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ABSTRACT

In this paper we analyse the neo-schumpeterian model of economic development applied to the economy of the Basque Country during the last few years and the three pillars that account for the development of a region following this model are rooted in the Basque economy in which there are company organizations that promote competition, financial institutions prepared to run risks and public authorities geared towards modernising and boosting the economy by means of tax incentives and other types of aid.

However, we firmly believe that, apart from the three pillars established by the neo-schumpeterians, another two should be added to this model: innovation and worker participation both in capital and profits and in management. Worker participation in enterprise is another factor which accounts for economic development in the Basque Country.

In short, the cooperatives are a model of the integration of innovative and participative culture and commercial companies could apply certain elements of these cooperatives with a view to becoming more dynamic and more social.

KEY WORDS: Cooperatives, innovation, management, neo-schumpeterian model, participation.

ECONLIT DESCRIPTORS: P130, M100, M310.

El modelo neo-schumpeteriano de desarrollo económico en el País Vasco: la contribución de la Economía Social

RESUMEN: En este trabajo analizamos el modelo neo-schumpeteriano de desarrollo económico aplicado a la economía del País Vasco de los últimos años. Así, los tres pilares arraigados en la economía vasca que explican el desarrollo de este modelo en la región, se manifiestan en organizaciones de empresas promotoras de la competitividad, instituciones financieras dispuestas a tomar riesgos y unos poderes públicos con voluntad de modernizar e impulsar la economía mediante incentivos fiscales y otro tipo de ayudas.

Sin embargo, creemos firmemente que, además de los tres pilares establecidos por los neo-schumpeterianos, habría que añadirle a dicho modelo otros dos: innovación y participación de los trabajadores en la empresa, tanto en el capital y en los beneficios como en la gestión. La participación de los trabajadores en la empresa es otro factor explicativo del desarrollo económico vasco.

En suma, las cooperativas son un modelo de integración de la cultura innovadora y participativa, pudiendo las empresas de carácter mercantil aplicar elementos de aquéllas con el fin de hacerlas, no sólo más dinámicas, sino también más sociales.

PALABRAS CLAVE: Cooperativas, innovación, gestión, modelo neo-schumpeteriano, participación.

Le modèle néo-schumpétérien de développement économique au Pays Basque : la contribution de l'économie sociale

RÉSUMÉ: Dans cet article, nous analysons le modèle néo-schumpétérien de développement économique appliqué à l'économie du Pays Basque au cours des dernières années. Ainsi, les trois piliers qui expliquent le développement d'une région suivant ce modèle sont profondément enracinés dans l'économie basque où il existe des organisations d'entreprises qui encouragent la concurrence, des institutions financières prêtes à prendre des risques et des pouvoirs publics avec la volonté de moderniser et d'aider l'économie grâce à des incitations fiscales et à d'autres types d'aides.

Nous croyons, cependant, qu'en plus de ces trois piliers établis par les néo-schumpétériens, il faut en ajouter deux autres à ce modèle : l'innovation et la participation des travailleurs au sein de l'entreprise, tant dans le capital et les bénéfices que dans la gestion. La participation des travailleurs dans l'entreprise est un autre facteur qui explique le développement du Pays Basque.

En résumé, les coopératives sont un modèle d'intégration de la culture d'innovation et de participation, dont certains éléments peuvent être appliqués par des sociétés commerciales, afin d'être plus dynamiques et plus sociales.

MOTS CLÉ: Coopératives, innovation, management, modèle néo-schumpétérien, participation.

1.- Innovation in economic thought

The ultimate aim of any economist ought to be that of improving the welfare of society for which the appropriate instruments must be designed. All schools of economic thought seek this end although the paths chosen along which the economy should journey may differ and consequently even give rise to contradictory situations.

At present, many university economists in developed countries centre their research on improving the rules of the market, thinking that, in this way, they will achieve high levels of well-being; meanwhile, there is still a minority of economists who focus their efforts on studying the importance of innovation as, by innovating, those companies that do so will, for a time, enjoy certain advantages of an almost monopolistic nature, which will allow the innovating country to maintain or improve their starting points.

The question of innovation, in a limited sense, or improvement in the production of goods and services has been raised by many economists. For example, D. Ricardo, in his reviews of his fundamental work, "Principios de Política Económica y Tributación" (Principles of Economic Policy and Taxation), included a chapter entitled "Regarding machinery". In this chapter, he deals with the advantages and disadvantages of introducing new machinery into production and the effects on retired employees, capitalists and workers.

Later, K. Marx would devote Chapter XIII of "Capital" to "machinery and labour-intensive industries". His thesis is clear. Machinery improves the production system but its use by capitalists increases the capital gains appropriated by them.

According to Marx, machinery adds no value to production but it does incorporate a part of the constant capital, besides increasing the turnover of goods. The introduction of more machinery will imply the growth of the organic composition of the capital, which, *ceteris paribus*, will mean a reduction in the profit rate, which will give rise to periodic economic crises. However, this reduction in the profit rate might be able to be countered as expounded in Volume III of "Capital".

However, the economist who theorized on innovation was J. Schumpeter. He designed a theoretic system which explained economic cycles and economic development, the key to the process of economic change being the introduction of innovations by entrepreneurs. These innovations come about when the product provision methods change, creating new products or new production methods, opening up new markets, conquering new sources for the obtaining of raw materials or half-finished products or starting up a new industrial organization. In short, innovation is more than an invention and, in

turn, an invention does not necessarily mean innovation, as has been the case on more than one occasion throughout history.

Schumpeter focuses his analysis on a macroeconomic level although he establishes that innovation in enterprise arises on a microeconomic level. From this point he goes on to the macroeconomic field. However, his followers, the so-called neo-schumpeterians centre their analyses on an intermediate level between macro and micro, in line with the Marshallian concept of meso-economy. Thus, in this new approach, these three levels are present.

Innovative decisions are taken in enterprise and the entrepreneur is fundamental in this aspect. Furthermore, such decisions are conditioned by the climate or the industry to which the company belongs (cluster, etc.) and the decisions taken on a whole by economic agents, especially enterprise, affect all activity as seen from a macroeconomic perspective.

The neo-schumpeterian approach singles out the novelties introduced into the production system and the uncertainty. However, innovation is considered from a wide perspective, beginning with technological, organisational and institutional innovation and social innovation itself. It may thus be deduced that the neo-schumpeterian paradigm takes various facets into account as well as the uncertainties of a socio-economic system.

Hanusch and Pyka (2007:276) believe that the analysis of the neo-schumpeterian school is not only based on the transformation process of an economy in industry and that the incidence of the financial and public sector must be studied when the following socio-economic mutations in a country are detected:

- 1) The *qualitative change* affects all levels of the economy and for this reason, not only must structural changes be taken into account but also the alteration of obstacles which hinder development in new circumstances.
- 2) The *qualitative changes* do not appear continuously in time but they do correspond to the idea of "discontinuous balance", giving rise to a regular and smooth development as well as periods of radical change.
- 3) Finally, the process mentioned shows strong non-linear effects and positive feedback which are responsible for models in the process of formation and other forms of spontaneous restructuring but which are characterised by great uncertainties.

Our hypothesis is that economic actors are trained, acquire competences and take business initiatives in specific geographic areas: a state, a region, a city, a valley, etc. In our case, we base our observations on actors who operate on a regional level (Cooke, 2002) and that the basis of industrial and social innovation is seen at this level. We also believe that *knowledge* and the way in which it is

acquired and the *apprenticeship* of the economic actors who intervene in these processes are determining factors in innovation and special attention must also be paid to contributions made by clients (Moreno, H. and Pérez, A.:2003). Learning and knowing in a situation of uncertainty is essential in an ever-changing world.

The knowledge acquired builds up with the passing of time and, when the economic actors share this knowledge, innovation is the result and the heterogeneity of these actors is an important source of such innovation.

Another aspect of modern economy to be borne in mind is its *complexity*. In the economic world nowadays, the classic or Newtonian paradigm is becoming less and less relevant and is being substituted by the *systemic paradigm* or *the complex system*, which fits in better with the neo-schumpeterian economic model. This model is characterised by permanent interrelations and feedback that affect all economic actors, who react in harmony with each other. This complex system is different from the traditional or hierarchical system by which decisions are taken from the top downwards and not in a decentralized way. In the traditional system, the behaviour of the actors is predicted and action is taken accordingly; this is not the case in the complex system as future behaviour is unpredictable and conditioned by uncertainties arising from economic phenomena.

Finally, the analysis of the complex systems is centred more on long periods and not on the short term as in the neoclassical model, the model which was prevalent in the 1990s. Later on, analyses of the industrial cycles of greater duration began, in line with those carried out by Schumpeter (1911) at the beginning of the last century.

Furthermore, according to neo-schumpeterian analysts, modern economic development is supported by three fundamental pillars to which, from our point of view, *another two should be added*. Firstly, there are the three pillars established by the neo-schumpeterians and the last two are contributions based on observations of the Basque economy: 1) new organization of industry, 2) financial system, 3) the public sector, 4) *a network of technological centres in which the university system must play an important role* and 5) *a system whereby the workers take part in company management*.

The fourth pillar is based on contributions made by theorists of innovation and the fifth pillar is a contribution of the Social Economy. These five pillars must be perfectly interrelated in order that the initiative may spring from any one of them and be fed back in such a way that it influences the social and economic development of the area – in our study, the region.

2.- Empirical evidence in the Basque economy

a) Qualitative and quantitative transformations

The development outline proposed by Hanusch and Pyka responds, to a great extent, to the transformation model of the Basque economy initiated at the end of the 1970s and which still exists. At that time, Basque industry was characterized by the great importance of the iron and steel industry with an integral iron and steel mill, Altos Hornos de Vizcaya (Vizcaya Furnaces) plus a large number of common and special steel producing companies. All these companies underwent a crisis as they were not able to compete with the emerging iron and steel producing countries (Navarro, 1988, 1989 and 1990; Barrutia, 1995 and 2001). Other Basque industrial sectors were also affected by the consequences of strong competition from outside which gave rise to the closing down of factories and an increase in the unemployment rate, which, at one time, was as high as 25% (Navarro, Aranguren and Rivera, 1994).

The 1980s were characterised by the Industrial Rationalisation carried out in the Basque Country, which led to the gradual modernisation of Basque industry and the disappearance of many steel mills including Altos Hornos de Vizcaya which eventually closed down in 1996. In the place of the iron and steel industry, other industries began to take a successful hold such as the aeronautic, automobile component, wind-power generator industries, etc.; moreover, industries of long standing tradition in the country but which became obsolete were modernised, for example, the production of railway coaches (CAF in Beasain), paper mills, domestic appliances (Fagor, Otsein, etc.), coach bodywork building (Irizar de MCC), the production of vans (Mercedes in Vitoria), etc. A technology park was also created in each of the three Basque territories thus giving a boost to new industries and activities. In short, there was a qualitative change in the Basque industry helped by public policies and the enthusiasm of the economic agents in the Basque Country who, at the beginning of the 1990s began to organize themselves in *Clusters*, assessed by Professor Porter, for the purpose of improving competitiveness (*Ekonomiaz*, Revista Vasca de Economía, 2003).

Another aspect worthy of mention is that the 1990s saw a swift incorporation of women into economic activity. Statistics testify to this fact. The female work force rose from 29% in 1980 to 34.4% in 1995 and, by 2006, in accordance with the European Union guidelines passed in Lisbon in 2000, this figure had reached 57%; the employment rate for men in 2006 was 75.8%. It is very clear that there has been a great increase in the female employment rate, however it is still much lower than the 70% existing in Sweden and other countries in the north of Europe. Furthermore, female employment is far more precarious than male employment. Nevertheless, a structural change can be observed in the labour market and this has given a boost to the Basque economy.

It is also at this time that more importance is given to innovation to improve competitiveness among companies. Within this change in economic philosophy, special mention must be made of the important contribution made by the cooperative group, Mondragón Corporación Cooperativa (MCC), which has endeavoured to convince Basque economic agents of the need to incorporate the concept of innovation into enterprise (Bakaikoa *et al*, 2004). The basic principles of MCC's philosophy confirm the relevance of innovation, which is an important part of this cooperative group's Mission. The most outstanding aspect of MCC's contribution to innovation is the creation of a culture of innovation which has spread to the economic agents in the Basque Country as a whole.

This new culture has produced results: in the list of 1,000 companies in the European Union with the highest absolute investments in R&D and Innovation in 2006, there are five Basque companies: Industria de Tubos Propulsores (ITP) from the aerospace and defence sector, which is 197 on the EU list and fifth in Spain, and what is more, this company is running the risk of participating in the Airbus 380 project together with other Basque companies, which have invested 300 million Euros in the hope of receiving 3,000 million Euros in return; Gamesa, wind-power generators, which is number 314 in the EU and ninth in Spain; Compañía Auxiliar de Ferrocarriles (CAF), number 699 (2005), CIE Automotive, number 774 and 16th in Spain and Fagor, which belongs to the MCC group, number 805. This ranking is headed by Daimler-Chrysler, GlaxoSmithKline and Siemens. Inevitably, these figures are of importance but a more representative figure would be the ratio of these investments in R&D and Innovation with respect to global turnover in the same branch of activity.

Another significant factor in the change in tendency of the Basque economy arises from the Statute of Autonomy passed in 1979 and by which the Basque Country assumed competences in economic fields such as agriculture, fishing, industry, road networks, etc. In order that these sectors should develop, public policies drawn up by the Basque public institutions were applied. Furthermore, the Basque Country has had its own autonomous tax system since 1981, which makes it possible to collect all taxes except fiscal monopolies and customs duties and it also has competence to regulate all direct taxes including the corporation tax, which has laid the way for the establishment of a wide range of tax incentives in order to attract investments (Bakaikoa, 1986, 1998 and 2007; Zubiri, 2000). The educational system, including the public university, was also transferred to the Basque Country.

The new legal framework and the economic policies applied in the 1980s and the 1990s helped to put the Basque economy on the road to growth and, with the exception of 1980, 1992 and 1993, with rates of 0%, 0.9% and -0.7% respectively, the GNP has grown considerably: 4.5% in 1990, 3.5% in 1995, 5.2% in 2000, 3.6% in 2004 and 3.9% in 2005. Meanwhile, the income per capita in 1980 was 3,150 € rising to 27,247 € in 2005. There is no doubt that the qualitative and quantitative change, albeit with some ups and downs, has been continuous.

b) The pillars of economic development in the Basque Country

The first pillar is seen to be, above all, at a mesoeconomic and microeconomic level. The companies of an industrial sector organise themselves in order to innovate. This organization may be a *cluster* or an industrial district, where the former is of a highly technical nature and the latter incorporates production into a specific social scene. In these organizations, companies compete with a view to innovating but as well as competing they cooperate. At present, there are twelve *clusters* in the Basque Country, which makes it possible for the companies that form part of these *clusters* to develop. Meanwhile, as they become global, the traditional manufacturing companies become bigger by means of mergers, acquiring companies in third countries or making direct investments in emerging countries. However, in order to survive they must compete and therefore innovate constantly. Small and medium-size companies are also laying a lot of emphasis on innovation because, if they do not, they will disappear from the market.

In short, for all the companies mentioned, the tripod – innovation-knowledge-learning is indissoluble. Treating knowledge as a common good, in the manner of the neo-classicists, has no sense whereas regarding it as a gift on a regional or local level does, as it is a variable input that boosts development by means of feedback effects when it works in complex company systems.

The second pillar of development in a country or region is the financial system with a willingness to run risks. Entrepreneurs and financiers must cooperate to boost development. There must be a symbiosis between both agents. Entrepreneurs must have a financial system as a travelling companion if they want to reach their destination. In order that this combination should materialise, the authorities should play their part by improving interest rates of a horizontal nature.

It is clear that the traditional banking system (banks and savings banks) is not inclined to embark upon highly uncertain adventures although they may participate in specific projects but with no particular spatial identifications. However, nowadays, the financial system is not made up of banks and savings banks alone but there also exist venture capital companies, mutual guarantee companies, credit cooperatives and other funds prepared to face greater risks than traditional banks.

The Banco Bilbao-Vizcaya-Argentaria, of Basque origin, with offices all over the world, participates in some industrial groups situated in the Basque Country, such as Gamesa or Iberdrola. However, this participation in the Basque economy is on the decrease and the bank has cut itself off from the Basque Country since it moved to Madrid from where it carries out its global activities.

As opposed to banks, savings banks do have close links with their geographic surroundings; besides, their management is based on economic, political and social criteria although their economic criteria are becoming more and more similar to those of the banks. The three savings banks in the Basque Country account for 54.7% of the deposits in the Basque Country, according to the Basque Economy, Report 2005 (CL: 357). These deposits will be consolidated when the three savings banks

merge, giving rise to the third largest savings bank in Spain. This future dimension will make it possible to participate in important vanguard business projects in the Basque Country. For the moment, it is worth pointing out the investments in several regional projects: Iberdrola, CAF, Euskaltel, etc.

The savings banks are also linked to public institutions (county councils and town councils). Consequently, these institutions do not operate on a purely economic basis, as do private banks, but they also take into account their surroundings, by making productive investments or by donating part of their profits to charity. In short, the investments made by these financial institutions may be managed or recommended by the public institutions linked to them.

Although these savings banks do not base themselves on economic criteria alone, they are extremely efficient and profitable. This is especially true of the Kutxa de Gipuzkoa-Donostia (the Savings Bank in Gipuzkoa-San Sebastian), which obtained the highest qualification for entities of this kind from Standard&Poor's in 2007.

Then there are the cooperative credit banks: the Caja Laboral, which belongs to the MCC group and Iparkutxa (Caja Rural Vasca – the Basque Rural Savings Bank). Between them, the cooperatives account for 16.6% of the total deposits in the Basque Country. It is clear that these savings banks, which are closely linked to the Basque territory, invest a large part of their funds in the Basque Country.

Finally, there exists the mutual guarantee society (ELKARGI) for small and medium size companies and another (Oinarri) for firms in the cooperative, mutual and non-profit sector. Elkargi was a pioneer in its sector and now has 9,166 associates among the small and medium size companies with a volume of guarantees (2004-2006) of 710 million euros. Also to be taken into consideration are the venture capital companies promoted by the Basque Government and the county councils. The entity, Gestión de Capital Riesgo (Venture Capital Management) of the Basque Country participates, in most cases, in companies that are going to make investments of a high technological content and become shareholders for periods of six to ten years; together with the Gipuzkoa County Council, this entity has formed the society known as Seed Gipuzkoa with a view to supporting leading technology companies in the territory of Gipuzkoa. Both the mutual guarantee society and the venture capital companies are also modern, efficient instruments necessary for boosting innovation in enterprise while at the same time complementing the traditional financial entities.

The third pillar of economic development within the neo-schumpeterian model is the Basque public system. The Basque authorities have the competence to intervene in economic activity by means of tax policies and other incentives designed to attract investment in real assets. And they have done just this in times of economic depression.

Now that the years of economic depression have been overcome, present public investments are aimed at large projects concerned with infrastructure (ports, ring roads, motorways, high speed trains, etc.) in detriment to social expenditure and this is particularly affecting expenditure on education, which

in the long term will act in detriment to knowledge, a basic factor in innovation; furthermore expenditure on public health has been neglected and this is giving rise to doctors seeking employment in other countries; this phenomenon does not only exist in the Basque Country but also in other autonomous communities in the Spanish State. All in all, the Basque Government makes traditional public investments which tend to increase the accumulation of capital in accordance with the paradigm illustrated by J. O'Connor (1978).

The Basque tax policy applies measures to encourage investments, as entrepreneurs have to face up to a tax rate on profits which is lower than that of the rest of Spain besides generous tax reductions on investments in R&D, amortizations that are quicker than in the rest of Spain, investments in fixed assets, etc. (Zubiri, 2000 and Bakaikoa, 2007).

The *fourth* pillar is concerned with the Basque system of innovation and is added to the three pillars of the neo-schumpeterians¹. In 1997, Saretek, the Basque Network of Science, Technology and Innovation was set up with the aim of promoting, coordinating and socializing the development of science, technology and innovation in the Basque Country with a view to making the Basque economy an example of competitiveness. In 2007, Saretek became the Basque Agency of Innovation. At present, this agency groups together 90 associates and within the space of a year the figure is expected to grow to 300. Thus, all these centres develop scientific knowledge so that it may be applied by Basque economic agents.

Among the members are the three technology parks, MCC's Polo de Innovación Garaia, research centres, universities, etc. Some of these centres are long standing and of great prestige thanks to their quality. Consequently, it is not surprising that they take part in international projects (Airbus, etc.). Also worthy of mention is MCC's participation in the drawing up of innovation policies due to the experience it has gained in this field. It must be pointed out that the need to socialise innovation forms an important part of their principles and their mission.

After several years of setting up the infrastructure for Innovation, 2007 saw the creation of the Basque Council for Science, Technology and Innovation and the Ikerbasque Foundation, the aim of which is to attract 100 excellent researchers from other countries over the next two years². The aim of these institutions, all of which are backed by Basque authorities will be to socialise the culture of innovation in all fields in the Basque Country, which coincides with MCC's principles and mission.

As far as R&D and Innovation is concerned, the Basque Country still has a lot of ground to cover if it wants to fulfil the aims established by the European Council in Lisbon in 2000 when it was decided that 3% of the GNP should be devoted to this aspect by 2010. Table 1 shows some data for comparison.

1.- Bakaikoa, B., Begiristain, A., Errasti, A. and Goikoetxea, G. (2004), "Redes e innovación cooperativa" (Networks and cooperative innovation), *Journal on Public, Social and Cooperative Economy*, n° 49, pp. 263-294.

2.- Speech made by the President of the Basque Autonomous Community, Mr. Ibarretxe, concerning the state of the autonomy on the 28th September, 2007.

Table 1. Spending on R&D and Innovation

Country	1995	2000	2005	Euros 2003
BAC*	1.12	1.42	1.44	424
EU-25	1.84	1.88	1.90	443.3
Sweden	3.35	4.27	3.74	1,150
Finland	2.26	3.38	3.46	918.9
Spain	0.81	0.91	1.07	246.5

*Basque Autonomous Community

Source: Eustat

It must be pointed out that most of this spending on R&D and Innovation in the Basque Country is done by companies, encouraged by tax relief and advantageous amortizations in the case of high technology equipment. It is also worth remembering that the central government has still not transferred competence in this matter, as is specifically provided for in the Statute of Autonomy in force since 1979 and demanded by the Basque authorities, entrepreneurs and university graduates for its importance in the future of this country.

The *fifth* pillar that we add to the neo-schumpeterian model of development is that of *participation of the workers in the company*. So far, the big companies only offered incentives to the members of the managerial staff: *stock options*. This formula motivated them to obtain the maximum profit possible. In future, not only the top executives but also the workers should be involved in the management of the company to achieve better results making them party to the results obtained by the company³.

This participation on the part of the workers must not be limited only to them receiving a fraction of the profits or being given company shares but must lead to them taking part in the management of the company. To this end, the Basque Government intends to encourage entrepreneurs to become more aware of this and count on the workers, having them participate at three levels: capital, profit and self-management.

An obvious reason for the participation of workers is that they have a permanent contract because if they are working on a temporary basis, there is little chance of them becoming involved in company matters. Another reason is that, living in an age of knowledge, the logical thing is that all workers should be immersed in a learning process meaning that they would be capable of observing malfunctions in everyday tasks and consequently be able to put them right; however, in order that they might identify

3.- In Argentina the self-management system has become more widespread as a consequence of the last crisis, although the basic philosophy is different from ours; see Deledicque, LM, et al "Recuperación de empresas por trabajadores y autogestión. Un estudio de una empresa argentina" (Recovery of enterprises by workers and self-management. A study of case in Argentina), Revista de CIRIEC de Economía Pública Social y Cooperativa, no. 51, April, 2005.

with the company they must be permanent workers. The workers themselves would be able to correct the aforementioned malfunctions better than external agents. Teamwork is another important reason. Finally, hierarchies should be avoided in the chain of command and decisions should be taken horizontally, which would entail substituting the hierarchical command for team or group leaders. It is also essential that information should travel from the bosses downwards and from the workers upwards; fluid and transparent information makes for a good atmosphere in the company, and it is a component of the social capital.

The cooperative company model is similar to the participative company, but not sufficiently so⁴. In the cooperative model, the workers have a share in the property and in the cooperative returns, but the cooperative is not exactly a self-managed company, although it could well be, according to cooperative principles.

As mentioned above, the Basque Government's policy is to encourage this participation even in the case of companies that do not form part of the Social Economy. However, it is not easy to motivate economic agents to cooperate in a harmonious way; at times, cooperation is made difficult by entrepreneurs who believe that they should be the ones to take decisions regarding the company and that the workers should only carry out orders given on a hierarchical basis; by the same token, the workers, often guided by the trade unions, are reluctant to cooperate with those who, at the drop of a hat, may create a conflict or simply do away with them.

The participation of workers in small size, family companies would, in many cases, prevent the business from closing down as the descendents of these entrepreneurs often show no interest in continuing in the family business.

Nevertheless, in the Basque Country, there are cases of self-managed companies and literature concerning this abounds (Aragón, et al. 2003; Knowledge Cluster: 2001, 2003 and 2006). The Institute of Cooperative Law and Social Economy - GEZKI of the University of the Basque Country/Euskal Herriko Unibertsitatea (2003 and 2007) organised two congresses of a scientific nature regarding this subject under the guidelines of the Basque Government; a member⁵ of this university institute did his thesis on worker participation; work has also been carried out in companies for the purpose of implementing participation, etc. There is also an abundance of consultancy firms that assess companies with a view to encouraging participation⁶.

4. Bakaikoa et al (2004), "Governance of the Mondragon Corporation Cooperative", *Annals of Public and Cooperative Economics*, vol. 75, nº 1, March.

5. Aritzeta, (2005), *Influencia de la implantación de los grupos de trabajo autónomos sobre procesos individuales, grupales y organizacionales: un análisis comparativo longitudinal y multinivel*(The influence of the implementation of autonomous work groups on individual, Group and organizational processes: a longitudinal and multi-level comparative analysis), Editorial Services of the University of the Basque Country/EHU, Leioa (Bizkaia).

6. Hobest, etc. Koldo Saratxaga, the former Managing director of the cooperative, Irizar and Alfonso Vázquez are members of this consultancy.

Generally speaking, the idea of participation is rooted in the Basque cooperative movement. It comes as no surprise that the Mondragon Cooperative Corporation (MCC) belongs to and dynamises this movement. Apart from *cooperation, responsibility and innovation*, among MCC's four corporate values is *participation*, which the corporation must encourage, as all members can contribute towards improvement with their knowledge; there must also be participation in establishing company aims and special attention must be paid to teamwork and constant training. In the Basque Country, another case of participation can be found in the field of education and in particular in the Ikastolas (schools created to recuperate the Basque language, the majority of which came into being during Franco's regime), which have become teaching cooperatives.

In MCC, the associate workers' share in the share capital in 2006 came to 91.1%. It is recognised by the European Federation of Employee Share Ownership that MCC is the first European company among those companies in which the workers participate, with a share capital of over 50%. This share capital is remunerated with a 7.5% interest at the most, as long as the cooperative obtains positive results. Mention must be made of the fact that the workers in MCC's public limited companies had a share in 9.6% of the share capital of these companies.

Both MCC'S associate workers and the daywage workers receive a part of the surplus generated during the fiscal year by way of interests on the capital and cooperative returns (rebates in the event of losses). In 2006, of the 677 million euros obtained through surplus, 186 million euros were devoted to capitalised returns, 153 million to interests and monetarized returns and the rest (338 million) were devoted to Corporation Tax, Reserve Funds and Social Funds. MCC's employees (non-associate workers) receive a payment of 25% of what a partner receives for participation in the results.

However, participation in the management of MCC's cooperatives is rather limited, although all are entitled to intervene with full voting rights at the General Assembly and can become members of the cooperative's bodies: the Executive Council, Social Council, Board of Management, etc. Nevertheless, of the almost forty thousand associates, only 861 are members of these governance bodies. The body that acts as a link between the work associates and those of governance and management in the cooperative is the Social Council.

Some associated cooperatives have gone deeper into self-management. In this respect, MCC has wide experience in participation, the most outstanding case being that of the associated cooperative, Irizar, S. Coop. In this cooperative, participation is at three levels: capital, profits (cooperative returns) and self-management. Self-management has begun to develop in other MCC cooperatives such as Ampo, S. Coop., Eroski S. Coop, Lana S. Coop. One of the challenges for the future of the MCC cooperatives will be to promote self-management as the aforementioned cooperatives endeavour to do. In fact, the recently designed Corporate Management Model proposes that self-management should be one of the aspects to which cooperatives must pay special attention.

3.- From the traditional management model to the systemic model

The first reason why the traditional management model should be replaced by the self-management model is that the former is becoming outdated. The traditional management model is in crisis. Globalisation is making it more difficult to use traditional company management methods, where decisions are taken at the “top” of the company and the orders to carry out various tasks are conveyed in a vertical manner, giving rise to a divorce between the managing elite and the passive executors of the decisions. Planning is questioned because the high degree of globalisation obtained and the abundance of information available gives rise to factors that are difficult to foresee.

Consequently, the classical management model is criticised and consideration is being given to substituting it for another model in which the decisions taken are of a horizontal or systemic nature. Those who carry out the various tasks stress the importance of the way in which work is done. It is a way of working in a network. In short, the authority of the traditional model is converted into leadership.

The second reason is that the cooperative model has a greater chance of becoming a self-managed company than a traditional capitalist company. Cooperatives are based on principles which are officially approved by the International Co-operative Alliance (ICA) and these valid principles make for a situation whereby the company is guided by a genuinely democratic and participative spirit. Consequently, an effort should be made to go more deeply into democracy and integral participation so that the associate workers may also take part in day to day management instead of waiting for orders from their superiors.

Participation in the democratic management of a cooperative must signify that participation is not only limited to casting a vote at the General Assembly and the informative assemblies; it must also signify intervening in strategic planning (investments), organising work and production, adapting customers' proposals, suggesting that suppliers make certain modifications, etc. All this must be backed by fluid, transparent information and permanent training.

From the framework of MCC companies we have chosen to analyse a particular cooperative company from a more integral participative perspective. However, although this is a study of a “single case”, it is by no means lacking in scientific value. In a previous epigraph, it has been mentioned that several Basque companies, both cooperative and capitalist, endeavour to implement worker participation methods, whether the workers are partners or not; in these cases participation has reached different levels and the cooperatives, among which one has been chosen, are, logically, the most advanced as far as the process of participation is concerned.

In order to choose the MCC cooperative that best fulfils the cooperative principles, especially regarding the development of self-management, a commission of 10 experts from the group was formed: 2 cooperative managers, 2 members of the Standing Committee, 2 members of the General Council, 2 from Mondragon University, 1 from the centre for research, transformation and innovation and one from the training centre (Otalora). Of the ten experts in cooperativism in MCC, nine chose the cooperative Irizar, which is located in Ormaiztegi (Gipuzkoa). This choice was based on the fulfilment of three cooperative principles: 1) the supremacy of work over capital; 2) democratic organisation and 3) participation in management.

We have opted for the analysis of a single case, as it is a special case. In the study of the evolution of the MCC cooperatives, it can be seen that they fulfil the cooperative principles gradually and in this evolution some of them were in the vanguard and, as time goes on, other cooperatives of the same group are implementing the Irizar model. And, in the near future, other cooperatives will make the same changes following this new model of corporate management.

There are other cases⁷ of MCC cooperatives where attempts were made to implement the self-management system after undergoing a serious economic crisis. In some cases the self-management model failed to prosper due to difficulties of leadership while the Executive Council tried to control the management tasks arising from the crisis. There are also other cooperatives wishing to encourage self-management but, as yet, no results are available⁸. Outside the MCC cooperatives, those which are commercial companies are also seeking formulas for participation similar to those applied in the distribution cooperative, EROSKI through GESPA.

It is assumed that organisations can be managed on the basis of the underlying ideas in the Complexity Sciences and to confirm this fact, we make use of real experience in a cooperative. We also wish to demonstrate that this type of management has been put into practice with satisfactory results and, in the future, other cooperatives should be able to follow along the same path.

Getting to know the process followed in the implementation of the new organisation and management of Irizar by means of shelved documents is no easy task so we have opted for semi-structured interviews. One of the interviews which appears in the book by Luxio Ugarte (2004) entitled "Sinfonía y Jazz" (Symphony and Jazz) is with the person responsible for the implementation of the self-management model in Irizar, Mr. Koldo Saratxaga. In this book can be found themes related with the new organisation and management so it has been decided not to have another interview with him.

7.- Pagalday, E. (2003), "Participation experiences in enterprise...From the day after", *Participación de los trabajadores en la empresa (Workers participation in enterprises)*, Marcial Pons, Madrid. The author omits the name of the associated cooperative which underwent the experience of self-management.

8.- Mention of the names of the cooperatives is avoided.

There have also been semi-structured interviews with members of the staff at Irizar belonging to different teams and chosen at random. The questions are concerned with the degree of implication of the associate workers in self-organisation and self-management, information and cooperation, improvement in planning and its replacement by shared management, education, training, etc.

Another work used was the “Estudio de la figura del trabajador del conocimiento en tres organizaciones vascas” (A study of the knowledgeable worker in three Basque organisations). One of these organisations is, once again, the cooperative Irizar. In order to carry out this study, 85 associate workers of the 650 in Irizar at the time were interviewed. The questions asked were related with the dynamics of management.

Finally, we decided to reject the idea of direct observation and another questionnaire aimed at Irizar’s personnel as we considered that there was already sufficient information.

4.- The completely new self-management experience in Irizar, S. Coop.

a) Management of the cooperative⁹

The first thing one notices in the material compiled from the cooperative Irizar is that the person is more than just a work resource, which is the idea defended by the founder of MCC, Father Arizmendiarieta, from the beginnings of this cooperative experience. If the person is left to his own devices, his creative capacity has no limits but it is necessary to move away from simple answers. It is also necessary to trust the people who participate in the project and think that everything they do is with the best of intentions; if they do a job badly, instead of reprimanding, corrections should be made as people do not deliberately do things badly. In short, trust in people is fundamental when it comes to self-organisation in work teams formed by people from self-managed, multi-disciplinary fields and is a great improvement on the classical departmental-hierarchical idea.

Another aspect which is worthy of note in Irizar is that power is not hierarchised but structured on the principle of participation-leadership. Instead of the hierarchical concept, they work on the principle of shared leadership. The idea of a boss with unlimited powers does not exist; his/her function is like that of a sports coach.

9.- Agirre, A. (2006), *Kooperatiben Koeboluzioa Konplexutasunaren Paradigman: Beren Idiosinkrasiari Eusteko Bidea (Thesis)*, Mondragón Unibertsitatea, Oñati.

The work teams are made up of four or five persons although there can be groups of up to fifteen members. The components of these teams are inter-connected in one way or another and the aim is to strengthen cohesion in groups and between groups because collaboration is the secret of success. Also, relations with other institutions will also be promoted, especially with suppliers and customers.

In this new organisation, Irizar responds with three types of stable work groups:

- 1) Customer line teams
- 2) Customer satisfaction teams
- 3) Pilot teams and coordination teams

The *customer line teams* are made up of people who participate directly or indirectly in the work regarding the manufacturing cycle of each coach, so that, in principle, all those who work in Irizar's parent company are included, suppliers and subcontractors as well. 95% of the staff participate in these teams and they manage the entire manufacturing process of the bodywork from the moment the order is received to the moment the coach is delivered to the customer.

Throughout the day, these teams carry out the work planned for 8 hours' work. With a view to satisfying the customers' wishes, they are in permanent contact with the customer satisfaction team, whose job it is to gather all information concerning the requirements regarding the quality and service of the product manufactured by Irizar. Previously, these teams had a leader who was elected by the members and/or proposed by the pilot team. However, as the project has been consolidated, it was considered that this responsibility should be shared among all the members. The customer line team, in turn, is divided into sub-teams according to the process. Each one has a leader elected among the members, who take it in turns to be leader. The underlying idea is that all should assume the leadership at some time.

The *customer satisfaction teams* link the market to the customer line teams. Those who make up the customer satisfaction team are related with the market, as the closer one is to market information points, the more easily such information will be transmitted to the production centre. These customer satisfaction teams also lead the company strategy, define qualitative and quantitative aims, connect and drive the customer line teams and make the customers' requirements known in order to carry out the correct strategy through the eyes of the company.

It must be pointed out that the two aforementioned teams are multi-disciplinary and self-managed and focus on everything concerning the market so that all movement between the market and the production centre are taken into consideration. In short, if one is familiar with the ins and outs of the market, it will be easier to obtain customer loyalty, which is the reason for the creation of these teams, whose field of action is in different geographical areas (France-Holland-Belgium; Poland-the Czech Republic-Slovakia-Hungary-Russia, etc.).

Then there is the cooperative's *pilot team* made up of the leaders of the 15 customer satisfaction teams, the coordinating team, the person responsible for quality and the one responsible for the after-sales service and they meet once a month to study the evolution and the ups and downs of the market and to determine how they can support the other teams in the carrying out of their tasks. It is a team which is made up of people elected according to the responsibilities they assume in the project (technological services coordinator, personnel coordinator, coordinator general, etc.) and the leaders of key projects. The pilot team is not stable, as occurs in cooperatives that are managed in a classical fashion. If new initiatives arise, the team is reformed with new members.

There is also a *coordination team*. Its aim is to share in the monitoring of the evolution of the project and to find the quickest possible solution to any malfunctions that might exist. Another purpose of this team is to encourage the participation of all the cooperative's associate workers, providing them with correct and punctual information about everything that happens concerning the cooperative and making them party to Irizar's global project.

As far as participation of the members of the different teams is concerned, the survey shows that the majority of the workers participate in defining the objectives of their jobs and the tasks to be carried out as well as in fixing the aims of the unit of the company of which they form part. Other workers answer by saying that they participate in determining the tasks limited to their sphere of work and that they have sufficient autonomy to proceed as they deem fit.

In spite of the high degree of participation, those who work in a customer line team have jobs which are perfectly defined (painting, welding, etc.) and so the field in which they may act is not particularly wide. However, in other more generic teams (management teams), the possibilities of taking action, proposing improvements, etc. are greater. Once the project is developed by an "ad hoc" team, the team is dissolved. In such teams, the participating members define their objectives, develop their capacities and make contributions, often exceeding initial expectations.

The idea behind all this is to break the monotony of work and, instead of always doing the same jobs, the workers have the opportunity to develop initiatives that generate added value.

Why do they work like this? The answer given by the leaders of Irizar, S. Coop. who were interviewed is clear: the idea is to achieve the highest performance from the atomised energy that exists in the cooperative, making any project viable, which, in the long run, makes for improvement in competitiveness.

Another important aspect is that of **communication**. In traditionally managed companies, communication is merely a transmission of information in a single direction. In a project that is shared, as in Irizar, all economic information is shared, ideas for the future are proposed and the direction that must be taken in order to continue being competitive is put to debate, etc. Therefore, good communication is of prime importance in the good running of a self-managed company.

In order that communication should be successful, forums are set up for all those who wish to attend to participate; they may even be convoked on personal initiative. According to the survey, 42% claims to have participated in a multitude of initiatives, having coordinated meetings on issues connected with their responsibilities.

Communication networks also operate between various customer line teams, so that they may exchange information regarding what each team is doing, their problems, solutions proposed, etc. In short, on line communication concerning the cooperative's economic situation and any problems arising is fluid and constant.

Besides the aforementioned forums, discussion forums dealing with basic issues concerning the development of the cooperative are convoked three times a year. These meetings are equivalent to the General Assembly and all workers both permanent and temporary attend with full voting rights. In the first two general meetings, issues related with the financial year are debated and reflected upon and the results are presented in April, as in any other cooperative. In the ordinary General Assemblies everyone participates but only the partners can exercise their right to vote on legal agreements. And in the third assembly Strategic Thoughts are agreed upon.

Every day at 8:30 a meeting is held. This meeting is coordinated by a member of the customer satisfaction team and all those in charge of the different sections of each customer line team participate. At this meeting, an analysis is made of the situation of the bus that is in the process of being manufactured and any problems that might have arisen in order to find a quick solution and have the bus ready for the customer.

The problems that arise in the 8:30 meeting are analysed in another meeting which is held at 10:00 and attended by the six coordinators of the meetings regarding each production line as well as the personnel coordinator, the planning coordinator, those in charge of the market and the members of the technology services.

Another forum is the planning team, which meets every Friday and whose job it is to plan the production for the coming week and make forecasts for the following 2-3 weeks. These forums are complemented by the intranet system and the magazine, which is issued quarterly, all of which make for the improvement of company information. Finally, it must be pointed out that any member may encourage the creation of forums attended by people or virtual forums to deal with issues related with the running of the company.

Particularly worthy of note is the freedom and autonomy of the members/teams of Irizar, as they are the administrators of their work time. The team itself decides when each group is to start their activities taking into account that work is carried out in a chain; in principle, there is no fixed time for starting the working day or finishing – only the established objectives must be fulfilled. There is no control over attendance – this is ruled by the members' sense of responsibility, according to 64% of those polled. In other companies, the workers do not have this liberty.

In the past, the workers were given a written plan of what each one had to do. Now they distribute the work in the team. Each person, depending on his/her ability works at a different rhythm and if he/she needs help, the other members of the team help.

Work norms are left on one side and instead debate is encouraged. Bureaucratic proceedings are substituted for dialogue. Talking about any complications that may arise is the basis for solving conflicts, "by transforming all problems into opportunity". The diversity of people together with disagreement are respected and the coordinators must show that they are there to help and serve others.

The associate workers are the owners and that is precisely how they feel in the field of management and when it comes to taking action. Having autonomy and being free to act makes them feel they are in charge of the coach manufacturing process and this identifies them with the project. Not only are they the owners of the capital but also of the production process; this feeling of belonging makes it easy to be constantly taking decisions.

The traditional management system signifies fulfilling decisions imposed hierarchically to the letter. But self-management calls for the teams to have information, albeit abundant and chaotic on occasions but, in time, they learn to select the most relevant information received from other teams as well as from customers and suppliers. The associate workers are of the opinion that no information should be hidden. Sometimes the information is redundant but always positive.

In Irizar no power is imposed, which is why so many meetings are held to exchange information. Instead of command there is leadership and power is developed horizontally and in a decentralised fashion. Decisions are taken among many people, otherwise self-management/self-organisation would not be possible. This means working in a team with the capacity and willingness to communicate, take decisions and assume risks.

Irizar does not draw up traditional Strategic Plans or Management Plans, but, every year, a team of approximately 60 people is formed for the purpose of strategic reflection with respect to the coming financial year. Every year, the main ideas are looked over by the coordinating team together with other persons and, at a later date, the rest of the personnel are informed of the general results of this activity. As a result, certain basic simple ideas are defined and this is known as Strategic Thoughts (which would replace the traditional Strategic Plan). The next step is to specify Ideas and Objectives (which would replace the traditional Management Plan) with respect to the coming year, establishing for the purposes of management the annual qualitative and quantitative objectives to be fulfilled. Both the Strategic Thoughts and the Ideas and Objectives are agreed upon by virtually all those who go to make up Irizar and finally, they are passed at the December Assembly. In the year just finished, 400 of the 730 persons that go to form Irizar Ormaiztegi were in agreement with the Strategic Thoughts before they were passed at the Assembly.

The investments for the following financial year are carried out in accordance with what the teams say. Furthermore, agreement over these investments is reached in the coordinating team and they are then presented at the corresponding General Assembly for their approval.

In Irizar education and preparation are important. The former is acquired through trust of and closeness to the rest of the people and the latter is a matter of obtaining the widest possible knowledge. Education changes the way people are and the way they do things. Working in a team is the best education.

Belonging to the customer line team makes its members aware of what they are doing in production and who they are doing it for and that gives their work sense. It makes them feel united and proud to work in a self-managed project although the system itself is unstable but makes for advancement.

b) Some information

MCC's economic data are of special significance and its contribution to the economy of the Basque Country is outstanding. In 2006, it accounted for 4.1% and 3.8% of the GNP and Basque employment, reaching the figure of 8.5% if we take the Basque industrial product. Of the total amount of industrial employment in the Basque Autonomous Community, 8.6% were employed in the MCC cooperatives and a further 20,602 jobs were generated. Finally, 16.8% of investment in the BAC was made by this cooperative group.

Irizar Sociedad Cooperativa, was created in 1989 for the manufacture of coach bodywork. In the beginning, it produced a wide range of bodyworks, which gave rise to poor economic results.

These data are an example of the importance of MCC in the economy of a region like the Basque Autonomous Community, where it is a leader in policies of innovation and participation. To this end, it counts on such precious instruments as the cooperative university, research centres and centres devoted to participative entrepreneurial culture.

As has been mentioned, Irizar, S. Coop is among the most participative cooperatives. This cooperative began to change the management model with the arrival in 1991 of Mr. Saratxaga who occupied a post in the management of the company, which was technically bankrupt and with a volume of sales of 20 million euros and a staff of 250 associate workers. The change in the management model began in 1993-1994 after some tough debates. The following table shows some significant figures in the evolution of this company.

Table 2. Evolution of Irizar, S. Coop

Year	Sales (Millions of euros)	Value of assets	Value of own resources	Employees
1991	20	10,000	8,000	250
2000	250	255,000	140,000	1,700
2006	430	464,000	285,000	3,030*

*In the parent cooperative in the town of Ormaiztegui (Gipuzkoa) 630 employees.

Source: data provided by Irizar

The growth in volume of sales has been constant – in 2006 the company grew by 11% and invested 20 million euros in its process of internationalisation. These investments were distributed in the following manner:

- 1) Purchase of 60,000 m² plus a building of 14,500 m² in Morocco,
- 2) 8,000 m² of installations in Brazil,
- 3) Enlargement in South Africa to triple production
- 4) It began to build a new plant in India
- 5) Development of the new model in Mexico, Brazil and Ormaiztegui.

Once the new management model was implemented, the cooperative began to take off and, in 1995, a *joint-venture* of fifty per cent each was set up in China. Two years later in 1997, the company set up in Morocco and expanding its area of business in Spain. The following year, it set up in Brazil and the same year The Irizar Group was created. In 2001, it began to build bodyworks in India and the following year it acquired another company in Spain and, finally, in 2004, it set up in South Africa. This is the photograph of the cooperative's rapid expansion and how the models of traditional management have been replaced by a systemic management model.

In Spain, it is the leader of builders of coach bodywork, having built 1,607 bodyworks and sold 767 in 2005, with a share in the market of 45.7%. In the same year they produced 1,430 bodyworks in their installations in Mexico, Brazil, South Africa Morocco, India, China and Manresa and Sevilla in Spain. This cooperative's products can be found in 71 countries.

Both in the case of MCC as a whole and in the particular case of Irizar, S. Coop. with a high degree of self-management, the growth rates regarding business and employment are noteworthy. Thus, it could be concluded that the generalisation of innovation and worker participation in enterprise in the BAC, growth levels and generation of employment could well reach higher levels than those existing at present.

5.- Conclusions

The neo-schumpeterian model of economic development is applicable to the economy of the Basque Autonomous Community of the last twelve years. Thus, the three pillars which explain the development of a region are rooted in the Basque economy, in which there are organisations of competitor companies (12 clusters), financial institutions prepared to take risks and authorities willing to modernise and boost the economy through tax incentives and other types of aid.

However, we firmly believe that to the three pillars established by the neo-schumpeterians, another two should be added: innovation and worker participation in enterprise both in capital, profits and management (self-management). In the field of innovation, the important contribution made by MCC is worthy of note, as it is the indisputable leader in the Basque economy both in the implementation of innovation systems and the creation of an innovative entrepreneurial culture in Basque Society.

Worker participation in enterprise is another factor that accounts for the development of the Basque economy. In cooperatives and worker-owned companies, sharing in the capital and the results of the Social Economy companies is a reality. There is no doubt that this participation reinforces the development of companies that operate in this way, as a high degree of complicity is reached among the workers in the company where they work. MCC is living proof of this.

The facts show that in going deeper into worker participation in management, as is the case in Irizar, S. Coop. and other cooperatives that are beginning to introduce this management model, there is a substantial improvement in the economic results.

To sum up, cooperatives are a model of the integration of an innovative and participative culture and commercial companies would do well to apply elements of the cooperative system, as this would make them more dynamic and more social.

Bibliography

- AGIRRE, A. (2006): *Kooperatiben Koeboluzioa Konplexutasunaren Paradigman: Beren Idiosinkrasiari Eusteko Bidea* (Thesis), Mondragón Unibertsitatea, Oñati.
- ALBIZU, E. et al. (2006): *La participación de las personas. Siete claves para añadir valores a las organizaciones*, Servicio Editorial de la Universidad del País Vasco/Euskal Herriko Unibertsitatea, Leioa.
- ARAGON, A. (2003): "Gestión de la participación de los trabajadores en la empresa: Situación y desafíos", *La Participación de los Trabajadores en la Empresa*, GEZKI- universidad del País Vasco/Euskal Herriko Unibertsitatea, Donostia-San Sebastián.
- ARITZETA, A. (2005): *Influencia de la implantación de los grupos de trabajo autónomos sobre procesos individuales, grupales y organizacionales: un análisis comparativo longitudinal y multinivel*, Servicio Editorial de la UPV/EHU, Leioa (Bizkaia)
- BAKAIKOA, B. (1986): "Una visión del Concierto Económico y del Cupo en la Comunidad Autónoma Vasca", *Revista Vasca de Administración Pública*, nº 14.
- BAKAIKOA, B. (1998): "Inbertsionarako Zerga Pizgarriak EAEn", *Eleria*, nº 3.
- BAKAIKOA et al. (2004): "Governance of the Mondragon Corporation Cooperative", *Annals of Public and Cooperative Economics*, vol. 75, nº 1, March.
- BAKAIKOA, B., BEGIRISTAIN, A., ERRASTI, A. & GOIKOETXEA, G. (2004): "Redes e innovación cooperativa", *CIRIEC-España, Revista de Economía Pública, Social y Cooperativa*, nº 49, p. 263-294.
- BARRUTIA, X. (1995): "Siderurgiaren berregituraketa Europako Ikatz-Altzairuaren Elkartean", *Industrializaziotik desindustrializaziora*, Udako Euskal Unibertsitatea, Bilbao.
- BARRUTIA, X. (2001): *Altzairuaren ibilera eta berregituraketa: Altos Hornos de Vizcaya*, Universidad del País Vasco/Euskal Herriko Unibertsitatea, Leioa (Bizkaia)
- BELBIN, M., AYESTARAN, S. et al., (2006): *Rumbo a la innovación. Trabaja en equipo y cambio cultural en las organizaciones*, Cluster de Conocimiento, Bilbao,
- CLUSTER DE CONOCIMIENTO (2001): *La empresa participativa: Una visión sobre el papel de las personas en las organizaciones*, Cluster de Conocimiento, Bilbao.
- CLUSTER DE CONOCIMIENTO (2003): *Empresas participativas: experiencia y aproximación*, Cluster de Conocimiento, Bilbao.

- DELEDICQUE, L. M. et al. (2005): "Recuperación de empresas por trabajadores y autogestión. Un estudio de caso de una empresa argentina", *CIRIEC-España, Revista de Economía Pública, Social y Cooperativa*, nº 51, abril.
- ECHEVERRIA, S. (2007): "Cultura e innovación como marco de la participación en la empresa", *La participación en la empresa*, Servicio de Publicaciones de la Universidad del País Vasco-Euskal Herriko Unibertsitatea, Leioa (Bizkaia).
- EKONOMIAZ, Revista Vasca de Economía, 1996, nº 33, monográfico sobre participación.
- MORENO, H. & PÉREZ, A. (2003): *La innovación en la pequeñas empresas catalanas. Las cooperativas de trabajo*, CIDEN, Barcelona
- NAVARRO, M. (1988): *La Política de Reconversión en España: el Caso de la Siderurgia*, Tesis Doctoral, Facultad de CC. EE y Empresariales (ESTE), Universidad de Deusto. San Sebastián.
- NAVARRO, M. (1989): *Crisis y reconversión de la siderurgia española, 1978-1988*, Junta del Puerto de Pasajes, San Sebastián.
- NAVARRO, M. (1990): *Política de reconversión. Balance crítico*, Eudema, Madrid.
- NAVARRO, M., ARANGUREN, M. J. & RIVERA, O. (1994): *La crisis de la industria manufacturera en la CAPV: Aspectos estructurales*, Manu Robles-Arangiz Institutua, Bilbao.
- PAGALDAY, E. (2003): "Experiencias de participación en la empresa...Desde el día después", *La participación de los trabajadores en la empresa*, Marcial Pons, Madrid.
- UGARTE, L. (2004): *¿Sinfonía o jazz? Koldo Saratxaga y el modelo Irizar*, Granica, Barcelona.
- VÁZQUEZ, A. (1998): *El modelo vasco de transformar empresas. Retos de futuro*, Hobest, Bilbao.
- ZUBIRI, I. (2000): *El sistema del Concierto Económico en el contexto de la Unión Europea*, Círculo de Empresarios de Vizcaya, Bilbao.