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# Assessing Mondragon: Stability & Managed Change in the Face of Globalization

By: Saioa Arando, Fred Freundlich, Monica Gago, Derek C. Jones and Takao Kato

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**Abstract**

By drawing on new interview evidence gathered during several field trips and new financial and economic data from both external and internal sources, we document and assess the changing economic importance and performance of the Mondragon group of cooperatives as well as the two largest sectors within the group. Compared to conventional firms in the Basque Country and Spain, and producer co-ops (PCs) and employee owned firms elsewhere, in general we find evidence of growing group importance and strong performance and a similarly strong record for the industrial and retail divisions. These stylized facts do not support hypotheses concerning PCs such as predictions that PCs will restrict employment and become progressively comparatively undercapitalized. In accounting for this record, we highlight key and, at times, not uncontroversial institutional developments in the group during the last 20 years or so that indicate the existence of a continuing capacity for institutional adaptation in Mondragon--an ongoing ability to innovate and make institutional adjustments to deal with emerging challenges. In addition, we provide more detailed information than before on some key distinguishing institutional mechanisms of the Mondragon group, including the extent of worker-member transfers during economic crises, the patterns of profit pooling and the type and volume of training. The aggressive and extensive use of these and related mechanisms, themselves formulated and refined only after a deliberative democratic process, may help to account for some of the outstanding features of the Mondragon group record. Overall these findings represent suggestive evidence that groups of employee-owned firms are feasible and sustainable organizational forms; in a world of declining labor power and tepid employment recovery by private firms, the institutional arrangements at Mondragon are worthy of deeper study by many including policy-makers, other co-ops and other employee-owned firms.

Key words: employee ownership, producer cooperatives, labor managed firm, productive efficiency, Mondragon

JEL Codes: J54; P50; L20

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* Mondragon Innovation & Knowledge (MIK), S.Coop. a research center at - Enpresagintza - Mondragon Unibertsitatea, 20560 Oñate, SPAIN. Email: sarando@mik.es, mgago@eteo.mondragon.edu, ffreundlich@eteo.mondragon.edu

****** Dept. Economics, Hamilton College, Clinton NY 13323; e-mail: djones@hamilton.edu

*** Dept. Economics, Colgate University, Hamilton, NY; Email: tkato@colgate.edu

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## Introduction

The recent economic crisis has stimulated much interest amongst researchers and policy makers in the possibilities of alternative ways to structure economic organizations. One option is worker or producer cooperatives (hereafter, PCs.)[1]The Mondragon group is one of the best-known examples of “real -world” PCs. Founded in 1956 with some 25 workers in the Basque Country of Spain, Mondragon was originally a group of mainly industrial cooperatives. Subsequently the group has grown to include firms in other areas, notably retail and finance, and, by 2008, the Mondragon group comprised about 250 cooperatives, subsidiaries and affiliated organizations, including 73 manufacturing plants overseas, altogether employing almost 100,000. Membership has always been closely linked with employee ownership and, in the early decades, essentially only and all workers were members. Membership provides a guarantee of employment, relocation or 80% of salary during times of slack demand as well as the right to participate in the firm’s General Assembly, vote for and serve on electoral bodies, and receive a share of profits. However, as we discuss below, often membership is a more complicated matter today, especially in the retail group which includes Eroski, a hybrid consumer-worker cooperative. Other distinguishing features at Mondragon include provision for profit pooling and a rich set of institutions to support primary firms.

This Mondragon experience has long attracted interest by diverse scholars on varied matters (e.g., Johnson and Whyte (1977), Bradley and Gelb (1982), Cheney (1999) and Dow, (2003) ) and sometimes has been presented as a kind of “exemplary model” as regards feasible alternative enterprise forms in today’s globalized economy (e.g., Sacrey et al., 2008). At the same time, the nature and scope of work on Mondragon, especially recent work by economists, is quite limited. In part this reflects restrictions on economic and financial data which has meant that most studies today are somewhat dated and often highly aggregative (e.g. Thomas and Logan, 1982). Also, many studies do not take account of the astonishing changes in the Mondragon structure that have occurred during the last twenty years or so, while other recent accounts tend to focus only on a particular theme (e.g. Joshi and Smith 2008.) Finally, while many accounts highlight specific features of the Mondragon system of co-ops , such as, under certain conditions, the ability of member-workers to be transferred among co-ops, most accounts of these crucial mechanisms often lack substantive detail concerning the operation of these distinguishing institutions. In this paper, which is one of a series forthcoming from the authors (see also Arando et al, 2010a, 2010b), we begin to redress some of the aforementioned shortcomings of the literature. We draw on evidence derived from more than twenty interviews with key actors at Mondragon conducted between 2007 and 2010, and also financial and economic data, including new data made available to us from Mondragon.

After briefly reviewing theoretical and empirical work on PCs, in the third section we attempt to improve on the available evidence concerning the importance and performance of the Mondragon co-ops. Our focus is on the overall *group* of co-ops as well as for the groups' two key sectors -- the industrial co-ops and the retail chain. By using diverse kinds of data, we document a growing economic presence within and without Spain, as well as a group record that suggests strong performance.

To better understand the reasons behind this strong group record, in the fourth section we argue that Mondragon's ability to be institutionally adaptive (e.g. Moye, 1993) continues to play a major part in sustaining the success of the group. In facilitating that adaptability, we also argue that it is the essential democratic nature of the Mondragon set-up that enables measured and effective adjustments to be continuously undertaken and at a lower cost than competitors in conventional firms. To support this claim, we highlight key institutional developments in the Mondragon group during the last twenty years or so and provide more detailed information than hitherto on the scope and nature of some of the key distinguishing institutional mechanisms of the Mondragon group. These include the extent of worker-member transfers, the patterns of profit pooling and the type and volume of training. It is our contention that it is the aggressive use of these and other mechanisms that help to account for key features of the Mondragon strong group record.

**Theoretical and Empirical Evidence on Producer Cooperatives**

In this section our discussion is organized around some of the main themes that are evident in the economics literature on PCs (e.g. Bonin et al., 1993; Dow, 2003). One major area of interest to economic theorists is whether mechanisms within PCs [2] , such as employee ownership and/or participation in decision-making, will lead to employees supplying efficient effort, testing the proposition that democratic firms suffer from only modest shirking by employees, and ultimately achieve high levels of output. A large literature has emerged to empirically examine these links in PCs, and a commonly favored approach to test this and similar hypotheses has been to use individual firm data and augment a standard production function by a vector of ownership and participation variables (e.g. Estrin, Jones and Svejnar, 1987). Typically the null hypothesis that the various forms of ownership participation taken together do not affect productivity is rejected. (e.g. Dow, 2003).

Another key concern is employment. A vast body of theoretical work was triggered by a seminal paper by Ward (1958) in which a PC was believed to maximise per capita income of worker-members rather than total profits, as in a capitalist firm. A key finding emerging from this early model is that, relative to a capitalist twin, the PC will tend to have smaller levels of employment and for employment to vary inversely with product price. Most subsequent theoretical work overturned the pessimistic conclusions that resulted from this simple model. Also, the more rigorous empirical inquiries, notably Craig and Pencavel (1992) for US plywood firms, Pencavel et al., (2006) for Italian PCs and Burdin and Dean (2009) for co-ops in Uruguay, find that PCs have more stable employment, and provide no evidence of short run inefficiencies or perverse supply curves.

The way in which capital requirements are financed and the resulting structure of ownership of the firm's assets are matters that have attracted the interest of many researchers, especially students of PCs where the issues are particularly interesting since assets may be owned by members individually or collectively, and sometimes by by non-member financiers. The non-transferability of ownership rights in many PCs has led some theorists to argue that PCs will face persistent underinvestment. However, empirical support for such predictions is weak (e.g. Jones and Backus, 1977), a finding that many find unsurprising since many real world co-operatives have implemented specific institutional designs to ameliorate potential problems that theorists have identified. In another line of inquiry, researchers have analyzed the tendency of PCs to transform themselves into organizations within which control rights are vested in a small number of worker-members (e.g. Ben-Ner, 1984). As with other key issues, there is a disconnect between early theory and empirics, and most empirical work has *not* found strong evidence in support of this degeneration thesis (e.g. Estrin and Jones, 1992 for France.)

Based on this brief review, we make three observations. First, reflecting the dominant neoclassical approach in economics, the vast majority of empirical work has been structured to test hypotheses relating to the behavior of the *average or* representative cooperative compared to a comparable capitalist firm. However, if PCs, through mechanisms such as profit pooling and member-transfers, are closely integrated, as is the case for Mondragon, then arguably it is also important to investigate aspects of behavior for the overall *group* of closely integrated co-ops. Second, very little empirical work by economists has been informed by the Mondragon experience: the most influential empirical papers investigate other PCs. Third, most investigations by economists of the Mondragon experience (e.g. Bradley and Gelb, 1985) were undertaken when the institutional set-up was quite different from what we observe today. In the following section, we examine more recent evidence on the importance and performance of the Mondragon co-ops. While we do not pursue a formal hypothesis testing approach, we do provide evidence that relates to the broader themes that are evident in the theoretical and empirical literature on PCs.

**The Mondragon Record**

The conventional wisdom is that the Mondragon group is economically important --Mondragon itself reports that it is “the seventh largest consortium in Spain”

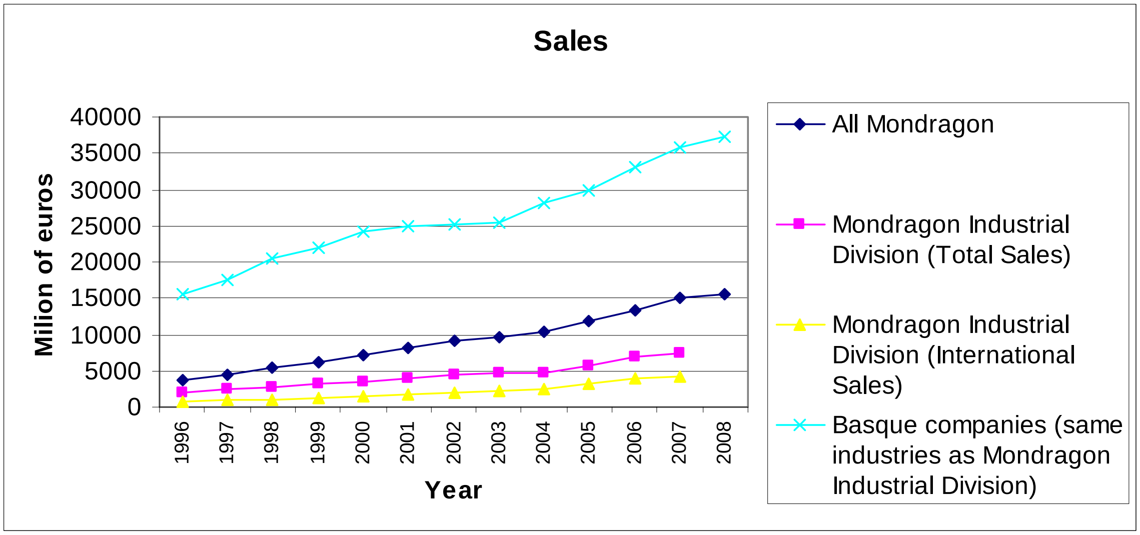
(Mondragon Annual Report, 2007.) One indicator of performance is the oft-quoted remark that no members have ever been made redundant at Mondragon (e.g. Moye, 1993:253). However, empirical support for claims that relate to *comparative* performance is often slim. Hence in this section, to try to present a more detailed picture of these issues, we report economic data on basic indicators such as sales and employment.

Our evidence includes information derived from public sources such as Mondragon annual reports and similar financial data that are available for major parts of the group, such as the Eroski Group, the main firm in Mondragon´s retail group. We also draw on a proprietary data set that covers the Mondragon industrial co-ops during1995-2005 and has been supplied to us by Mondragon. In endeavoring to make comparisons of importance and performance with comparable capitalist firms, we draw on official data, including data from the Basque National Statistics Office (EUSTAT), as well as data that have been used in other contexts.[3] .Throughout this discussion, we are well aware of the statistical limits of these types of comparative exercises. Consequently, great caution must be exercised when drawing conclusions based on such comparisons.

*Sales and Productivity*

One source we draw on to document the record for the overall *group* of Mondragon co-ops concerning basic indicators such as output/sales is Mondragon annual reports. Figure 1 reveals a picture of sustained and rapid growth in sales for the Mondragon group, at least until late 2007 with the onset of the current global recession.

Figure 1. Sales for Mondragon and Basque Companies




Sources: Mondragon Annual Reports, internal data set and Eustat

In trying to see how this growth record for the Mondragon co-op group compares with that for conventional firms in Spain, in its 2007 Annual Report, Mondragon reports that, since its inception, Mondragon has grown to become the largest group in the Basque Country (as well as the seventh largest in Spain). When comparisons with other co-ops in Spain are made, the Mondragon group is the largest co-op from the perspective of sales (and employment). Moreover, five of the ten largest individual cooperatives in Spain belong to the Mondragon group, including the two largest, Eroski and Caja Laboral. Turning to comparisons with co-ops elsewhere, including PCs, a list assembled by the ICA (www.global300.coop), indicates that in 2008 the Mondragon co-ops was the ninth largest group of co-ops in the world and that ranking has moved up one place since the list was first compiled in 2004.

Turning to the Mondragon industrial group, based on our internal data, in Figure 1 we see a record of growing sales. In Figure 1 we also compare that record with the record for sales for all types of firms within the Basque economy, where comparisons are restricted to those sectors within which Mondragon firms operate .[4] These comparisons show that there was a more rapid rate of growth of sales in Mondragon firms compared to conventional firms in the same sectors— Mondragon co-ops' sales grew by more than 213% whereas Basque company sales grew by about 140% during 1996-2008. This is reflected in growth in the comparative importance of Mondragon industrial sales relative to total Basque sales in the same industries. Whereas in 1996 that ratio was 13.3%, by 2007 it had grown to 20.8%.[5]

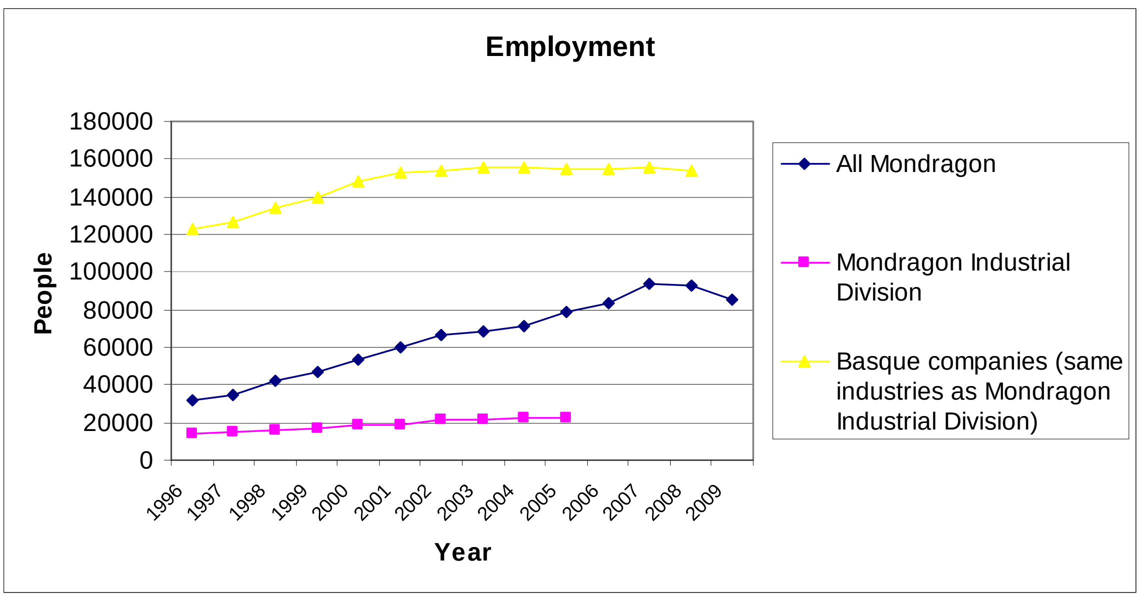
When the record for Eroski**,** the retail chain, is examined, the Eroski Annual Report states that the Eroski Group sales were 8.42 billion euros in 2009, compared with 6.36 billion euros in 2006. That record compares favorably with comparable conventional retail companies. Based on sales, Eroski is now the third largest retail chain in Spain (INDISA, 2007-2008). Also, based on sales, if we break out Eroski from the Mondragon group, Eroski, which is a hybrid producer-consumer cooperative, is now also the biggest Spanish cooperative (see www.cepes.es.) A recent global ranking of retailing firms (Deloitte, 2010) signals the growth in importance of the Eroski Group -- in 2009 Eroski was ranked as the 76th largest retail chain in the world, a gain of 16 positions in one year.[6] . Finally, we can also make comparisons with the sales record for other well known examples of employee ownership in the retail sector, such as the John Lewis Partnership in the UK. Between 2006 and 2009, the sales figures reported in the JLP annual report indicate growth in nominal sales of about 21%; this compares with 32.4% for the Eroski Group. For a longer period, 2003-2008, Eroski's sales grew 11.4 % per annum, compared with a comparable figure for John Lewis of 6.9% (Deloitte, 2010.) Also, whereas in 2008 the ICA data rank John Lewis as the 18th largest coop/mutual in the world, if we break out the Eroski data from the data for the Mondragon group, Eroski alone had sales that would have ranked it ahead of John Lewis.

In sum, while the available evidence on comparative sales is far from perfect, it seems reasonable to conclude that, by this indicator, the Mondragon group and its major divisions have become more economically significant actors in recent years. While assessing comparative performance is a trickier task (in part because of differing rates of acquisitions) it also appears that, on the basis of sales, the Mondragon group has performed well, especially compared to conventional firms and co-ops elsewhere. This record of strong growth in sales/output is consistent with those who argue that in PCs, which combine high levels of participation and employee ownership, powerful incentive mechanisms exist which can be expected to lead to high levels of productivity. Moreover, in another study (Arando et al., 2010a) we use *micro-econometric* data -- store-level data for the population of stores within Eroski-- to formally test this hypothesis. Our preliminary findings provide evidence in support of the proposition that firms with substantial employee ownership (the Eroski Group's co-op stores) have higher productivity than stores with significantly less employee ownership (the Group's Gespa stores) and stores with conventional ownership structures (i.e. no employee ownership). [7]

*Employment*

Recent evidence on the employment record for Mondragon co-ops is limited and dated, although Luzarraga et al., (2008) is an exception.[8] To help to plug this gap, we first look at total employment in Mondragon firms since 1983, provided by Mondragon Annual Reports. The data show that sales have almost registered a fivehold growth in total employment during 1983-2007 and a tripling during the last ten years of that period. There have, however, been some reversals since the current recession began, and overall employment has shrunk by about 9.3% since 2007. But this still compares favourably with developments in Spain and the Basque country. Whereas from 2003 to 2009 overall Mondragon employment in Spain increased by 17%, during the same period, total employment in Spain has increased 13% and in the Basque Country only about 1%.[9] .

FIGURE 2 Overall Employment in MONDRAGON and the Basque Country




Sources: Mondragon Annual Reports, Internal data set, Eustat.

Compared to other cooperatives, the share of total employment in Mondragon co-ops located in Spain over employment in cooperatives in Spain increased from 19% in 2003 to 24% in 2009.

Turning to the industrial group at Mondragon, by using the internal data and focusing on employment in the Basque region, from Figure 2 we see that from 1996 to 2005 total employment grew by about 64%. While this is substantial, it is still less rosy than the overall group picture discussed above. This group picture includes job growth overseas as well as in other sectors, notably retail, with employment in the Eroski chain growing from 29,192 employees in 2003 to 52,711 in 2009, a gain of more than 80% in six years.

Figure 2 also shows evolution of employment in conventional firms in the Basque Country in sectors in which there are Mondragon co-ops. Comparative performance during 1996 -2005 reflects a better performance for Mondragon industrial co-ops -- overall job growth for conventional firms was 29%, about half the rate experienced by Mondragon industrial co-ops. Consequently, whereas in 1996 employment in industrial co-ops in Mondragon in the Basque country accounted for 8.1% of total employment, by 2005 this had increased to 10.3%.

The last issue we consider for industrial co-ops, is the relationship between employment in Mondragon industrial co-ops in Spain and how this is potentially affected by employment in co-op plants overseas. The best available study on this matter to date is Luzarraga et al., (2008) which provides interesting detail concerning the history of this internationalization process. They note that the first Mondragon industrial co-op to establish an overseas plant was COPRECI in 1989 and that by 2006 25 co-ops had overseas operations in 65 productive plants employing 14,601 workers. Importantly, they find that between 1999 and 2006 employment growth *in Spain* in the group of Mondragon co-ops with overseas plants was more than twice as high as growth in employment in Mondragon industrial co-ops that did not have overseas operations (Luzarraga et al, 2008:18)

Finally, we consider the way that co-op employment has responded during economic crises. During earlier crises, Bradley and Gelb (1987) find that Mondragon co-ops experienced far fewer job losses than did private companies. For the current crisis, beginning in 2008, the picture is not as detailed as one might wish, although we do know some things. Based on our interviews, as well as data available at the Basque National Statistical Office (EUSTAT), it appears that because of insufficient demand for members' labor, by 2009, fewer than 200 of more than 20,000 co-op *members* in industrial co-ops were temporarily not at their workplaces, although they still received 80% of their regular wages. This evidence of a modest amount of furloughs for members is reinforced by Basterretxea and Albizu (2009b) who report that, for the whole Mondragon group in 2008, only 12 members were dismissed with compensation, 96 worker-members took early retirement, and about 350 workers worked fewer hours (averaging about 160 hours fewer per worker member per year, or approximately 10% of a full-time post). At most, two firms faced a threat of closure or temporarily shut down. As such, this reinforces evidence from previous periods that has documented the rarity of Mondragon co-op closures and has established a lower failure rate in Mondragon enterprises than in private firms (e.g. Ellerman, 1984.)

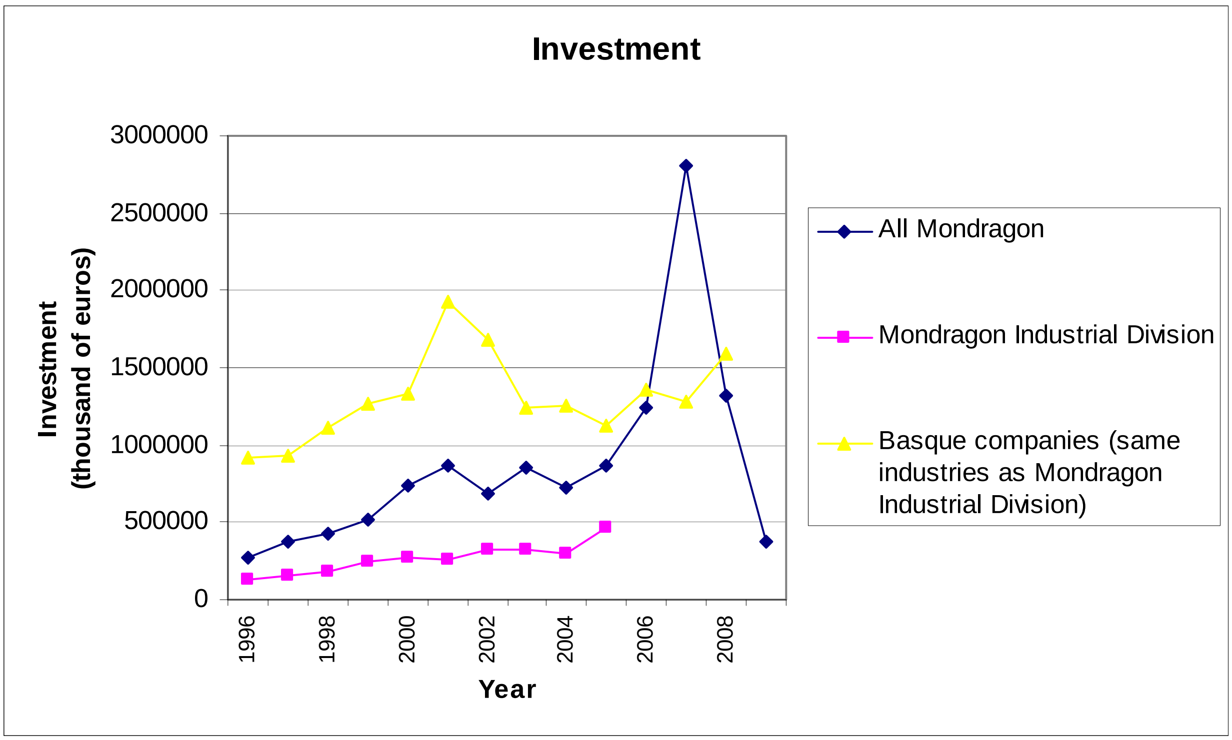
When employment in co-ops has contracted -- from Figure 2 we see that since 2007 total employment in the Mondragon group has fallen by about 9.3% -- it is clear that the brunt of such adjustments fell on the shoulders of temporary and non-member workers. But even this volume of layoffs probably compares favorably with the record of conventional firms in Spain, including the Basque region, where there has been a substantial growth in layoffs and unemployment rates in 2010 of more than 20% and about 12%, respectively. It seems safe to conclude that, compared with other firms, there has been less shrinkage of employment in the Mondragon co-ops during the current crisis. When comparisons are restricted to employment of co-op members, then the differences are dramatic, with virtually no shrinkage of the co-op membership labor force. In tandem with higher employment stability in Mondragon co-ops, there is also evidence of greater wage flexibility during crises. Several interviewees reported examples of wage flexibility during the current crisis—for example, members at the FAGOR group agreed to an 8% cut in wages for the period April 2009-March 2010.

In sum, the employment data indicate a Mondragon group that is far bigger today than in the 1990's. The data also suggest a record that is quite strong in terms of employment growth and job retention, even during times of economic crisis. While Ward (1958) predicts employment restriction to be the norm in PCs, in the main, our Mondragon data point to sustained employment expansion of the group and also a tendency for the average PC to increase its labor force.

*Investment*

Between 1971 and 1989, Moye (1993) finds that gross capital formation in Mondragon co-ops occurred at an annual rate of about 9% ., more than twice the overall rate for Spain; since then, little systematic data are available. In providing evidence on investment, it is important to note that different sources often define "investment" differently. That said, Figure 3 shows a moderate upward trend in investment (defined as expenditures on both new and existing fixed assets)until 2007 when such spending surged dramatically (in part following the acquisition of the Caprabo chain by Eroski.) Unsurprisingly, the global financial and economic crisis then took a massive toll, and investment declined significantly in 2009.

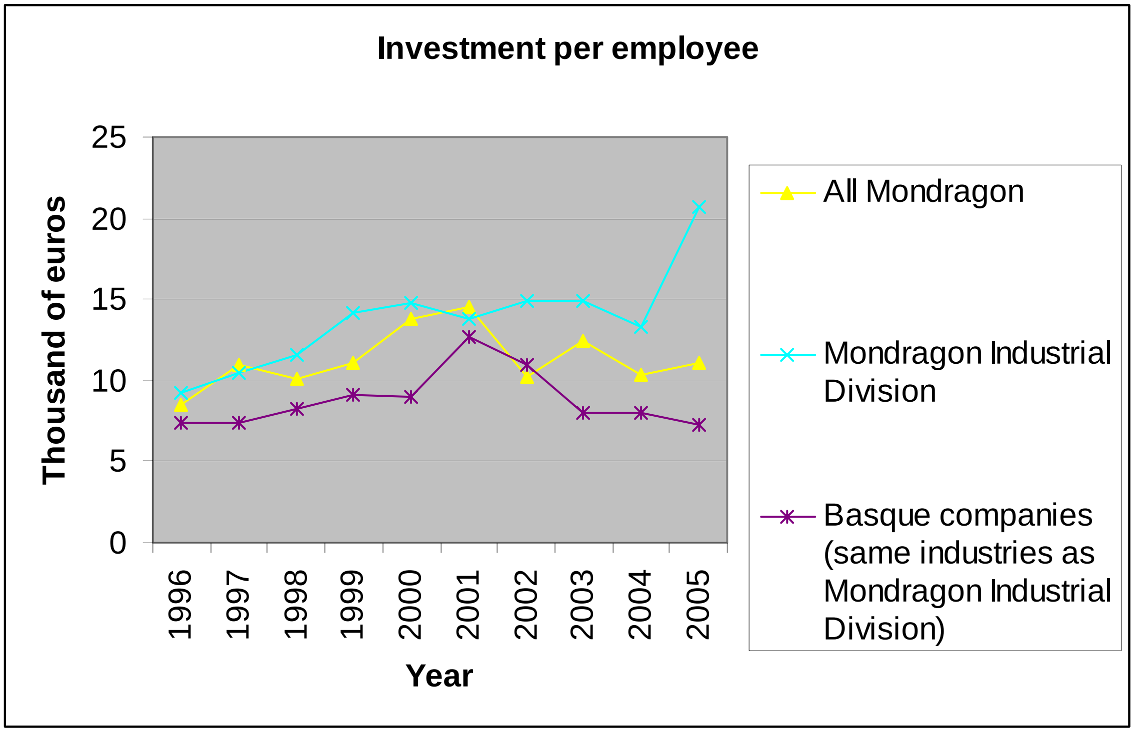
Figure 3: Investment in Mondragon and Basque Companies




Source: Mondragon Annual Reports, Internal data set, Eustat.

Within Mondragon's industrial group, the internal data indicate that overall investment more than quadrupled in a 10 year period and that gains have been steady even during business downturns (Figure 3), excepting the current recession. Figure 3 indicates a different picture for conventional firms in similar industries during 1996-2005: total investment has essentially doubled and a significant contraction in total investment began as early as 2001.

Figure 4 : Investment per Employee




Source: Mondragon Annual Reports, Internal data set, Eustat

However, these data do not take into account *differences in average size* among firms. When we normalize with respect to the workforce, the rate of investment per employee in Mondragon industrial co-ops is higher than in conventional firms (Figure 4). Also, investment in the Mondragon co-ops was much less sensitive to the business cycle. Whereas in conventional firms investment per worker dropped off dramatically during the business cycle beginning in 2001, in the industrial co-ops, typically the opposite pattern prevailed.

Turning to the Eroski retail chains, during 2001-2006 investment oscillated from between 274 and 618 million euros, although these represented substantial sums for a firm with 5-6 billion sales. Investment increased dramatically in 2007 to more than 2.2

billion euros with the acquisition of a large supermarket chain, Caprabo, centered in Catalonia. Subsequently, investment has declined in 2008 and, reflecting the sharp downturn in consumer spending in Spain, undoubtedly has fallen further since then.

In sum, the available evidence on investment also suggests a group record that is strong and indicates growing economic importance for the Mondragon group and its main divisions. It would appear that the Mondragon group investment policy serves to guard against underinvestment, which continues to be suggested by some theorists as an Achilles heel that will undermine PC performance.

*Instability and Degeneration?*

A number of theorists hypothesize that PCs will necessarily "degenerate" ( e.g. Ben-Ner, 1982.) One key prediction is that, over time, the incentive grows for worker-members to replace retiring members with employees who remain non-members and that, consequently, the fraction of the workforce that comprises members will inexorably decline. Another "degeneration" prediction is that successful co-ops will end up being sold to private corporations. In the eyes of many (e.g. Jones, 1980), the apparent tendency of Mondragon co-ops not to succumb to such phenomena was an important strength of the Mondragon PC form (and contrasted with collapsing membership rates that had been observed for other aging co-ops, such as in the UK or the US.)

However, subsequent data for Mondragon (e.g. Mondragon Corporation, 2006-2008; Ormaechea, 2003) suggest that the Mondragon co-ops had begun to degenerate in the first sense mentioned above. Precise longitudinal data are hard to come by, but employment has been gradually shifting in favor of non-member workers for at least two decades. Thus, by 1990, the fraction of the work force that comprised non-members in the average co-op at Mondragon was already 10% (Moye, 1993). By 2007, only 29.5% of the Mondragon group's total work force were members of their co-ops (Altuna, 2008). In other words, some 50 years after the founding of the first Mondragon co-op, a substantial majority of Mondragon workers are non-member employees. As such, they have standard employment contracts with the coops and do not have the rights and responsibilities associated with membership nor voting rights with respect to choosing members of elected bodies, no employment guarantee, and no obligation to be employee-owners. On the other hand, non-member workers do receive an annual profit share, at a minimum, this is25% of the share a worker-member at the same pay grade would receive. However, it is important to note that in more recent years the group has developed strategies to reverse this situation, strategies that will be explored below.

The bulk of these non-member employees work in conventionally-owned subsidiaries and joint ventures that the co-ops have established outside the Basque Country,  particularly in the Eroski retail chains in Spain (approximately 30,000 non-member workers), and in overseas manufacturing plants (approximately 12,000 non-member workers). Still, several thousand others are "temporary workers" inside the co-operatives themselves. These various situations involving non-member workers have all been controversial in the group for many years and have led to numerous major debates that, in turn, have produced changes in policy and practice. Developing and implementing these changes, however, has been more or less complex, depending on the situation.

The least complex of these has been the use of temporary, non-member workers, mainly inside industrial co-operatives because  the seasonal and/or cyclical nature of production (and hence demand for labor), and the prohibitive cost of providing all workers with membership. During the 1990s, the group began to emphasize the importance of minimizing the use of temporary workers and set a goal that a minimum of 85% of the co-ops' internal work force should be made up of worker-members. In Table 1, we examine the evolution of the ratio of members-to-total employees in Mondragon's industrial group and observe steady if modest improvement in the membership ratio beginning early in this decade and continuing through 2008,when the group approached its 85% membership goal. [10] .

**Table 1.  Membership ratios in Mondragon Industrial Co-ops***

| 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 82,4% | 78,0% | 73,0% | 71,6% | 71,5% | 71,2% | 73,3% | 74,7% | 76,7% | 81,1% | 81% | 81,7% | 80,9% | 83% | 88,1% |

**Sources**: Internal Mondragon data set (1995-2003) and Annual Reports (2003-2009)
**Note:** *Refers to employment internal to the cooperative firms only, not to subsidiaries

A more complex situation involving non-member employees can be found primarily within the Eroski distribution chains. The main driver of Eroski's use of non-member employees was a growth strategy initiated in 1989 characterized by massive and rapid expansion outside its traditional base in the Basque Country. This occurred mostly in response to competitive pressures, especially from large French chains. The majority of this growth has involved the start-up and acquisition of non-cooperative supermarkets and other stores as subsidiaries of the Eroski cooperative. The need to expand quickly and substantially in the 1990's was pressing. Eroski felt it was potentially too slow, risky, and complicated to expand by using cooperative legal structures, especially outside the

Basque Country in what was largely uncharted territory, both in terms of business practice, and  workers' responses to cooperative ideas and structures.

Eroski's expansion strategy was successful in business terms, but the balance between cooperative and non-cooperative employment gradually became very lopsided. To address the issue, in the late 1990's Eroski established a voluntary, partial employee-ownership structure (called GESPA) that eventually involved about 5,000 employees in several of its Spanish subsidiaries. It was very popular among employee participants. Eroski concluded that it was not only capable of doing business successfully around the country, but that it was also capable of using cooperative principles and related organizational/ownership structures in many different places and under different circumstances.

As the Eroski Group continued to grow apace through the 1990's and 2000's, GESPA, as it was initially structured and implemented, could not keep up with the speed of expansion. Hence, an increasing percentage of the Eroski work force came to consist of non-member workers in conventionally-owned subsidiaries. By 2008, only about 9,000 (18%) of Eroski's roughly 50,000 workers were co-op members and another 5,000 or so (10%) participated as partial employee-owners in GEPSA (Altuna-Gabilondo, 2008). As a result, and based on the accumulated success of the GESPA process, Eroski has approved a multi-year initiative to "cooperativize" its operations that will begin to be implemented in 2011. When this initiative is completed (by about 2014-16), the great majority of Eroski workers, who today are non-member employees working in conventional subsidiaries or partial worker-owners in GESPA, will become worker-members of cooperative firms. Thus, in a short period, this transformation will lift the ratio of members-to-total-work-force up to about 70%-75% in the Mondragon group as a whole.

The most complex of the situations involving non-member employees is that of the overseas manufacturing subsidiaries of co-ops in the industrial group employing approximately 12,000 people. This foreign expansion was driven by a complex series of factors involving the imperative to grow in order to protect employment at home, competitors' own location of plants in low labor-cost countries, and the need to be "close to market" in a variety of industries. In general, the co-ops have felt that opening up membership to workers in these plants is legally, financially, and culturally problematic; hence, in the short-term, employee ownership overseas has been viewed as non-viable or excessively risky. This perspective has begun to change, however. During the last several years, the Mondragon headquarters organization, led by its President, has developed a policy for overseas operations to promote "employee participation" in three areas: decision making, profits, and ownership. A number of co-ops had concrete plans to experiment with partial employee ownership in their foreign plants, but these have largely been put on hold by the financial and general economic crisis. Others are debating different financial, legal and related strategies for achieving this three-pronged participation in different countries where legislation, workers' economic circumstances and cultural norms vary widely. The jury is still out on whether Mondragon can put in place substantial cooperative or similar employee ownership arrangements in its overseas activities. Since overseas employment investment can only grow in coming years, this issue bears close monitoring by researchers, policy-makers and others. It is one of the key strategic issues the Mondragon cooperatives face in the medium to long term. [11].

In sum, when we consider how the evidence we have presented squares with theories of cooperative degeneration, certainly some degeneration has taken place. Things are different from the 1970s when virtually 100% of Mondragon workers were members. However, overall, it turns out that a simple story of sustained degeneration both for Eroski and industrial co-ops is inadequate. Upon closer inspection the story is more nuanced, and not as simple as some would suggest (e.g. Kasmir, 1996). In particular, the case of Eroski suggests that institutional changes can be introduced to inhibit the theorized inevitable process of declining membership rates. The challenging situation with subsidiaries overseas remains to be addressed and evaluated in future research.

In drawing overall conclusions for the record described in this third section, we are mindful of the need to be cautious when making such assessments, given the limits of the data. However, taken together, the evidence presented in this section strongly indicates that the Mondragon group and the main industrial and retail divisions have grown in relative economic importance within and without Spain, and that this may also be the case compared to other co-ops and other well-known employee-owned firms. Furthermore, when using basic indicators of group performance such as sales, employment and investment, the Mondragon record appears to at least compare favorably with (and may even substantially outstrip) that for other firms including conventionally owned private firms.[12] . As such, the record does not appear to support predictions that, compared to conventional firms, PCs will be less productive, will have declining employment, and be prone to underinvest. There is also suggestive evidence that the group is especially resilient during crises. Finally, while the picture is complex, the overall evidence does not support the standard degeneration hypothesis.

**Accounting for the Record: Mechanisms that Facilitate Managed Change**

The key question we examine in this section is how has Mondragon, when facing a fast-changing environment, been able to sustain a strong record without sacrificing essential cooperative features? While analysts covering earlier periods were largely optimistic on Mondragon's capacity to adapt (e.g., Moye, 1993; Whyte, 1999), other accounts often have been more pessimistic as to whether and how co-ops located in Northern Spain would be able to respond to the numerous challenges confronting them both in Spain and around the world (e.g. Cheney, 1999). Some of these challenges, such as quickening globalization and a faster pace of technological change, were common to most businesses in advanced economies. Other challenges, such as the disappearance of an initial advantage based on low labor costs in Spain, were more specific to Spanish employers. The emergence of the "Basque miracle" (Porter et al, 2004), characterized by rapidly declining rates of unemployment and rapid growth, and how to thrive in that context, also presented new challenges. To facilitate change and adaptation in such a taxing environment, we argue that the fundamental democratic feature of the Mondragon set-up enables Mondragon to undertake measured and effective adjustments and to do so at a lower cost than competitors in conventional firms.

Some of the institutional arrangements that distinguish Mondragon both from conventional firms and other PCs, and which facilitate the high degree of adaptability and flexibility in the Mondragon group and its member cooperatives, are reasonably well known and are ably described elsewhere. These arrangements include the ability of members to transfer among Mondragon firms during times of depressed demand and the use of profit pooling (e.g. Mathews, 1999; Thomas and Logan, 1982). However, specific details on the operation of these mechanisms in Mondragon are scarce, and other practices, such as the focus on continuous training, do not appear to have received the attention they deserve in the literature. Also, during the last twenty years or so there have been important developments that need to be taken into account in order to understand the mechanisms that underpin group performance. In our discussion, we aim to provide a fuller and more current documentation of the scope and nature of several of these mechanisms than is contained in other studies. We concentrate on how these arrangements, within a framework that provides for sustained democratic deliberations, help to nurture and reinvigorate integration within the group and, in turn, help to sustain strong group performance. Together these features provide for a degree of integration among Mondragon member firms that is very high, and which distinguishes Mondragon from most other less-integrated groups of PCs. [13] .

*Autonomy, Flexibility and Change within the Group and Individual Firms*

First, important changes have occurred at the *organizational level*. These changes reflect continuing attempts to solve the dilemma of how best to provide for a high degree of democracy and autonomy in individual firms and yet also allow central bodies to promote changes, economies of scale, and sustained efficiency in the whole group. During the first generation of the group, Mondragon companies worked out common policy and governance arrangements through joint membership in their own banking cooperative, the Caja Laboral, which is a “second degree cooperative,” a co-operative whose members are other co-operatives (Thomas and Logan, 1982). As years passed, the potential advantages of joint action for investment and employment planning, training, new product development, exporting, and other activities became clearer. Starting in 1964 with the establishment of ULARCO, a grouping of three of the largest and oldest cooperatives, but mainly in the 1970s and 1980s, the cooperative firms decided to form subgroups based on geographic proximity. One of the implications of this was that the well-known arrangements for surplus/profit redistribution would take place within such regional groups.

The growth of newer sectors such as auto parts manufacturing and retailing, as well as the general sense of a need for more economically rational organizing criteria, continued to create momentum for change. Hence, after substantial discussion and debate in the late 1980s, the group decided to reorganize itself again, this time with two other features principally in mind: (1) the establishment of central structures for overall governance, strategic coordination, and the provision of management services; and (2) the creation of subgroups of firms and the groups/divisions by industrial sector instead of by region. In the main, it simply seemed to make more economic sense to the co-ops to join together in subgroups according to product/market affinity and not geographic proximity. In 1991, the Mondragon Cooperative Corporation (MCC) was born to put these ideas into practice. At first, three different sectoral groups were created: financial, manufacturing (called "industrial"), and retail. Later a knowledge group was added. As part of this restructuring process, the manufacturing group was itself divided into a number of divisions. However, while the push was to move away from regional groups, it is also true that within this new manufacturing group some regional groups have remained more or less active, e.g. at FAGOR and ULMA. Other structural modifications also have taken place since 1991 and, in 2008, the name changed from "MCC" to simply "Mondragon." Nevertheless, so far, the basic organizing principles at Mondragon remain largely intact, seeking, again, to balance autonomy for individual co-ops with strategic coordination and common governance.

These structural changes might be seen as reflecting shifting views concerning the on-going debate about the optimal degree of decentralization/centralization for individual firms. While the changes mean that management practices and governance structures at the highest levels are not as "close to the shopfloor" or as participatory today as during earlier periods, at the same time, a consistent theme in our interviews was the view that these organizational changes did not really affect day-to-day operational fundamentals. While individual firms willingly surrendered some autonomy to the groups/divisions, the balance of power continued to reside with individual firms rather than the center. The existence of individual firm autonomy is perhaps best illustrated in two areas: (1) those rare cases of co-op closures; and (2) firms' decisions to enter and/or leave the Mondragon group. In the first area, when an individual company is under serious threat, Mondragon will provide consultative and even financial help so long as it seems possible to sustain the business. But the decision to close--and to protect any remaining individually owned stakes-- is taken by the particular cooperative. [14] By contrast, in anticipation of shifting market opportunities, the center might take the initiative in suggesting concrete ways in which individual co-ops could shift their product mixes and even give advice on new plant locations. But final decisions rest with the individual co-op—those at the center do have substantial authority, formal and informal, but, where there is disagreement, they tend to negotiate decisions with individual co-ops and make recommendations. They do not have traditional executive authority. In the second area, the preeminence of co-op autonomy is also clear. The decision to enter or remain a part of the Mondragon sectoral network, or not, depends on a decision by each co-op's General Assembly of worker-members. A small number of co-ops did, in fact, decide not to join the MCC structure when it was first proposed (e.g. the ULMA Group) or to leave the structure in later years (e.g. AMPO). Several of these have since voted to return to the Mondragon network, but the key point here is that the decision-making authority for these decisions rests in the individual co-operative firm, not in a centralized, corporate body.

Most people interviewed as part of our research reported that strategic decisions typically reflected standard business criteria with a focus on generating sustained sales and profits. This is clearly the case especially during good economic times such as the second half of the 1990's and early in the twenty first century, when it appears as if members are content with what many might view as "satisficing behavior." However, during economic crises, as several interviewees stressed, the paramount concern of managers shifts to maintaining employment for members. Arguably the focus on job security is triggered by the experiences of the generation that came of age between 1980 and 1995. They had lived during times characterized by long periods of persistent high unemployment in the Basque Country [15] ·, and in Spain generally, though not nearly as severe as in the greater Mondragon area. Joblessness during that period was constantly reported in the mass media, deeply affected the general economic environment, and may have significantly influenced the mentality of that generation.

Mondragon has also shown itself to be very flexible in another key area: the legal structure of joint ventures and subsidiaries. During the early years at Mondragon, all enterprises in the group were cooperatives located in the Basque region, and new firms entered the group as start-up co-ops or through immediate conversions or mergers of existing firms into co-ops before or upon entry. Over the years, however, the group has purposefully evolved to include *enterprises that are not restricted to cooperatives*. We discussed above the now extensive use of conventionally-owned subsidiaries outside the Basque Country, particularly in the Eroski retail chain and in the industrial co-ops' internationalization process. In addition, since the late 1980s, the Mondragon group has expanded by acquiring existing firms both outside and inside the Basque Country. While some of these later acquisitions soon became co-operatives (e.g. MAPSA), as in the early years, often the acquired companies, initially at least, continued to be structured as conventional firms. One example was the acquisition of FABRELEC, a local domestic appliance manufacturer, in 1989. During the acquisition process, a plan to provide the opportunity for co-operativization was drawn up. All parties felt that it would take time for the Mondragon co-op buyer to provide information and training about the cooperative option, to shift ingrained management policy and practice toward the cooperative model, and for the work force to assimilate and debate the new circumstances. It was agreed, as a consequence, that approximately five years after the acquisition, workers would be given the opportunity to vote on whether or not to join the FAGOR Home Appliances manufacturing co-op as worker-members. The five-year period passed, and, after substantial discussion, the vote was taken and an overwhelming majority became members. More or less similar processes have been undertaken in other conventional firms acquired by Mondragon co-ops.

Another new organizational form that has been created is the so-called "mixed cooperative". These emerged because of rising capital requirements in start-up situations, especially in capital intensive manufacturing sectors, and the inability to obtain sufficient capital either from the traditional core source, namely worker-members' initial investments, or, given the high debt-to-equity ratios involved, through standard debt from the Caja Laboral or other banks. These mixed cooperatives allow for "investor" members, generally other cooperative firms in the Mondragon group, and are structured to provide modest, but explicitly limited, control rights for new capital suppliers. An example is MULTIFOOD, a food processing firm in which worker-members had a central part in control and surplus distribution, but two large cooperatives were also members, including Eroski and the commercial catering co-op, AUZO-LAGUN.

The other key organizational change since the initial decades of the 1950's, 1960's, and early 1970's is that much more of the group's resources are devoted to strengthening existing co-ops and much less to nurturing new ones. Quickening globalization of many of the co-ops' markets led them to internationalize production (e.g. Errasti et al., 2003). To help this process along and manage change, a department of "Internationalization" was established at the Mondragon headquarters. These are clear indicators of the group's focus on consolidating existing co-ops, rather than opening new ones. Further, large amounts have been invested in new technology in existing co-ops in order to reinforce their position in existing markets and to open up markets for allied products and services.  Both dimensions of this trend continue to a significant degree today, but are not as dominant as earlier. Since such a large proportion of Mondragon's companies are in traditional sectors, now the group has also established as a strategic priority the development of new businesses in sectors that are seen to have significant future potential, regardless of the amount of experience Mondragon has in these sectors. These include medical and energy technology, as well as home care and health services.

*Compensation Policies*

Other major changes that have mainly affected the operations of *individual cooperatives* include shifts in compensation policy, i.e., in the permissible *differences in salaries between the highest and lowest paid.* When the first cooperative was created in 1956, a key aim was to diminish social and economic inequalities among co-op workers. Consequently, salary differences were restricted, and initially it was decided to adopt maximum differentials of 1:3. However, over time, pressure for widening these differentials emerged. The Spanish economy began to catch up with wealthier European countries; the group itself grew; and its work force and management ranks became more representative of the broader society in its attitudes toward pay and  as demand for skilled managers and engineers increased. After ten years the range was increased to 1: 4.5 and in 1987, during the first Mondragon Cooperative Congress, the range was increased again, this time to 1:6. This change, however, did not automatically mean that senior managers would be paid six times shopfloor workers, but rather that this was a permissible ratio for a co-op to use and continue to belong to the group. A co-op could then debate internally changes in its salary ratio, taking into account all its particular circumstances, and any change would ultimately have to be approved by its General Assembly of worker members. A number of the larger co-ops did hold these debates and widened pay ratios , but most co-operatives maintained ratios very close to the earlier ones. By 2002, in response to market pressures, the range was widened again to 1:8.9.

Indeed, it has been argued that if compensation took full account of all forms of compensation (including, for example, bonuses) the range was in fact 1:11 (Ormaechea, 2003:420). Still, it is important to qualify this point. Clearly, Mondragon co-ops responded to social-cultural-market pressures and widened the salary differential, a move which for many was at odds with cooperative principles. At the same time, it is important to realize, as mentioned, that decisions about *how* to apply the maximum allowable differential are made in accordance with cooperative principles, i.e., in individual co-ops after extensive discussion and debate and, finally, a vote in firms' General Assemblies. Ultimately, very few workers are affected by these maximum differentials. Also, not all co-ops make use of them;in fact, most do not, and several interviews with top managers reported policies whereby the bylaws of that co-op stipulated that their maximum permissible differentials were only 1:5. It also remains true, even taking into account changes in the salary differential over the years, that senior managers in Mondragon typically earn less than their counterparts in conventional companies, and in larger co-operatives, the differences are dramatic.

Hence, as far as bonuses are concerned, several managers reported that they tended to make use of mainly low-powered financial incentives, and only modest use has been made of performance related pay, even for top executives. Thus, an executive contract in which as much as 20% of rewards consisted potentially of a performance bonus, was viewed as being quite exceptional. Also, bonuses would nearly always be based on sales and productivity rather than job retention or employment growth.

*Changes Concerning Membership and the Practice of Member Relocation*

The crisis of the 1980's demonstrated to the co-ops that they needed more flexible labor forces. As already discussed, one consequence is that major changes have taken place concerning the *nature of membership.* One central change was the creation of the "temporary member" category. A new type of contract was created in 1993 for temporary members and it was adopted by cooperatives in the following years. This new contract was seen as an instrument of guarantee both for cooperatives and employees. Temporary members have most of the same rights as do full members, e.g., they share in surpluses based on the individual's salary, and may vote for and can serve on elected bodies. The main difference is that they do not have job security. Temporary members, however, also have the most of the same obligations as do full members, e.g. for ownership stakes to be written down during crises and related financial sacrifices, or to serve on the local work-area elected body (the Social Council) if elected. The difference in this case is that their membership fee is only 10% of the full membership fee. Importantly, their situation is transitory: workers can be temporary members for a maximum of five years and, at any given time, no more than 20% of a co-op's full membership can consist of temporary members.

The relative importance of the initial membership fee has also declined over the years. However, this has not been the result of a specific change in membership fee policy, but rather of changes in compensation policy. The initial membership fee is equivalent to one year's salary at the lowest potential compensation level in the group. Since the gap between lowest and highest paid in the group has increased on a number of occasions as a result of specific policy changes over the last 25 years, the relative weight of the membership fee has declined.

One of the key adjustment mechanisms used among the group of co-ops is the requirement that a firm experiencing relatively strong demand must be ready to hire member-workers from a firm that is experiencing soft demand. This *"worker relocation"* policy reflects the Mondragon commitment to essentially guarantee a member job security, but not in a particular position or a particular firm. However, the implementation of the policy can lead to various tensions. Individuals may not embrace the need to commute over a much longer distance than they are used to or to work in an unfamiliar position, although they are compensated for the difference in commuting distance. For firms, sometimes this worker relocation policy has been viewed as requiring them to make sacrifices that were too costly. Nevertheless, the policy seems to be a stablefixture at Mondragon, ready to be widely and extensively used during economic crises, and is a key component of workers' satisfaction with being a cooperative member (Freundlich and Pisano, 2010). Thus, an interviewee reported that in the ULMA group alone during the crisis of 1984, about 18% of worker–members (66 workers) moved among different firms in the group on a *temporary* basis. In the subsequent crises of 1992-93 and 2008-09, the corresponding numbers for temporary transfers were about 5% and 3%, respectively (with the last figure representing about 110 workers, compared to fewer than 100 in the previous crisis and 66 in 1984.) Another interviewee at Mondragon estimated that in late 2009, in the depths of the recent global recession, about 500 members were temporarily working in other co-ops. Unlike the Japanese case of "lifetime employment," whereby a significant proportion of workers on temporary transfer will never return and become permanently transferred (Kato, 2001), in Mondragon there appear to be far fewer *permanent* transfers. Thus,Basterretxea and Albizu (2009b), drawing on internal sources from Mondragon, report that during the period 2000-2008 the greatest number of permanent transfers for all of Mondragon in one year was 29 in 2007. Interestingly, however, even during some "good years," some permanent reallocations did take place—two in 2001, nine in 2003 and two in 2005.

### *Profit Pooling*

Sharing a portion of profits at the division level -- *profit pooling* -- continues to have a central place in Mondragon. When individual co-ops pool parts of their surpluses they establish "solidarity funds" that are available to assist co-ops in difficulties. Since 1991, the practice has operated both at the regional/sectoral level as well as for the overall group. As additional funds have been developed, it appears that the importance of this practice has increased in recent years.[16] . At the decentralized levels, one interviewee reported that within the ULMA group of co-ops, up to 50 % of profits (surplus) recorded at individual entities within ULMA (such as construction and manufacture of greenhouses) were pooled. In other regional or sectoral groups in Mondragon, the norm was for profit pooling in the range of 15%-40% of surplus. At the overall group level, individual co-ops contribute to or invest in two different kinds of funds. First, Mondragon policy requires that member co-ops invest in a venture capital fund called "Mondragon Investments." Co-ops made an initial investment in this fund and also make an annual investment, both based on formulae that take into account various factors related to size and performance. Second, Mondragon firms make post-tax donations to a central foundation that amounts to 5% of profits for industrial and retail firms, and substantially more for the bank, Caja Laboral. The foundation funds are used to finance education and training activities, to diminish losses in weaker co-ops (if they are taking concrete measures to improve performance) and for other not-for-profit kinds of initiatives. While the role of the Caja in risking its own assets by making loans to co-ops facing economic problems has diminished over time, during the crisis it has continued to try to keep lending to help individual co-ops in difficulties.

*Training*

The scope and nature of *training* within Mondragon is a very distinctive feature of the group and arguably an important source of its strong record (Meek and Woodworth, 1990.) In an enlightening paper, Basterretxea and Albizu (2009a) provide a fresh perspective on actual practices surrounding training for managers in the Mondragon group. They note that the ability to attract and retain highly qualified managers is of paramount concern for Mondragon. At the same time, it is especially challenging in view of both the policy of compressed wage differences and that many co-op managers are hired as young adults, and based on their resumes, do not necessarily have any pre-existing commitment to co-op values. Indeed, Mondragon firms say it is exceedingly difficult to try to apply a “cooperative values” filter in the selection process. Still, one incentive to stimulate management retention follows from the fact that the managerial labor market at Mondragon is an internal labor market -- essentially all professional positions within the group are filled from within the group – hence young managers are likely to have a career ladder. Another critical policy has been the development of an extensive set of training centers geared to the special needs of managers (including a facility at Otalora). One of the key managerial training programs results in what is equivalent to an MBA in co-op management, and about 20 of these degrees are awarded each year, reflecting steady growth over time. Several of our interviewees also reported that the majority of top executives at Mondragon have gone through this training program. In view of the high degree of mobility of managers within the group, one would expect that there would be a high degree of knowledge transfer as information learned in these courses on best practices is efficiently and cheaply disseminated within the group.

In another informative paper, Basterretxea and Albizu (2009b) discuss policies and practices at Mondragon concerning training for non-managerial employees. An important point of departure is the recognition that worker-members have the right to a job, though not a particular position. To meet the challenges presented by this job security guarantee, in addition to the worker re-location policy previously discussed, the Mondragon group has emphasized a policy of continuous and general training. The aim is to have available a well-trained and flexible work force. To this end, the authors report several indicators that underline the importance attached to general training at Mondragon. Investment in continuous training in Mondragon represents 2.7% of the wage bill (compared with averages of 1.2% for Spanish firms and 1.6% in EU companies.) Hours of training average 23.7 for Mondragon workers, almost double the EU-27 average of 12 hours. Whereas in the EU-27, about one in four employees are reported as benefiting from training, in Mondragon the proportion is more like one in two. So far as the type of training is concerned, Basterretxea and Albizu (2009b) discuss several examples of innovative training practices—training that was often quite generic and long-lasting. For example "…the whole workforce at Orkli (an important cooperative)...has already gone through retraining courses." [17] .

In sum, while there have been major changes in the structure and functioning of the Mondragon co-ops during the last twenty years or so, it is our sense that the essential nature of the Mondragon co-ops has not fundamentally changed. At root, the co-ops are still responding to the wishes of the core membership, although certain decisions, e.g., creating non-cooperative subsidiaries, have been highly controversial inside and outside the group. These, in turn, have led to substantial structural and policy responses by the group and individual co-ops, in particular the co-operativization of the Eroski Group, an initiative that will be closely examined for its applicability to overseas operations. At the same time, we also note that the process of integrating the co-ops has deepened, and mechanisms such as continuous training appear have become more important.

## Conclusion

Commenting on the literature on worker co-operatives up to the early 1990s, Bonin et al. (1993) noted that the literature had been theory-led and that empirical literature had lagged significantly behind. At the same time, it was apparent that theory building had often ignored many well-known stylized facts. Early empirical studies often contained results that contradicted the most basic propositions of early theory. Since then empirical research on co-operatives has continued to make great strides. However, it is clear that much remains to be done, especially concerning the famous Mondragon co-ops. In this chapter , we have made a modest start by analyzing new empirical data about the Mondragon *group*.

More specifically, by drawing on several types of data, including new interview evidence derived from many field trips to Mondragon, and new financial and economic data, including internal data, this chapter has documented and assessed the changing importance and performance of the Mondragon group and its two largest sectors. Compared with conventional firms in the Basque area and  in Spain (and co-ops and employee owned firms elsewhere), in general, we find evidence of Mondragon's important to the larger economy and and of strong performance for the group as a whole and a  for the industrial and retail divisions of the group. Most of the stylized facts concerning the record of the group, such as growing investment and employment, do not sit well with predictions based on the early theory of the labor-managed firm, such as predictions that co-ops will restrict employment and become progressively comparatively undercapitalized (and reviewed in Bonin et. al, 1993.).

In accounting for this record, we highlight key institutional features and developments in the Mondragon group during the last 20-25 years. At root, individual Mondragon firms continue to be worker-owned and governed while various mechanisms point to sustained solidarity within and integration of the group. While some of these changes, e.g., new types of firms and new categories of membership, may be viewed as representing movements away from the founders' ideals, we argue that it is too early to determine whether they represent fundamental changes or not. Moreover, to deal with emerging challenges, the capacity of the group to innovate and to make institutional adjustments continues. Furthermore, there is evidence that many of these developments, which appear to represent departures from the founder's ideals, are not likely to be sustained, but rather may turn out to be temporary phenomena. This is most clearly the case with Eroski and its on-going strategy of co-operativization. There is also evidence that firms that begin as mixed cooperatives soon assume a traditional cooperative organizational form.

In addition, we provide more detailed information than hitherto available on some of the key distinguishing institutional mechanisms of the Mondragon group, such as the extent of worker-member transfers, the patterns of profit pooling, new organizational forms, and the type and volume of training. It is our contention that it is the extensive use of these and other mechanisms, themselves formulated and refined only after a deliberative democratic process, that help to underpin the strong Mondragon group record and enable the group to manage change, if imperfectly, still at a more measured pace and lower cost than its competitors. For example, Mondragon' extraordinary levels of training may reflect the fact that Mondragon firms are not facing similar degrees of pressure as privately owned firms to distribute profits to shareholders. Mondragon frims can take a longer term view on investment in human capital which, in turn, will be expected to pay off in enhanced organizational efficiencies in the long run. By contrast, as Bassi et al., (2002) amongst others argue, pressure from financial markets may cause underinvestment in training for conventional firms. Relatedly, we expect that the provision of strong job security (together with the worker re-location policy) as well as the various mechanisms for employee involvement and strong financial participation through worker ownership, to foster powerful motivations for enhanced worker productivity. In highlighting these particular strategic mechanisms, we emphasize a more complex interplay of factors than past accounts, and highlight some factors that were not previously identified as factors for the success of the Mondragon group. Thus early analytical work by economists tended to stress the roles of incentives stemming from the interplay of employee involvement and employee ownership alone. While we do not by any means dismiss the potential impact of these features, our sense is that the unusual attention given to lifetime training is probably at least as important in accounting for group success. In addition, overall, these findings represent suggestive evidence that there is a *Mondragon* cooperative difference; by comparison with other PC experiences past and present, the degree of integration among the Mondragon co-ops, as exemplified in practices such as worker-member transfers and profit pooling, is extraordinary.

At the same time we are keenly aware that Mondragon continues to face enormous challenges. Many of its core businesses, especially those in manufacturing, are threatened by the intensification of competition in today's globalized economy. The process of institutional adaptation will need to continue and probably accelerate with likely a growing role for? institutions whose central mission is knowledge-creation, such as technology parks and the University of Mondragon ,. We are also keenly aware that some of the findings reported in this paper are quite preliminary and that much more rigorous analysis is needed. This is especially the case for issues surrounding the links between domestic and overseas employment growth. In on-going work (e.g. Arando et al., 2010a, b), we address key unanswered questions such as the comparative performance of PCs and conventional firms, as well as the comparative performance of firms with majority and minority EO. In one paper (Arando et al., 2010a), we also find evidence that some of the institutional mechanisms that we highlight for the group, such as training, help to underpin the superior performance of the co-op stores.

One broader implication of our findings concerns the range of organizational forms that are feasible in today's advanced economies. Many have argued (e.g. Stiglitz,

2003) that besides privately and publicly-owned firms, co-operatives represent a third, highly viable organizational form. Our account of the Mondragon co-ops provides further evidence in support of the feasibility and sustainability of the cooperative alternative. In a world of declining labor power (Gordon, 2010), in which CEOs of private firms quickly shed labor during crises and slowly re-hire during upswings, the sophisticated institutional arrangements that characterize the Mondragon co-ops are worthy of deeper study by policy makers and others.

**Endnotes**

[1] See, for example, http://economix.blogs.nytimes.com/2009/11/23/the-case-for-worker-co-ops/.

[2]In PCs, as in other co-operatives, cooperative principles such as "one-member-one-vote" and limited interest on capital apply. However, unlike in other cooperatives, in PCs worker management exists alongside employee ownership. There is a large bosy of economic theory that examines the behavior of the "pure" PC –the theory of the labor-managed firm.

[3]These include attempts to compare the growth in importance of Mondragon co-ops with co-ops elsewhere including PCs. In that process we make limited use of other sources such as the list of the biggest co-ops and mutual societies in the world (www.global300.coop) as well as Spanish co-op sources (such as www.cepes.es.).

[4] Regretably the available data do not permit decomposing total sales into those in domestic and foreign markets.

[5] Comparisons using the theoretically-preferred value-added are more difficult in part because Mondragon measures "value added' differently from conventional firms. However, preliminary attempts to adjust measures to make comparisons on a consistent value-added basis also suggest that co-ops have long enjoyed a substantial edge. However, during the first decade of this century, by this measure, it appears that the comparative advantage of industrial co-ops was being eroded.

[6] However, this movement was probably heavily influenced by the largest acquisition that Eroski has ever made that of Caprabo.

[7]However, an unpublished study of a small sample of industrial co-ops does not yield such a favorable picture. (See Martin, 2000.)

[8] For earlier evidence see, for example, the various exercises reported by Moye (2003).

[9] We have used the survey EPA from the Spanish National Statistical Office (www.ine.es).

[10] Data for the financial group are not readily available (although this represents fewer than 5% of total employment in Mondragon.)

[11] For evidence for a plant in the Czech Republic see Vanek (2008).

[12] There is also other more qualitative evidence that speaks to the performance of the Mondragon group and its main divisions. This includes the winning of a considerable number of Basque, Spanish and European awards for quality, and being a finalist for the European Environmental Award.

[13] For example, arrangements that provide for members to transfer to other PCs or for profit pooling appear to be either absent or of very limited importance in other PCs ( For French PCs see,e.g. Estrin and Jones, (1992), for Uruguay ,Burdin and Dean, (2009) and for the US,Craig and Pencavel, (1995). For earlier discussions and comparisons that draw attention to the distinctive nature of the Mondragon set-up, including its extensive supporting structures, see also Jones (1980) and Bonin et al, (1993).

[14] An interviewee provided details of the steps surrounding the closure of two co-ops COVIMAR and VICON during earlier crises. The process of managing this change involved many stages including pay cuts (which increased over time) and technical and financial assistance from the Caja Laboral (on behalf of the group). While sustaining jobs was a key concern, repayment of creditors was also of central importance. Ultimately the co-op decided to close.

[15] As recently as 1994 the unemployment rate hit 24% in the Basque country.

[16] Intriguingly, Japanese keiretsu play a similar role in monitoring and rescuing (when appropriate) its affiliate firms (Aoki, 1988.)

[17] One reason Mondragon can support such high levels of training is that their extremely low unemployment rates produce favorable “experience ratings” and very low contributions for unemployment insurance (UI). Basterretxea and Albizu (2009b) estimate that during 2000-2008, UI in Mondragon firms averaged 1%, whereas in 2009 UI for firms affiliated to the Spanish Social Security system averaged 7.05%.

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