its founder, Jose María Arizmendiarieta, advocated a company model based on solidarity (Altuna, 2008). The mechanisms of intra-cooperative and inter-cooperative solidarity, as well as the strategic cooperation activities created, have contributed to improving the competitiveness of cooperatives in

times of economic prosperity and have mitigated the social damage in times of crisis.

This section briefly describes the evolution of the Mondragon cooperative experience, emphasizing those key milestones from the perspective of inter-cooperation. In addition, a detailed description is given of the various mechanisms of inter-cooperation (mechanisms of solidarity and mechanisms of strategic collaboration) currently in place in the Mondragon Group.

### *History of the Mondragon Experience from the Perspective of Inter-Cooperation*

The Mondragon Group is the second largest cooperative group in Spain (CEPES, 2015). It was created in 1956 with the foundation of Ulgor (later Fagor Electrodomésticos), which adopted the legal form of a cooperative firm three years after it was set up (Mondragon, 2016). The Mondragon cooperative experience immediately began to expand with the creation of new cooperatives such as Arrasate, Fagelectro, Copreci, and Ederlan.

In 1959, Caja Laboral (now Laboral Kutxa, 2016) was created, to address the financing needs of Mondragon cooperatives. In parallel, the social welfare services (Servicios de Provisión Social, now Lagun Aro EPSV) were created to manage healthcare, insurance, and welfare of cooperative members in the light of their ineligibility to get benefits from the general state system of social security. Both organizations have been of key importance in the application of tools of inter-cooperation and solidarity within the Mondragon experience.

In 1965, Ularco was founded; this was the first regional group<sup>2</sup> and the embryo of the industrial cooperative association movement. The creation of the subgroup highlighted the need for institutions that would provide coverage for cooperative plans and projects and for tools for cooperation between different grassroots cooperatives to assist their competitiveness and survival (Grupo Cooperativo Mondragon, 2016). In 1978, at the initiative of Caja Laboral, it was decided to extend this experience, and 14 more regional subgroups were created, thus giving regional form and structure to the group. Within the framework of this organization, a model of regional inter-cooperation was established centering on the socioeconomic development of the region (Altuna, 2008) and the harmonious development of the cooperatives in the regional group.

In spite of the mechanisms of inter-cooperation adopted, the crisis of 1980–1985 highlighted the importance of acting as a group and the need to promote new mechanisms of inter-cooperation in order to ensure the survival

and competitiveness of each of the cooperatives. As a result of this process of deliberation, on March 1, 1985, a group council was formed, known as the Mondragon Cooperative Group<sup>3</sup> to contribute to optimizing social and business performance for the group. In other words, this integration of cooperative enterprises facilitated the pursuit of social objectives, such as employment generation and protection and social capital development as well as business objectives, such as profitability, growth, etc.

In 1987, the Mondragon Cooperative Group held its first congress, at which it approved the basic cooperative principles on which its social and economic project was to be based. These included the principle of inter-cooperation, viewed as “the specific application of solidarity and a prerequisite of the business effectiveness which needed to be shown among cooperatives at an individual level, between subgroups, and between the Mondragon cooperative experience and other Basque cooperatives and other movements elsewhere in Spain, Europe, and the world” (Altuna, 2008).

Another important milestone in the Mondragon experience came in 1991. The third cooperative congress held that year approved the new organizational project known as Mondragon Corporación Cooperativa (MCC). This project advocated the introduction of a sectoral structure and the gradual disappearance of regional subgroups. This preference of sectoral arrangement, still prevalent, was based on the search for better dimension, greater synergies, greater efficiency, and improvements in technological level through the creation of sectoral technology centers. Under this arrangement, 24 subgroups were created, organized into seven industrial divisions, one financial division and one distribution division. The corporate center was also created at the same time to support and sustain cooperatives.

From the perspective of inter-cooperation, this change in organization and philosophy made it necessary to adapt new mechanisms of solidarity, and the model of sectoral inter-cooperation was adopted.

At the same time, in order to adapt to the socioeconomic context at any given time, various inter-cooperative funds were created over time. Of these, the most significant were the Central Inter-Cooperation Fund (CIF), the Inter-Cooperative Education and Promotion Fund (IEPF), and the Inter-Cooperative Solidarity Fund (ISF).

### *Mechanisms of Inter-Cooperation of the Mondragon Group*

Since its origins, inter-cooperation has been one of the pillars of the Mondragon experience project, and therefore there have always been different

mechanisms of inter-cooperation that have been adapted to the socio-economic situation at any given time (Grupo Cooperativo Mondragon, 2016). Some mechanisms are based on the value of solidarity, while others have been created to improve economic results through cooperation in strategic activities at different levels.

Elortza, Alzola, and López (2012) classify the mechanisms of inter-cooperation existing in the Mondragon Group as follows: (a) the mechanisms offered by the support bodies in the financial area and in social protection, and (b) the tools of inter-cooperation such as profit pooling and inter-cooperative funds. In addition, there are other instruments of cooperation that contribute to improvement in the competitiveness of cooperatives at regional, divisional, and corporate levels.<sup>4</sup>

The different mechanisms of inter-cooperation are explained briefly below:

1. *Mechanisms offered by support bodies in financial area and social protection*  
Among the support bodies in the financial area and social protection which contribute to inter-cooperation, the Mondragon Group has the following mechanisms:

- Caja Laboral, now rebranded as Laboral Kutxa (2016), is a credit union that was established in 1959 by the first cooperatives that would later become the Mondragon Group. Its initial mission was to “promote financial support by enrolling members’ savings and the surpluses of cooperatives to channel these resources toward the development of other cooperatives’ (Altuna, 2008).

At the beginning of the Mondragon experience, the cooperatives grouped around the credit union, and although they did not formally constitute a group, they occasionally acted as such. Laboral Kutxa offered necessary financial resources to the “associated” cooperatives. As partner organizations, they had to deposit their surplus amounts with it and conform to the cooperative principles.

The evolution of banking regulation in recent years has obligated Laboral Kutxa to act with full and strictly enforced autonomy in its credit treatment of firms in the Mondragon Group. In other words, Laboral Kutxa must treat credit clients in the group as any other banking entity would; favorable treatment is strictly prohibited. Further, bank regulators strictly limit the portion of Laboral Kutxa’s loan portfolio that may involve Mondragon Group companies.

However, Laboral Kutxa makes a larger contribution to the inter-cooperation funds than other cooperatives in the group: each year it

contributes 30% of its profits to these funds (Laboral Kutxa, 2016), a larger share than other cooperatives.

- Lagun Aro is the institution that offers social protection to the members of the Mondragon Group. Lagun Aro was created in 1959 to address the problems of healthcare, insurance, and unemployment faced by cooperative members and their families due to the fact that they were not eligible to benefits under the general state social security system (Elortza et al., 2012). Lagun Aro is another pillar in the expression of inter-cooperation within the Mondragon Group and it has made an important contribution during the periods in which the cooperatives underwent economic crisis. The “Employment Aid” benefit it offers to cooperative members is a reflection of the values of solidarity, co-responsibility, and inter-cooperation inherent to the philosophy underpinning the Mondragon cooperatives (Lagun Aro, 2017). Within this benefit, Lagun Aro provides five different systems: (a) Demand-based work calendar, that is, a policy that reduces work hours by week/month/quarter during period of projected low demand in the company or business unit and that increases these hours when demand picks up.<sup>5</sup> (b) Relocation, consisting of provisionally or permanently relocating surplus staff to other cooperatives that require labor. (c) Unemployment,<sup>6</sup> the system offered when members cannot continue to work as a result of economic circumstances in their cooperative that are outside their control. (d) Pre-retirement,<sup>7</sup> whereby members aged over 58 years (and in exceptional cases, those over 55 years) can end their career when their services are not needed in their cooperative due to declining demand or when they face difficulty in relocation. (e) Severance compensation.<sup>8</sup> As far as possible, Lagun Aro prioritizes relocation over other systems in the belief that it is the system that most favors the individual member.

The various systems offered by Lagun Aro under the “Employment Aid” benefit have been of key importance in managing surplus staff at different cooperatives facing difficulties. Although the systems offered have remained unchanged, the conditions offered by Lagun Aro have varied depending on the socioeconomic context at any given time.

## 2. *Tools of inter-cooperation such as profit pooling and the inter-cooperative funds*

The most important mechanisms are as follows:

- *Profit pooling.* This is the portion of net surplus before taxes that autonomous and independent cooperatives in Mondragon pool for redistribution among the cooperatives of sectoral divisions (i.e., automotive,

construction, household goods, and machine tools) or regional subgroup (Fagor Group) as a genuine expression of solidarity of the Mondragon Group. Profit pooling serves a dual objective: (a) In business terms, it fosters harmonious development of the cooperatives within the sectoral or regional subgroup, and (b) in social terms, it tends to standardize payment to members in the same subgroup through equitable distribution of positive or negative dividends and seeks to protect job maintenance (Grupo Cooperativo Mondragon, 2016).

Each subgroup, sectoral or regional, has its own rules of profit pooling. For example, in the Fagor regional group the rules governing profit pooling mean that cooperatives with individual profits pool between 15% and 35% of these, whereas cooperatives with losses draw 100% of their losses from the pool (Ibarrondo, 2014).<sup>9</sup> Once the amount to be redistributed has been calculated, the pooling criteria defined by each subgroup are applied.

- *The Central Inter-Cooperation Fund (CIF)*<sup>10</sup>: This fund was created at the Third Cooperative Congress, held in December 1991. This mechanism of solidarity serves a dual objective: on the one hand, it channels resources from cooperatives to strategic projects whose size or associated risk would put them beyond the capabilities of individual cooperatives or subgroups (e.g., internationalization of projects or new activities). The fund also contributes to strengthening the economic situation of cooperatives in crisis, subsidizing their projects to a maximum amount equivalent to 20% of annual losses based on a level of advance payments for labor of 90% of the group's benchmark model (Altuna, 2008).

The amount deposited in this fund comes from the cooperatives of the group. When the fund was established, each cooperative paid an amount of €756 per worker-member, with a subsequent annual contribution of 10% of its profits. Laboral Kutxa, however, paid 20% of its profits to the CIF each year (currently 14%), which considerably raises the amount available in the fund. Since it was created in 2015, the fund has received total provisions of approximately €581,418,000 (Mondragon, 2016a).

The resources in this fund are channelled through MCC Inversiones and Fundación Mondragon.

- *The Inter-Cooperative Education and Promotion Fund (IEPF)*<sup>11</sup>: This fund was created at the Second Cooperative Congress held in 1988 to encourage cooperative and business training and education among members. The fund also supports technological R&D and the education centers within the group.

The fund is supplied from contributions made by cooperatives to the Cooperative Education and Promotion Fund (CEPF)<sup>12</sup>.<sup>13</sup> Indeed, 20%



of the amount that each cooperative endows to the CEPF must go to the IEPF (43% in the case of Laboral Kutxa; Altuna, 2008). Since its creation, this fund has received €119,074,000, which has been channelled through the Fundación Mondragon (Mondragon, 2016a).

- *Inter-Cooperative Solidarity Fund (ISF)*<sup>14</sup>: This fund was approved by the Seventh Mondragon Congress in 2003. It is a specific fund for cooperatives from the industrial area and its purpose is to partially cover the losses suffered by cooperatives in their business areas. Specifically, it can compensate up to 50% of the losses posted by cooperatives. The contributions to this fund are made by the industrial cooperatives which are required to pay 2% of their gross surplus each year. The fund has received €42,970,000 (Mondragon, 2016a), and as in the other cases, the resources are channelled through the Fundación Mondragon.

### 3. *Other instruments of cooperation that contribute to improvement in competitiveness*

In addition to the aforementioned mechanisms of solidarity, there are also other instruments of cooperation at regional, divisional, and corporate levels through which inter-cooperation is structured. These mechanisms involve business processes that would be impossible to take on individually and which contribute to the competitiveness of cooperatives.

At a corporate level, there are various instruments of cooperation. These include Ategi (the Mondragon purchasing platform), Mondragon Internacional, Mondragon Promoción, Mondragon Innovación, the GARAIA Innovation Hub, Mondragon Sustrai, the Promotion Center, and various technology and research centers.

Instruments of cooperation are also established within regional subgroups. For example, the Fagor Group (a regional subgroup comprising the first cooperatives in the Leniz Valley) has mechanisms of cooperation in the financial area (e.g., inter-cooperative loans that allow them to solve financial problems by harnessing the group's internal resources), in the area of human resources (e.g., all regulations relating to this area are pooled), and in the area of brand and patent management (Ibarrondo, 2014).

At the same time, cooperatives in sectoral divisions have established their own mechanisms of inter-cooperation. For example, in the components' division, there are mechanisms that seek a shared structure in the area of transfer technology, innovation, and quality (Ibarrondo, 2014).

## FAGOR ELECTRODOMÉSTICOS: BACKGROUND

The origins of FED go back to 1955 when five former students of the Mondragon vocational college set up ULGOR, a firm producing cooking rings and oil stoves. In 1956, the company moved to Mondragon and became a cooperative in 1958 (Altuna & Urteaga, 2014).

Financial conditions in the region, the commencement of economic liberalization and end of autarchy in Spain, and the beginning of economic growth helped ensure higher-than-predicted profits during the company's early years. As a result, it launched new auxiliary business activities which would later be developed into independent cooperatives.

Although independent, over time these cooperatives formed different regional, sectoral, and corporate subgroups within the Mondragon experience (see previous section), and FED became the largest cooperative in the FAGOR regional subgroup and the Household division (TU Lankide, 1992).

After 50 years of success, FED gradually began to experience crisis as a consequence of major changes in its business environment, and in October 2013, following several difficult months, it declared bankruptcy.

This study examines the trends in some of the economic and financial variables that cast light on the final years of business at FED. Specifically, it seeks to explain the causes of economic and financial deterioration, offering an account of the origins of crisis. However, it is important to acknowledge that – as is always the case – there was no single specific cause; rather it was a combination of events and decisions, some predictable and others circumstantial, that drove FED to a situation in which it was forced to close down.

### *Economic and Financial Figures for the Final Years of FED*

The household appliances industry is characterized by a high level of competition and the dominant position of global companies seeking to minimize costs by increasing the size, and by increasing profit by differentiation and innovation of their products and their customer loyalty (MCA-UGT, 2009). It is a mature market in which growth opportunities depend on the introduction of new products; in this, technological capacity and innovation are essential for opening up new markets (European Commission, 2013). Investment in research, development, and innovation is of key importance in ensuring any firm's future, in which return on investment is directly related to the total amount of resources devoted to research. As a result, larger companies can benefit not only from savings through synergies and economies of scale but

also from their capacity to devote greater amounts of resources to research and development.

The market leaders are global players based in the United States and the European Union, but the year 2000 and thereafter saw a rapid influx of Asian competitors who found the European market particularly attractive because of the high margins it offered. In terms of production, manufacture of small domestic appliances shifted to low-cost countries, but production of higher-value added domestic appliances is less prone to offshoring (European Commission, 2013), and is still to a large extent located in countries with comparatively high labor costs.

In this context, FED enjoyed a good position in Spain, where it had nearly 20% of market share, making it the second largest firm in the domestic market after the BSH (2007) group.<sup>15</sup> In Europe, however, it stood at eighth position in 2003, with just a 2.2% market share, a long way behind the leader BSH with a market share of 19.9% (Mendizabal, Begiristain, & Errasti, 2005). At the same time, as early as in 1988, a “strategy for change” report had identified the need to prioritize reducing the firm’s technological gap compared to the most up-to-date companies in the industry. (Ortega & Uriarte, 2015).

In 2005, more out of necessity than opportunity, Fagor decided to buy out the French firm Brandt. The operation would give it competitive advantages through savings in production and purchases, research and development, and, at the same time, incorporate some of the leading brands in the French market (Mendizabal et al., 2005).

Fagor Electrodomésticos Group bought 90% of Brandt’s capital for €162 million euros, giving it full ownership of the company. This made it the fifth largest European manufacturer in its field, with a market share of close to 6%. Turnover in 2005 came to around €1.8 billion and was estimated to rise to €2 billion in 2006. The firm had a total workforce of around 11,000 personnel, working in 16 production plants in six countries. With 12 brands, its sales extended to 100 countries worldwide (CNMV, 2005).

However, the acquisition of Brandt also entailed significant risks, such as excessive borrowing, need to achieve synergies as soon as possible, and surplus production capacity that made a complicated restructuring process inevitable. Indeed, opposition to drastic cuts in production capacity forced a slowdown in the rate of restructuring (Ortega & Uriarte, 2015), which delayed the achievement of synergies and reduced the firm’s capacity to respond to impending crisis.

The absence of appropriate mechanisms for raising sufficient quantities of cooperative capital and the lack of adequate self-financing forced FED to borrow to cover its business growth. This increased the business risk

and required an immediate improvement in profitability to meet repayment commitments.

Following the takeover and debt issuance, borrowing levels increased to 81%. Although this rate was normally considered excessive, in the context of a growing economy and expectations that the upward trend would continue, the risk was felt to be acceptable. Any investment has to be recovered through increased turnover and a profit margin that exceeds the amount invested. The cash flows obtained during the following years must allow the loans to be paid off within the established period. In other words, the investment made must generate sufficient resources to pay back increased debt within the scheduled period, and moreover generate surplus amount greater than those achieved before the investment was made.

In the short period between the Brandt takeover and the onset of financial crisis (2005–2007), sales and value-added increased, productivity and operating margins improved, and the high level of debt began to fall. Improvements in the EBITDA<sup>16</sup> led to a drop in the “net financial debt/EBITDA”<sup>17</sup> ratio (commonly used in financial covenants), fuelling expectations of a successful outcome of operation. Nonetheless, the high debt rate caused the level of financing expenses affecting considerably the annual profits.

### *The Crisis*

Among other effects, the crisis that began in 2008 led to a drop in house prices and a paralyzing of construction of new homes in Spain. This led to a fall in sales of fitted kitchens. In this recessionary context, the demand for new kitchen appliances fell dramatically. At the same time, customers tended to put off replacing old appliances, but when they opted, they generally chose lower-range equipment.

In its main market, i.e., Spain, two important factors led to fall in FED’s sales: price and number of units. Reduction in demand and aggressive entry of new competitors from Asia pushed prices down, leading to a reduction in market prices, essentially in the medium–low-range units. Since FED could not match these prices, its sales fell more rapidly than the industry average, with a 41.8% drop in the number of units sold between 2008 and 2012. Over the same period, prices also fell by 5.3% (Administración Concursal, 2014).

It was not only in Spain that sales of household appliances fell; in the European Union as a whole, production fell by an annual average of 4.8% during the period 2008–2012, while value added and employment dropped by 2.6% and 2.1% per year respectively. In all, 18,000 jobs were lost in the

industry during the period, representing 8% of total year 2008 employment figures. Job losses were spread unevenly across the European Union, with disproportionately high numbers in northern and southern Europe, and an actual rise in employment in the industry in central European economies, particularly in Poland (European Commission, 2013).

As a result of the contraction of the European market, manufacturers tried to make up for lost sales through exports, which increased by an annual average of 0.7% during the period 2008–2012. Nonetheless, as a result of the aggressive policies of Asian manufacturers, imports during the same period rose by 5.2% per year (European Commission, 2013). In all, competition in the industry in Spain and Europe intensified, putting downward pressure on prices and pushing firms that were already in a delicate situation to breaking point.

During the period 2007–2012, FED's sales fell by 33%. Together with an increase in the cost of raw materials, this led to a 47% reduction in its gross margin. Over the entire period, the slow restructuring process led to layoffs of the same order as fall in sales (33%), but the cut in personnel costs came to only 23%. As a result, in spite of cuts in structural costs, the EBITDA slipped into negative. The EBITDA-to-sales ratio dropped from 4.4% in 2007 to –2.60% in 2012. Lack of business profitability and an urgent need to cut borrowing made rapid and profound restructuring inevitable (CNMV, 2004–2013).

During the years studied here, borrowing levels remained well above the recommended values. Borrowing is a measure of the proportion of debt to total assets. Values of over 0.6 are considered excessive because of the difficulty of paying back the debt within the scheduled periods and the loss of financial autonomy. At the onset of the crisis, FED's borrowing ratio stood at a worrying 0.81. By the end of 2012 it had risen to 0.97, placing the company on the verge of bankruptcy. This development was due to the business's inability to generate positive cash flows; instead of generating cash which could be used to pay back the debt, the business was consuming cash and had to go further into debt to continue functioning.

Every year, the net financial debt/EBITDA ratio was above the recommended level due to high debt and low EBITDA. The recommended value is 3–3.5, but during the years of crisis at FED, it was between 9 and 10.7, reflecting a range of problems in meeting its debt. This was a consequence of high levels of borrowing on the one hand, and of declining EBITDA on the other, which reflected the business's lack of profitability and its inability to generate cash necessary to pay off the debt. This would have hindered any future negotiations on the possible refinancing of the debt, since it entailed a breach of covenants signed with creditors.

In 2012 and 2013, the net financial debt/EBITDA ratio turned negative, indicating a clear inability to pay back the debt at any time.

Fagor Electrodomésticos Group's strategy plan for 2013–2016 approved the downsizing of activities with a view to improving internal efficiency and competitiveness. One of the consequences was that from now on, only products with the greatest value addition would be manufactured in high-cost countries (TU Lankide, 2012). This would probably mean closing down some plants and moving production to low-cost countries. Areas affected would include the refrigerator and washer businesses, which were not proving profitable in Basque plants. However, there were other businesses of greater value addition, essentially in the cooking division, where it was felt that competitive advantages might make local manufacture viable. While the competition reacted swiftly, FED delayed in completing these plans, retaining 65–70% of its production in high-cost countries (Ortega & Uriarte, 2015).

#### *Final Phase*

Cash flow stress resulting from the business' lack of profitability was a constant feature of FED's final months in business. This lack of profitability prevented the company from obtaining sufficient cash flows to meet all its debts within the operating cycle, such as debts with trade creditors, suppliers, and workers. In the years following the start of the crisis, only in 2009 and 2011 were cash flows from operating activities positive. This meant that not only long-term repayment of the debt but even comfortable maintenance of operating activities was no longer viable. This lack of financial resources was covered by an increase in borrowing, which, in light of sales trends, showed no sign of falling.

The last stage in FED's financial deterioration was lack of liquidity; its creditors lost confidence in the firm's capacity to pay and blocked all deliveries of materials and services needed for its operations.

When it finally closed, FED had 1,895 worker-members signed up to Lagun Aro and 108 temporary non-member employees (Insolvency Administration, 2014). As Ortega and Uriarte (2015) report, the closure directly affected the jobs of the members and workers at FED. However, it also entailed the loss of capital and savings of unemployed members and small investors external to the cooperative, the destruction of indirect employment, and, in a broader sense, it affected the mood of cooperative community as a whole.

The following section gives a comprehensive description of the Mondragon Group's inter-cooperation mechanisms activated during the FED crisis and following its closure, showing the cogency of cooperative principles.

## MANAGEMENT OF THE CRISIS: THE MECHANISMS OF INTER-COOPERATION

The events described in the last paragraph illustrate the complicated situation facing FED in its final years of business and at the time of its closure. In many ways, it dealt with its economic and financial affairs during those last years in much the same way as any non-cooperative organization would have done. However, human resources management during the actual stage of crisis was entirely different from that of capitalist organizations in serious difficulties. As a result of the mechanisms of inter-cooperation described above, and those created specifically to deal with the situation at FED, the social implications were different for both members and wider region. During the period under analysis, FED benefited from the services offered by these inter-cooperation mechanisms, some activated before the closure of the cooperative and others after it. Key aspects of FED's behavior in consonance with the Mondragon group seem similar to those of Japanese *keiretsu*, in particular in their efforts to relocate FED worker-members in other group firms during the crisis period and following the bankruptcy (Kato, 2001).<sup>18</sup>

The aim of this section is to describe the practical application of the Mondragon Group's inter-cooperation mechanisms in crises as those suffered by FED to demonstrate their legitimacy.

### *Application of Inter-Cooperation Mechanisms Before the Closure of FED*

As discussed above, the years leading up to closure were complicated for FED. During this time, a number of inter-cooperation mechanisms were activated from which FED benefited: It received large amounts from various inter-cooperation funds in the corporation; extraordinary funds were created to alleviate the complicated situation at FED; the profit-pooling criteria were activated up to their maximum limit; and the instruments in Lagun Aro's "Employment Aid" benefit were applied.

*Economic aid received by FED included the following:*

- Corporate Funds Destined to FED

The Mondragon Group used its inter-cooperative and solidarity instruments to the maximum degree and to the limit of its possibilities (Mondragon, 2015b). Indeed, out of the existing inter-cooperation funds, it awarded €300 million in credits and risks. Table 1 shows a breakdown of the amount received by FED from corporate funds.

**Table 1.** Breakdown of the Credits and Risks Awarded to FED from Corporate Funds.

Financing Line	Amount (€)
Capital holdings	82 m
Loans	174 m
Sureties and guarantees	44 m
Total	300 m

Source: Mondragon (2015b).

- Funds from the Fagor Group<sup>19</sup>

Throughout the ongoing crisis at FED, the cooperatives in the Fagor Group supported FED through all their available mechanisms (Ortega & Uriarte, 2015). During 2008–2013, the Fagor Group awarded €31 million to FED through profit pooling<sup>20</sup> and employment aid mechanisms available at Fagor Group that consist in transferring workers to other cooperatives in the group (Mondragon, 2015b). In addition, members of the Fagor cooperatives agreed to reduce their consumer advances (similar to salary) by around 10% to standardize the loss of consumer advances to FED members (Ortega & Uriarte, 2015). Finally, several cooperatives awarded loans to FED that could not be refunded, and awarded credit as FED suppliers.

This effort by the cooperatives in the Fagor Group and its cooperative members during the period was unprecedented and was exemplary of inter-cooperation at regional subgroup level. Indeed, Ortega and Uriarte (2015) quote one executive from a Fagor cooperative as estimating that each member in the Fagor Group contributed somewhere between €15,000 and €26,000 to the process at FED.

The effort on the part of the Fagor Group helped offset the financial distress at FED, although some critics believe that these solidarity mechanisms may have contributed to a general perception among members at the company that it was in no major difficulty (Ibarrondo, 2014).

- *Ekimen Berri*

Another mechanism of inter-cooperation activated before the closure of FED was the initiative known as *Ekimen Berri*. In 2011, FED required large amounts of liquidity to meet the debts it had contracted with various financial institutions. As a means of obtaining this liquidity, the company decided to enter into a “sale and lease-back” operation. This involved



selling two industrial premises to Ekimen Berri for €55 million and simultaneously renting them back with a final purchase option.

The Mondragon Group's involvement in this operation was crucial; Ekimen Berri was created by Fundación Mondragon to channel FED's financial operation. Ekimen Berri ran up a debt of €63.4 million (€55 million + VAT<sup>21</sup>), with a bank loan of €48.4 million and another €15 million loan from Mondragon Inversiones.

- **Extraordinary Funds: the Restructuring and Member Employment Fund**

The existing inter-cooperation mechanisms were not enough to meet all of FED's financial requirements. Given this difficult situation, the Mondragon Congress held on May 13, 2013 approved the creation of an extraordinary fund known as the Restructuring and Member Employment Fund (RMEF<sup>22</sup>). At that time, it was estimated that FED needed immediate additional funding of €70 million. However, because the cooperatives could not make immediate provisions to the fund, and FED's funding requirements necessitated an advance of the total amount at that moment, the Fundación Mondragon awarded a €70-million loan to FED. The corporation and the cooperatives undertook to make annual provisions to the RMEF, which would act as a guarantee to the Fundación Mondragon in case of breach of the obligations of amortization and/or repayment of the loan by FED.

In 2013 autumn, FED once again requested extraordinary financial aid from the Mondragon Group, but on this occasion the financial aid was refused.

- **Lagun Aro's "Employment Aid" Benefit**

As has occurred at other moments of crises, Lagun Aro made all the systems available in the "Employment Aid" benefit available to FED. During FED's final years in business, demand-based working calendar was applied on downward basis and, in addition, numerous relocations were organized and important retirement plans were put in place. Although specific data on application of the "Employment Aid" benefit are not available, it is known that between 2005 and 2012, average employment in the FED Group fell by 44% (from 10,163 to 5,673), while in the FED facilities in Mondragon, the workforce was cut by 53% (from 3,479 to 1,628). The inter-cooperation mechanisms (i.e., demand-based working calendar, relocation, unemployment aid, pre-retirement, and severance compensation) offered by Lagun Aro were decisive in the departure of members – mainly those employed at the Mondragon facilities – from the firm.

*Inter-Cooperation Mechanisms Following Closure*

As discussed above, when FED went out of business in October 2013, 1,895 workers became unemployed. Mondragon prioritized managing the position of these workers and designed an immediate action plan to deal with the situation.

One of the key actions in this process was the creation of an employment office to find solutions for each of the 1,895 workers made redundant. The office comprised head of the area of human resources at Mondragon and its collaborators, staff from the personnel department at FED, and a representative from Lagun Aro. The employment office decided on three areas of action (Mondragon, 2015a): (a) First, it opted to create jobs in other cooperatives through the insourcing of previously outsourced activities and the creation of new activities of added value; (b) second, it stated the need for a comprehensive search for relocation possibilities for surplus members in other cooperatives; and (c) it created educational programs for surplus members with difficulties in relocation, designed to reskill them to the profiles required by the cooperatives of the group.

Once the employment office had identified its areas of action, employment supply and demand in the Mondragon Group was analyzed. A thorough diagnosis was made for the supply of unemployed personnel, and criteria were established for selecting personnel for relocation. A file was created for each person, giving their level of training, experience fitting the job, languages, and availability to travel or change of residence. This was combined with an employment profile created using a professional tool estimate primary personality characteristics and cognitive ability to predict workplace behavior. Personnel who met the requirements of vacant posts were chosen on the basis of seniority.

In parallel, Mondragon's social management department made a study of the possible demand for employment among cooperatives in the group and other external cooperatives participating in the Lagun Aro procedure. The study also weighed each cooperative's commitment to take on surplus members from FED (albeit on a temporary basis). To this end, they were asked to plan and anticipate finalization of non-fixed contracts and to report results to employment office so that when these contracts end, the office could assess whether the vacancies could be filled by unemployed personnel from FED.

Immediately after the launch of the employment office, the cooperative Udalaiz S. Coop<sup>23</sup> was created. Udalaiz was an instrumental cooperative with the aim to offer legal coverage to unemployed members by guaranteeing receipt of Lagun Aro EPSV's employment aid benefits. It also assisted the

employment office in the administrative management required in relocating members benefiting from these benefits (Lagun Aro, 2017).

Once the employment supply and demand diagnosis had been completed and possible forms of action for handling unemployment had been identified, the employment office began working to find solutions for each of the person involved in the shortest possible time. The forms of action identified included the different systems offered by Lagun Aro through its “Employment Aid” benefit and others specifically devised for the situation arising out of the closure of FED (e.g., creation of new activities, solutions for personnel with difficulties for re-employment, etc.).

Through its “Employment Aid” benefit, Lagun Aro contributed significantly to resolving the unemployment situation of a large proportion of FED members. The systems most frequently applied were relocation, pre-retirement, and early retirement.

The system most often used for managing surplus members was relocation in other cooperatives (see Table 3). Based on its diagnosis of demand, the employment office sought to relocate as many members as possible in the shortest time. In the words of one member of the human resources management department at Mondragon, they asked the cooperatives to show generosity, and the response from the majority was very favorable; as a result, with minimum management by Lagun Aro, many members from FED were successfully relocated. Initially, most workers were relocated on temporary basis. However, as time passed, the number of permanent relocations increased markedly.

While it is true that Lagun Aro’s regulations require that members in structural unemployment should be given preference over temporary workers and temporary members when covering a vacancy in any cooperative, they showed flexibility and in very few cases was the change traumatic. The main difficulty in relocating unemployed members was that other than this regulation, there was no executive authority, and the relocation policy depended on the goodwill of the cooperatives that had vacancies.

Another example of the “Employment Aid” benefits was pre-retirement for staff aged 55 years or above. The aim was to encourage as many personnel as possible in this age group to sign up to the measure. The figures show that the response was positive (see Table 3). Pre-retirees received 80% of the consumer advance they had previously received from FED and were required to take early retirement at 60 years, with the penalties involved.

Although a priori the measure did not seem economically attractive, it proved to be effective; after a few months, when employment increased in the group, the pre-retirees were offered their jobs back, but only one person opted to return to the cooperative.

In addition, the forms of action established in Lagun Aro's "Employment Aid" benefit, the employment office also identified other possible paths for resolving the unemployment of surplus members from FED. These included the creation of new activities. Specifically, cooperative Sareteknika was created in October 2014. This was an organization focusing on offering after-sales services for household appliances, which in 2015 employed 21 former members of FED (Mondragon, 2015a).

Besides creating new activities, it is important to recognize that the purchase of former facilities by CNA-CATA also contributed to resolving the unemployment situation of several surplus members from FED. Indeed, the new firm, located in Mondragon, hired former FED workers to re-start part of FED's business. CNA-CATA is a household appliance firm which is not a member of the Mondragon Group. Thus, in principle, workers joining the new firm would have left the group and would no longer be covered by the Lagun Aro system. However, Lagun Aro decided to create a specific coverage network for these workers and the former Lagun Aro members were offered the possibility of returning to the cooperative system. They have been offered to take this option till December 2017, and those who decide to leave CNA-CATA will directly enter the lists of those eligible for relocation in other cooperatives. In addition, in the event of any of these workers being laid off by CNA-CATA before December 2017, they can return to the cooperative system and be relocated in other cooperatives.

Finally, mention should also be made of the way in which the employment office dealt with the group of workers with difficulties of re-employment. Among those unemployed, there were a small number of people who were having difficulties of re-employment for varying reasons of functional diversity, and health or social issues. This group was dealt with on a separate, individualized basis, with a view to finding vacancies in other cooperatives.

Management of this group also received support from Lagun Aro. Indeed, given the difficulty of relocating this group, Lagun Aro approved the creation of subsidized jobs in which it would meet part of the cost of the consumer advance when a cooperative agreed permanent relocation of any such member.

Among those considered to have difficulties of re-employment or relocation, there were some who had either no educational qualifications or had education not aligned with the needs of cooperatives. In order to improve employability and extend the skills of these personnel, Mondragon organized a vocational retraining plan (TU Lankide, 2015) comprising a three-year program, preceded by a one-year transitional course for those without formal qualifications.<sup>24</sup> The project was co-financed by the Basque Government and Lagun Aro and run in collaboration with various vocational education colleges in the region.

**Table 2.** Surplus Members of FED Enrolled in the Educational programs Offered by Mondragon.

Academic Year	Number of Persons Enrolled			
	Transition Course	1st Course	2nd Course	3rd Course
14–15	–	52	–	–
15–16	–	24	42	–
16–17	19	36	23	41

Source: Mondragon Group.

After closure, this training program was presented to 340 staff members of FED, of whom initially only a small number actually enrolled (see Table 2).

Although initially the program was not taken up as widely as expected, over time more people from this group recognized its value and consequently new members were enrolled every year.

From a social perspective, the various mechanisms established for dealing with unemployment had excellent results. As can be seen in Table 3, 92% of personnel had found solution for their unemployment in three years; 53% had been temporarily or permanently relocated; 28% had opted for early retirement or pre-retirement; and 11% had begun work at CNA-CATA.

At the beginning of 2017, only 8% people were still in a situation of structural unemployment. Nonetheless, given the cyclical nature of labor demand, the number of people unemployed varies from 150 during periods of low demand to 50 at time of high labor demand.

The figures given in Table 3 suggest that the mechanisms of inter-cooperation adopted following the closure of FED dramatically reduced its social consequences. The magnitude of the crisis led some to question the Mondragon Group's capacity to provide a solidarity-based response.

**Table 3.** Managed Solutions for Unemployed FED Members.

FED Members (Udalaitz + Edesa)	December 13	December 14	December 15	December 16
Solutions	671	1,510	1,731	1,750
Relocations (permanent + temporary)	671	1,062	1,084	1,012
Pre-retirement and early retirement		336	480	526
CNA Group		112	167	212
Pending	1,224	385	164	145

Source: Mondragon (2015b).

However, the extremely high degree of commitment shown by other cooperatives managed to efficiently resolve the process which could have developed into a serious economic and social problem for the Mondragon valley had the inter-cooperation mechanisms of the cooperative group not existed.

*Post-Closure Lessons: Aspects to Encourage and Factors of Success*

There are a number of lessons to be learned from the economic and financial crises triggered in 2008 in general, and the closure of FED and its subsequent management in particular. Mondragon has undertaken to put these lessons into practice in its next strategic cycle (Mondragon, 2016b). A debate has also begun on the weaknesses of the cooperative model and its relevance in today's society; this has served to establish the challenges and dilemmas of the future cooperative movement and learn from the experiences of the past. The aim of this section is to describe the lessons learnt from the FED crisis.

One of the main messages learned from the process is that in order to cope with the increasingly complex challenges facing organizations, the Mondragon Group “needs more cooperativism” (Mondragon, 2015b). Mondragon proposes to respond to these challenges by reinforcing its cooperative culture without questioning cooperative principles and values but focusing on certain values and practices, including inter-cooperation.

This inter-cooperation must be viewed in its broadest sense and must extend not only to cooperation between the cooperative firms in the Corporation but also to other cooperatives outside it. It is also proposed to encourage inter-cooperation between cooperatives and any other firm or business and social organization which is felt to be capable of contributing to achieving the cooperative's business and social objectives (Mondragon, 2016a). This way of viewing inter-cooperation, better adapted to the present socioeconomic context, is broader than that defined in the first congress of the Mondragon cooperative group, since it opens doors to inter-cooperation beyond various regional, national, or global cooperative movements, allowing for strategic collaboration with any public or private organization that can contribute to achieving the aims of the cooperatives in the group.

Alongside its encouragement of inter-cooperation, the Mondragon Group has also advanced in the way it views solidarity, which historically has been very closely tied with the concept of inter-cooperation. The crises at FED have shown that solidarity has sometimes been viewed as an unconditional value and there has been a shortage of mechanisms for making demands on cooperatives receiving funds from the solidarity mechanisms. Mondragon

considers that in the future it is necessary to encourage “responsible solidarity,” with mechanisms for making demands on organizations receiving aid, guaranteeing that collective resources are used properly and in projects that achieve the best social and economic results. Linked to this concept of responsible solidarity, Mondragon also considers that the mechanisms of solidarity should be used to alleviate the transitory difficulties that a cooperative may face and not to perpetuate its structural problems.

Together with inter-cooperation, social transformation is another area to which Mondragon is committed in the future. Indeed, social transformation has been another pillar of cooperative experience (Ortega & Uriarte, 2015). Nonetheless, in recent years, slowdown in the development of this concept has been identified (Mondragon, 2016a). The mechanisms of inter-cooperation must contribute to the social transformation that seeks “to leave a legacy to future generations by committing to projects that are close to cooperative members and their social environment, in which members have an opportunity to participate and that are open to collaboration with other agents in order to be able to extend their transformative effect” (Mondragon, 2016a). These initiatives will generally be local in focus, in close geographic proximity to where cooperative operations are located, and aimed at economic and community development. They might include initiatives directed, for example, to fighting poverty, providing education and training for local unemployed youth, promotion of minority languages and cultures, environmental and protection, and the like. These initiatives will, in addition, seek to build long-term local capacity for the future project development and implementation.

In addition to inter-cooperation, “responsible solidarity,” and social transformation, Mondragon has identified another two key aspects that need to be addressed in the future – (self)exigency and (co)responsibility,<sup>25</sup> and improvement in good cooperative government<sup>26</sup> – which it sees as being the keys to the cooperative group’s economic and social competitiveness.

However, arising out of the crises at FED, Mondragon also conducted a diagnosis of the existing instruments of inter-cooperation, identifying certain deficiencies and limitations. The lessons learnt from this process of deliberation were that the inter-cooperation mechanisms of the future must help to reinforce the competitive position of cooperatives and contribute to promote their business projects, aiding their expansion and growth, and fostering the harmonious development of cooperatives by mitigating the influence of economic cycles and homogenizing payment to worker-members in a solidarity-based fashion and contributing to the development of the present and the future society (Mondragon, 2016a).

To achieve all these goals, the Mondragon Congress held on July 20, 2016 proposed a new model of inter-cooperation mechanism based on just two funds: the Cohesion and Development Fund (CDF) and the Corporate Expansion Fund (CEF). The funds of CDF will go to promoting the cohesion and development of cooperative experience (e.g., compensation of losses, training, funding of center for new business ideas, promotion, R&D, new activities, etc.) and will be managed by the Fundación Mondragon. The funds of CEF will go to financing development, expansion, innovation, and internationalization of projects as well as supporting the creation of new activities. In some cases, the fund will be divisional in scope, and in others, interdivisional.

The process of reflection on the management of surplus personnel that started three years after the closure of FED, has identified a number of factors of success. The most notable aspect of the post-closure management has been the large proportion of unemployed FED members for whom solutions have been found. By the end of 2016, 92% former FED members were no longer unemployed. The key to the success of the management of unemployed personnel was put in the process that was designed for this purpose. The creation of employment office and its immediate implementation, the detailed diagnosis of the existing supply of employment, and the analysis of demand for labor in other cooperatives and their commitment to integrating surplus members from FED were the key factors that contributed to the success of the process. This experience highlights the possible future importance for the group of knowing at all times the profile of employees in the group and the profiles demanded by the cooperatives. When necessary, this would speed up the process of dealing with unemployed personnel.

## CONCLUSIONS

The investigation conducted has enabled the understanding of the evolution of FED in its final stage and the role played by the Mondragon Group's inter-cooperation mechanisms in managing FED crises both before and after its closure.

Based on this analysis of the evolution of the final phase of FED, it may be concluded that the closure of cooperative was largely due to the market situation and was not the result of cooperative model itself, as degeneration theory would suggest. Indeed, capitalist competitors in the industry moved their low-value added production to low-cost countries, and there was a significant fall in employment in the industry in northern and southern Europe arising out of the restructuring and closure of a number of plants.



Application of the mechanisms of inter-cooperation shows the importance of the principle of inter-cooperation in managing crises in cooperative models. Application of these mechanisms during the final phase of FED's business helped mitigate the effects of crises on employment. The funds from the "Employment Aid" benefit offered by Lagun Aro meant that the layoffs at FED did not have drastic consequences on the members from cooperative.

At the same time, the Mondragon Group in general and the Fagor Group in particular made an unprecedented effort through different inter-cooperation mechanisms, confirming that the spirit of cooperation and solidarity remains effective in an increasingly individualistic economic and social context. However, it should be noted that the large funds channelled to FED may have concealed from its members the full gravity of company's situation. This is an aspect that should be taken into account in the future.

Application of inter-cooperation mechanisms following the closure also contributed to the achievement of some notable social benefits. Three years after the closure of FED, permanent or temporary solutions had been found for 92% of FED's surplus members. In addition, alternative action plans were prepared for the personnel having difficulties in obtaining permanent arrangements (e.g., training plans, possibility of returning to the cooperative system for workers who had joined CNA-CATA).

Finally, it should be noted that the way unemployment was dealt with successfully following the company's closure limited the extension of its effects to society in general. Indeed, impact on public accounts was minimal. Unemployment benefits for surplus FED members were financed internally through the Lagun Aro schemes. Moreover, the number of people out of work in the region did not increase significantly following closure of the firm, demonstrating the capacity of the cooperative model to manage the crisis internally.

All these factors highlight the importance of the principle of inter-cooperation in cooperative movement and at the same time show the professionalism of cooperative model in managing social aspects during crises.

## NOTES

1. The following people were interviewed for the study:

- Zigor Ezpeleta (Director of Human Resources of the Mondragon Group)
- Iñaki Belaustegi (Department of Human Resources of the Mondragon Group)
- Iñigo Iñurrategi (Department of Human Resources of the Mondragon Group)

2. *Translator's note:* In Spanish, *agrupación comarcal*. A *comarca* is an administrative subdivision of a province, usually comprising various municipalities.

3. The Mondragon cooperative group, established in 1985, was the embryo of Mondragón Corporación Cooperativa, set up in 1991.

4. The regional intercooperation mechanisms are applied among cooperatives that have, historically, formed part of a regional subgroup within Mondragon, that is, co-ops that joined together for these and related business purposes because they were located in close geographical proximity. By contrast, the sectoral-divisional intercooperation mechanisms are applied among cooperatives in the same division, that is, cooperatives that compete in the same or similar industrial sectors, use similar technologies, have similar clients, and the like. Finally, the intercooperation mechanisms at the corporate level are applied to all the cooperatives in the Mondragon group.

5. In the case of the demand-based working calendar, Lagun Aro covers 80% of the monthly consumer advance (similar to salary) plus 100% of the welfare advance (similar to social security contribution) corresponding to the hours not worked and not subsequently recovered.

6. In the case of unemployment, while Lagun Aro and the member search for relocation opportunities and for a period lasting for up to two years, Lagun Aro pays 80% of the member's consumer advance and 100% of her/his welfare advance (roughly, the social security contribution). Cooperatives in difficulties can top up the benefit to up to 90% of the consumer advance.

7. Under this system, the member receives annual benefits from Lagun Aro until her/his 60th birthday in amounts equivalent to 12 monthly instalments of 60% of the monthly consumer advance plus 100% of the welfare advance (the social security contribution). The cooperative can top up the benefit to up to 80% of the consumer advance. At the age 60, the member enters the second phase of early retirement and her/his benefit then depends on the member's contributions to Lagun Aro over the course of her/his career.

8. In this case Lagun Aro pays a flat rate that basically depends on the length of time the member has been paying to Lagun-Aro, EPSV. The cooperative is free to top up this benefit.

9. After the crisis, these rules changed, and currently the cooperatives with individual profits pool between 15% and 40% of these, whereas cooperatives with losses can draw up to 200% of their losses.

10. For readers interested in further information on the topic, the name of this fund in Spanish is *Fondo Central de Intercooperación*, abbreviated as FCI.

11. For readers interested in further information on the topic, the name of the fund in Spanish is *Fondo de Educación y Promoción Intercooperativa*, abbreviated as FEPI.

12. The name of the fund in Spanish is *Fondo de Educación y Promoción Cooperativo*, abbreviated as FEPC.

13. Article 67 of the Basque Cooperatives Act (Act 4/1993, of June 24, 1993 governing the cooperatives of the Basque Country) establishes that cooperatives must contribute 10% of available surpluses for a year to the Cooperative Education and Promotion Fund (CEPF).

14. The name of the fund in Spanish is *Fondo de Solidaridad Intercooperativo*, abbreviated as FSI.

15. BSH Home Appliances Group. European leader in the household appliances market. Its main brands are Bosch and Siemens.

16. EBITDA: Earnings before Interest, Taxes, Depreciation, and Amortization.

17. Net Financial debt/EBITDA. Ratio used to measure a company's capacity to meet its financial debt based on its generation of profits. It is recommended that it should be kept below 3.5.

18. A more in-depth comparative analysis of human resource practices in this regard would be interesting for both literature and HR managers in Mondragon, Japan, and elsewhere. Space limitations and the authors' lack of familiarity with the *keiretsu* model make such an analysis difficult here.

19. The Fagor Group is the regional group to which Fagor Electrodomésticos belonged. Besides FED itself, the group comprises the following cooperatives: Copreci, Fagor Arrasate, Fagor Industrial, Fagor Ederlan, Fagor Electrónica, Mondragon Assembly, and Fagor Automation.

20. In addition to using the pooled amounts to alleviate the situation at FED, the cooperatives in the Fagor Group undertook to retain profit pooling at 35%, the maximum limit.

21. VAT: Value Added Tax. Indirect tax levied on consumption.

22. For reader interested in further information on the topic, the name of the fund in Spanish is *Fondo de Reestructuración y Empleo Societario*, abbreviated as FRES.

23. Udalaiz is an instrumental cooperative. Although it is an associated-labor cooperative, it has no workers of its own and its purpose was to offer legal coverage to former members of Fagor Electrodomésticos, S Coop., Fagor Hometek, S Coop., and Ibai, S. Coop.

24. Although the training plan was designed as a result of the closure of FED, personnel from other cooperatives in a similar situation were also eligible to take part.

25. The crisis at FED has revealed a feeling of complacency or lack of sufficient commitment among a significant number of members in an environment which is ever more competitive and demanding. A complex context requires a culture in which people accept a high level of commitment to the shared project. This requires worker-members to make self-exigent decisions on issues such as profit distribution, levels of advances, and economic targets that influence the competitiveness of the cooperative.

26. Another of the dysfunctionalities identified in the process at FED relates to the working of cooperative bodies (governing council, management council, and social council). In several cases, these organs have failed to act with the rigor and responsibility demanded by the circumstances (Ortega & Uriarte, 2015). In order to prevent such inefficiency, Mondragon proposes to work in a number of different ways. These include (Mondragon, 2016a) analyzing the possibility of co-opting external experts onto the governing council as consultants; providing training to executives and members of the governing and social councils to optimize their performance; defining the skills, roles, and responsibilities of the profiles of executives and members of the governing and social councils and developing tools to assess their performance.

## REFERENCES

- Administración Concursal. (2014). *Informe de la administración concursal Fagor Electrodomésticos, S. Coop.* Donostia/San Sebastián, Spain. unpublished document.
- Altuna, L. (Ed.) (2008). *La experiencia cooperativa de Mondragon: Una síntesis general.* Lanki, Eskoriatza, Gipuzkoa.

- Altuna, R., & Urteaga, E. (2014). Los inicios de la experiencia cooperativa Mondragón. *Revesco*, 115, 101–131.
- Alustiza, A. (2015). El impacto de la crisis de Fagor en el cooperativismo vasco. *Boletín de la Asociación Internacional de Derecho Cooperativo*, 49, 321–338.
- Bakaikoa, B., Errasti, A., & Begiristain A. (2004). Governance of the Mondragon Corporación Cooperativa. *Annals of Public and Cooperative Economics*, 75(1), 61–87.
- BSH. (2007). *Disponibile*. Retrieved from [www.bshgroup.info/laender/es/index.php?download=1856&file=103256383](http://www.bshgroup.info/laender/es/index.php?download=1856&file=103256383). Accessed on 24/4/2017
- Comisión Nacional de Mercado de Valores (CNMV). (2004–2013). *Cuentas anuales consolidadas. Fagor electrodomésticos, S. coop. disponible*. Retrieved from <https://www.cnmv.es/portal/Consultas/IFA/ListadoIFA.aspx?id=0&nif=F-20020517>. Accessed on 05/06/2015
- Comisión Nacional de Mercado de Valores (CNMV). (2005). *Hechos relevantes. Fagor electrodomésticos, S. coop. Transmisiones y adquisiciones de participaciones societarias*. Retrieved from <https://www.cnmv.es/portal/HR/verDoc.axd?t={bd6fc950-ebf3-4ee1-a243-9afc6e44626a}>. Accessed on 05/06/2015
- Confederación Empresarial Española de la Economía Social (CEPES). (2015). Retrieved from [https://www.cepes.es/social/ranking\\_global&tipo=5&fd=NaN&fa=NaN&ed=NaN&ea=NaN&year=2015](https://www.cepes.es/social/ranking_global&tipo=5&fd=NaN&fa=NaN&ed=NaN&ea=NaN&year=2015) accessed: 24/04/2017
- Elortza, N., Alzola, I., & López, U. (2012). La Gestión de la crisis en la Corporación Mondragón. *Ekonomiaz*, 79, 54–81.
- Errasti, A., Bretos, I., Nunez, A. (2017). The viability of cooperatives: the fall of Mondragon Cooperative Fagor. *Review of Radical Political Economics*, 49(2), 181–197.
- European Commission. (2013). *Study on the competitiveness of the electrical and electronic engineering industry*. Bruselas, Spain: European Commission. Retrieved from [http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item\\_id=8666&lang=en](http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item_id=8666&lang=en). Accessed 20/04/2017
- Gobierno Vasco (Departamento de Empleo y Políticas Sociales). (2016). *10. Ley de Cooperativas de Euskadi*. Retrieved from [http://www.gizartelan.ejgv.euskadi.eus/r45-content/es/contenidos/proyecto\\_ley/xleg\\_pyley\\_10/es\\_pyley\\_10/pyley\\_10.html](http://www.gizartelan.ejgv.euskadi.eus/r45-content/es/contenidos/proyecto_ley/xleg_pyley_10/es_pyley_10/pyley_10.html). Accessed on 24/04/2017
- Ibarrondo, I. (2014). *Una comparativa de las agrupaciones cooperativas del entorno. Fase de diagnóstico de la situación actual del Grupo Fagor*. Master's Final Project, Mondragon Unibertsitatea, Mondragon, Spain.
- Kato, T. (2001). The end of lifetime employment in Japan? Evidence from national surveys and field research. *Journal of the Japanese and International Economies*, 15, 489–514.
- Laboral Kutxa. (2016). *Laboral Kutxa: Historia y reflexiones estratégicas ante la crisis financiera actual*. Internal document, Laboral Kutxa.
- Lagun Aro. (2017). Retrieved from <https://www.lagunaro.es/ataria2/prestaciones;jsessionid=93F8268981FCD157F64FF16E31D03A55> Accessed on 24/04/2017
- MCA-UGT. (2009). *El sector de electrodomésticos de línea blanca*. Observatorio Industrial del Sector de Bienes de Equipo, 2009.
- Mendizabal, A., Begiristain, A., & Errasti, A. (2005). Deslocalizaciones y empleo cooperativo. El caso de Fagor Electrodomésticos, S.coop. *Revista de Economía Pública, Social y Cooperativa (CIRIEC-España)*, 52, 237–266.
- Mondragon. (2015a). *La gestión del desempleo en la coyuntura actual*. Internal document, Mondragon.
- Mondragon. (2015b). *Mondragon: Referente en solidaridad e intercooperación, comprometido con la sociedad y el empleo*. Internal document, Mondragon.

- Mondragon. (2016). *Mondragon 1956–2016: Un viaje por los hitos de la historia del Grupo Cooperativo, Mondragon*. Mondragon: Grupo Cooperativo.
- Mondragon. (2016a). *Mondragon del futuro*. Internal document, Mondragon.
- Mondragon. (2016b). *Política Socioempresarial 2017–2020*. Internal document, Mondragon.
- Ormaechea, J. M. (Ed.). (2003). *Medio siglo de la experiencia cooperativa de Mondragon*. Otalora, Aretxabaleta.
- Ortega, I., & Uriarte, L. (2015). Retos y dilemas del cooperativismo Mondragon: Tras la crisis de Fagor Electrodomésticos. *Cuadernos de Lanki*, nº 10, Eskoriatza.
- TU Lankide. (1992). MCC, organización empresarial. *TU Lankide* (Otalora), 354, 24–25. Retrieved from [http://www.tulankide.com/en/print-edition?set\\_language=en](http://www.tulankide.com/en/print-edition?set_language=en) Accessed on 06/03/2017
- TU Lankide. (2012). El Grupo Fagor Electrodomésticos aprueba su plan estratégico para los próximos cuatro años. Editado por Otalora. *TU Lankide*, 584, 17. Retrieved from [http://www.tulankide.com/en/print-edition?set\\_language=en](http://www.tulankide.com/en/print-edition?set_language=en) Accessed on 06/03/2017
- TU Lankide. (2015). La formación dirigida a personas en activo como apuesta de futuro. Editado por Otalora. *TU Lankide*, 594, 50–51. Retrieved from [http://www.tulankide.com/en/print-edition?set\\_language=en](http://www.tulankide.com/en/print-edition?set_language=en) Accessed 06/03/2017
- Whyte, W. F., & Whyte, K. K. (Eds.). (1991). *Making Mondragon: The growth and dynamics of the worker cooperative complex* (2nd ed.). Ithaca, NY: ILR Press, Cornell University.