1. Introduction

In a capitalist economy where private ownership of business is a characteristic feature, the firm can be defined as an organization that conduct business activities and is owned and controlled by the same person(s). Even if ownership is shared across several persons and/or institutions, as in the case of public companies, the presence of a unitary control of the business activities by a few persons who constitute the top management is easy to detect.[1] Thus, ownership and control are the main features of the firm's boundaries.

When this notion is applied to the analysis of actual firms, the boundaries thus identified do not always coincide with the legal entity (i.e. the company), which is normally used in empirical and theoretical studies to identify firms. This is due to the widespread presence of business groups: sets of companies that are legally distinct, but which are owned and controlled by the same person(s). This may be an individual, members of one family or a coalition of people, who are referred to as the 'ultimate owner', 'vertex' or 'controlling owner' of the group. [2]

There are several definitions of a business group proposed in the literature. The main difference lies in the 'nature' of the relationships among the units comprising the group, the most important distinction being between ownership and non-ownership links. In the case of ownership, belonging to a group is determined by a majority share – or a stake large enough to secure control – held by one person or a coalition of people (the controlling owner). In the case of non-ownership links, the literature proposes several forms of stable connections that result in business groups: subcontracting, franchising, alliances, etc. (Menard, 2004). In general, the economics literature considers ownership ties, while the sociology and management literature

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[1] Public companies are significantly present only in the large firm sectors of the UK and USA; in all other countries concentration of ownership and control prevail (La Porta *et al.*, 1999; Morck, 2000).

[2] The last term is used in this paper to refer to ownership.

focuses also on non-ownership ties (Goto, 1982; Granovetter, 1994, 1995). Although we do not deny that forms of stable collaborations, such as those observed in vertical chains, can influence the behavior of firms, in this paper the group (or the business group) is identified on the basis of ownership and control relationships.

Based on this perspective, we suggest that the business group rather than the individual company is the most appropriate 'unit' for an analyses of the organization and behavior of firms. The first authors to dealt with this issue (Penrose, 1959; Williamson, 1975) had some doubts about considering the business group as a firm. These doubts were based on the fact that both authors considered the presence of administrative (hierarchical) links and economic synergies as necessary conditions for identifying firm boundaries. According to Penrose: "although many industrial firms are more or less loosely bound together by a common source of finance or a strong element of common ownership, the mere existence of such connections is not of itself sufficient evidence that administrative coordination is effective and adequate enough to justify calling such a grouping a firm." (Penrose, 1959, p. 21).

In Penrose's view the critical distinction is between administrative coordination and 'mere' ownership relations. Notwithstanding the difficulties in 'operationalizing' this distinction, empirical evidence shows that business groups normally satisfy the conditions suggested by Penrose for the identification of firm boundaries: that is, the presence of a unitary direction and administrative co-ordination. This is especially true in the case of small and medium-sized groups where these elements are more evident.

The question of whether the firm is the business group or the legal unit is specifically relevant given the fact that business groups are not peculiar only to certain industries, countries or size classes. They are the organizational form typically adopted by entrepreneurs and managers to maintain and expand their control over business activities.[3] This preference has been reinforced by the trend in organization design since the 1970s towards enhancing the operative autonomy of organizational units in response to the increasing segmentation of markets. In this context the group has emerged as an organizational form specifically adapted to coping with the new conditions of markets and technology (Gerlach, 1997). Indeed, the legal autonomy accorded to the units of the group allows entrepreneurs and managers to implement an appropriate mix of control and autonomy to manage a set of different businesses. The group form also allows better control of the risks associated with investment in new activities.

The main aim of this paper is to demonstrate that it is the business group rather than the individual legal unit that is most suited to a study of the behavior and organization of firms; that is, the business group rather than the individual legal unit is the most appropriate firm boundary. We analyze the internal control mechanisms of business groups, emphasizing notions such as unitary direction and administrative co-ordination.

Given our aims in this contribution we adopt an interdisciplinary perspective that relies on economics, management and law. This multidisciplinary approach is necessary for analyzing the different aspects characterizing business groups in terms of ownership, control, economic synergies between firms and internal organizational mechanisms. To support our propositions, we use data and information from various sources, ranging from official statistics on the firms population, to sample surveys, case studies and juridical evidence. The use of different sources is justified not only by the interdisciplinary nature of the problem but also by the lack of systematic statistical evidence on the phenomenon of business groups. Most of the empirical evidence exploited in the paper refers to groups located in Italy based on the availability of statistics appropriate to the aims of this research. In fact, the Italian statistics agency (ISTAT) is one of the few statistics offices to produce systematic data on the populations of business groups. In

3 The exception to the widespread presence of business groups seems to be the US economy, where the M-form is prevalent (Chandler, 1982). This is generally justified by differences in fiscal regimes and corporate law (Morck, 2003).

response to the concerns raised by some Italian researchers at the beginning of the 1990s over the presence of business groups (Brioschi *et al.*, 1990; Barca *et al.*, 1994), information on groups has become part of the main surveys on Italian business activities. Though the Italian context presents specific economic and social features, the widespread presence of business groups is not a phenomenon that is peculiar to Italy, as we show in Section 3. Nor are there reasons to suppose that the characteristics of business groups and the general motives for their formation differ between the Italian context and other countries. For these reasons we believe that our results can be generalized to other social and economic contexts.

The paper is organized as follows. In Section 2 we provide a synthesis of the literature on business groups. In Section 3 we present some empirical data on the relevance of business groups in developed and emerging countries and develop a taxonomy of this organizational form. In Section 4 we propose and discuss our hypothesis that the group is the appropriate unit to delimit the boundaries of the firm. Section 5 concludes the paper.

2. Related literature

Most of the literature on business groups focuses on large, pyramidal groups. These are large complexes of several layers of controlled companies, with a holding company at the top (Morck and Yeung, 2003). There are two broad strands of literature. The first refers to emerging countries and considers business groups as resulting from the institutional conditions of these countries. Specifically, it sees the group as the result of inefficient market institutions. The second considers the group as a financial device used by individuals (families) who are at the vertex of the control chain. Within this approach, three different perspectives can be identified according to the issue being emphasized. We label them: i) equity leverage; ii) tunneling; and iii) internal capital market. The first two (equity leverage and tunneling) are appropriate for groups that include listed companies; the third refers to pyramidal groups in general, irrespective of their size or the presence or not of listed companies.

2.1 The groups as a result of market failures

This strand of the literature explains the presence of business groups as an organizational form suitable for the management and development of business activities in the specific economic, social and political conditions of emerging countries. A synthesis of the contributions regarding the nature of business groups in these countries was proposed by Khanna and Palepu (1997) and Khanna (2000). These studies interpret the presence of business groups as the result of the absence of or deficiencies in the institutions that facilitate an efficient enterprise system: i) the underdevelopment of financial markets; ii) high levels of institutional uncertainty and lack of discretionary power in private enterprises and public institutions; iii) high level of political instability; iv) underdeveloped intermediate product markets. According to this interpretation "highly diversified business groups can be particularly well suited to the institutional context in most developing countries. … [they] can add value by imitating the functions of several institutions that are present only in advanced economies" (Khanna and Palepu, 1997, p. 41).

Peng and Delios (2006, p. 399) state that "in general, business groups and conglomerates are creatures of institutional imperfections". Similarly, Chang (2006b) with specific reference to East Asian countries argues that:

> "Business groups are creatures of market imperfections, government intervention, and socio-cultural environments. I expect that as long as markets, especially capital markets, are imperfect and the East Asian governments influence resource allocation, business groups will continue to exist and even prosper in this region. As markets become more efficient and government intervention subsides, business groups may lose their reason for existence and see their influence decline".

According to this view, business groups should occur most frequently and most profitably in countries where market inefficiencies are prominent, usually emerging countries with significant market information asymmetries (Kock and Guillen, 2001; Yiu *et al.*, 2005). However, this interpretation is contradicted by the large presence of business groups in advanced economies, an increasing rather a decreasing trend in recent decades.

2.2 The group as a financial device

Studies of business groups in developed countries stress the interpretation of the group as a financial device to separate ownership and control: that is, to separate control rights and cash-flow rights. In the UK and the USA the development of stock markets has favored the establishment of public companies under managerial control (Barca and Becht, 2001); in continental Europe the group structure has allowed banks, families or the state to maintain control of large firms (La Porta *et al.*, 1999). In public companies the main instrument for monitoring managers and limiting their discretionary power is the stock market, through the contestability of control. In the case of business groups, the control of companies is granted by forms of negotiated relationships among the main stakeholders (owners, banks, managers), which ensure more stable control. According to this interpretation business groups accomplish two main functions: i) they guarantee the stability of control (reduce contestability); ii) they maximize the activities controlled with a given amount of equity capital invested by the controlling owner.

Daems's (1978) work on the main Belgian groups was one of the first studies to interpret the group as a way of securing efficiency and stability in the control of business activities. Daems pays specific attention to the main financial holdings defined as "financial institutions which manage a portfolio of stocks in order to control the companies in which they hold a share of the equity capital" (Daems, 1978, p. 2). The crucial point in this definition is the notion of control, which justifies the existence of the group. By control Daems means the possibility of monitoring, and therefore influencing, the allocation of capital by the controlled businesses. By assuming this function the holding company replaces the 'visible hand' of managerial control with the 'visible hand' of an internal capital market. At the same time, the group requires a developed capital market to raise the capital necessary to gain control of subsidiaries.[4] The presence of groups is justified by the fact that the resource allocation mechanism guaranteed by the holding company is more efficient than that of the capital market. From a theoretical point of view, in a perfect capital market there would be no need for intermediation. The existence of the holding company can be justified, therefore, on the basis of two elements: i) the existence of imperfections in the capital market (information, transaction and monitoring costs), which render convenient both portfolio diversification and the active management of shares by the holding company; ii) the existence of advantages deriving from the direct control of businesses. According to Daems it is this second element that is important in explaining the presence of groups.

The analogy of the group form to the multidivisional organization (M-form) has led some researchers to investigate the role of the pyramidal group in collecting and allocating to its companies financial resources (similar to the central direction in a multidivisional firm). Several researchers have investigated the nature and consequences of the group as an internal capital market. Buzzacchi and Pagnini (1994, 1995) try to assess the amount of financial resources managed within the group (internal capital market) and the allocation efficiency of this internal market. In the first of their studies of a sample of 510 large industrial firms, they show that the amount of resources intermediated within the group is comparable to the financial resources raised by the group from external sources. This confirms the similarity between the group and the multidivisional firm in terms of the former's role as a mechanism for the allocation of financial resources. However, the group multiplies the sources of external finance, since capital (debt and equity) can be raised by both the holding company and the individual firms in the group. It is this feature, according to Buzzacchi and Pagnini (1995), that may generate inefficiencies in the allocation process because of the presence of 'tunneling'. This is impossible

[4] "By acting as a financial intermediary in the capital market, the holding company becomes similar to a closed mutual fund. The basic difference is that holding companies strive for control over corporate decision-making" (Daems, 1978, p. 3).

in the case of multidivisional firms since individual shareholders have the same shares in all the activities (divisions) of the firm.

Studying the ownership structures of groups and the conflicts of interest between control and minority shareholders, has intrigued those authors who interpret the group as being a mechanism for separating ownership and control. The first systematic study to adopt this perspective was by Brioschi *et al.* (1990), who examined the ownership and control structures of the pyramidal groups listed on the Italian stock exchange. Their interpretation of business groups is set out clearly in the introduction to their book:

> even if the importance of the group as an organizational form of enterprise midway between the market and hierarchy cannot be denied, it is necessary to recognize explicitly that the group phenomenon, in its hierarchical form, is essentially linked, for causes and effects, to the separation between ownership and control … following Hilferding's hypothesis, the group form is seen as the answer to the problem of controlling the widest range of activities with limited capital. (Brioschi *et al.*, 1990, pp. 21–22, our translation)[5]

A similar conclusion is reached by Barca *et al.* (1994) in a study in the early 1990s of the Bank of Italy. In this and subsequent work, the pyramidal group is seen as a mechanism for separating ownership and control:

> By spreading the voting rights of minority shareholders out over a large number of firms, and concentrating those of the entrepreneur in the company at the top of the pyramid, this model allows the latter to obtain the control over the largest possible amount of other people's capital with the smallest possible amount of his own. (Barca, 1996, p. 14)

In this interpretation the relationship between the group and the stock market is fundamental, because equity leverage is maximized when there is a large spread of shareholders in the companies controlled by the group. Securing control through pyramidal groups is beneficial to controlling owners as they can extract private benefits from control. Two such benefits are

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[5] Suppose 50% is enough to secure the control of a company. An 50% owner of company A, which in turn owns 50% of company B achieves control of the latter, although the cash flow stake (corresponding to the capital invested in it) is only 25%. The cash flow rights of the controlling owner in the companies at the bottom of the pyramid (corresponding to the capital he/she has invested to control them) can be determined by $CFR = \prod_i s_i$ where s_i is the share of capital of the controlling owner in layer i of the pyramid. The control (or voting) rights in a company correspond to the direct share in that company. A measure of the separation between cash flow and control rights is the ratio between the latter and the former. In the example above the ratio is 2.

particularly important: i) securing the stability of control by reducing the contestability of ownership through hostile takeovers; ii) diverting cash flows from firms in which the controlling owners have low cash flow rights to companies where they have higher cash flow rights. This second mechanism, generally referred to as 'tunneling', has attracted the attention of several researchers (Dewenter *et al.*, 2001; Bae *et al.*, 2002; Bertrand *et al.*, 2002; Friedman *et al.*, 2003). The conflict in business groups between controlling and minority shareholders is exacerbated by the fact that the controlling shareholders have interests in all the companies in the group while minority shareholders own shares in individual companies.

The interpretation of the pyramidal group as a financial device used by controlling shareholders to maximize the activities under their control is appropriate for groups that include listed firms, and where there is significant divergence between control and cash flow rights. The empirical evidence shows that the majority of groups are comprised of unlisted companies and there is no significant divergence between control and cash flow rights (Franks and Mayer, 2001; Faccio and Lang, 2002).

Starting from this premise, Almeida and Wolfenzon (2005) propose a model that explains the presence of pyramidal groups even when the aim of the controlling shareholders is not that of separating ownership and control. Although the model proposes a more general explanation of pyramidal groups, it relies strongly on the assumption of poorly functioning capital markets and limited investor protection.[6] When capital markets are not well developed and investor protection is poor, established entrepreneurs are advantaged in setting up new firms even if novice entrepreneurs would have been more efficient owners. This is because established entrepreneurs can use the cash flow generated by their existing business, and the need to access capital markets is reduced. Strictly speaking, this financial advantage explains why established

[6] Indeed, one of the predictions of the model is that business groups should be more widespread in developing countries with less developed capital markets and limited investor protection.

entrepreneurs are at an advantage in creating new companies. According to Almeida and Wolfenzon, the use of the pyramidal structure allows established entrepreneurs to maximize their resources for investment by attracting capital for the new company from outside investors. Moreover, the established entrepreneur can extract private benefits from controlling the new firm.

Summing up, these two strands of literature identify the nature of business groups as a substitute for market mechanisms or as a financial device; but in so doing they undervalue the role and the implications of the business group as an organizational form of the firm. Moreover, in focusing on larger groups, this literature underestimate the presence and the relevance of business groups among small and medium sized firms.

3. Business groups

3.1 Relevance

In spite of the widely acknowledged importance of business groups in industrialized and emerging economies, there is a lack of systematic and comparable data on this phenomenon. Most national statistics agencies normally consider the legal unit and its sub-units (plants or establishments) as the appropriate entity for collecting firm data: thus, they neither recognize nor provide statistics for the group as an economic entity.[7]

Among the major EU countries, France and Italy are two of the few that systematically collect data on business groups. According to a 1999 survey by INSEE, companies belonging to groups (controlled by either national or foreign companies) represented 60% of value added and

[7] EU regulations on statistical units define the enterprise as "the smallest combination of legal units producing goods and services and constituting an autonomous economic entity". However, European national statistics agencies normally associate the enterprise (or firm) with the legal entity (sole proprietorship or company). Indeed, a European Commission survey states that "the fact of observing an enterprise gives no information about whether it forms part of a group of enterprises. … Regrettably, groups of enterprises do not currently figure in the business statistics of many Member States" (European Commission, 2001, p. 191).

50% of employment in France (Skalitz, 2002). In the 1990s the number of groups in France soared, thanks to the increased number with less than 500 employees (Vergeau and Chabanas, 1997; Loiseau, 2001). According to more recent INSEE statistics, business groups account for almost 8 million employees, representing some 56% of total employment (excluding the financial sector). There are more than 30,000 groups with less than 500 employees (defined by INSEE as micro-groups), employing more than 2 million people (Table 1).

Table 1 – Business groups in France by class of employees (excluding financial and agricultural sectors), 2005

Class of employees (2)	Number of groups (1)	%	Number of employees (1)	%	Sales (Euros)	Equity (Euros)
			thousands		billions	billions
Micro groups : 1 - 499	32,668	94.8	2,105	26.9	528	201
Small groups : 500 – 1,999	1,316	3.8	1,194	15.3	309	155
Medium groups : 2,000 - 9,999	399	1.2	1,477	18.9	468	263
Large groups : ≥ 10,000	84	0.2	3,051	39.0	969	981
Total	34,467	100	7,827	100	2,274	1,600

(1) Only employees working in France are considered
(2) The size classes of business groups and their definition are those adopted by INSEE
Source: INSEE (2006)

Statistics on business groups are also available for Italy the latest referring to 2002 (Table 2).

Table 2 – Business groups in Italy (excluding agriculture), 2003

Class of employees	Number of groups	%	Number of employees (thousands)	%
1–19	38,045	63.4	239.2	4.7
20–99	15,599	26.0	691.9	13.5
100–499	5,016	8.4	1019.6	19.9
500– 4,999	1,216	2.0	1,513.7	29.5
≥ 5,000	87	0.2	1,658.6	32.4
Total	146,876	100	1982,171	100

Source: ISTAT (2006)

Excluding the agricultural sector there are more than 50,000 groups in Italy, mostly small size (less than 500 employees). Although the numbers of employees in groups is much higher in France than in Italy, their weight in total employment is remarkably similar: employment in

Italian business groups represents 56.5% of all joint stock company employment (ISTAT, 2005, p. 11).[8] Although several surveys have been conducted on the phenomenon of business groups, there are no official statistics for other EU countries. This is not due to the unimportance of this phenomenon in these countries, but simply because it has not attracted the attention of scholars and national statistics agencies.

For the North American countries, data from Statistics Canada are the most explicit in distinguishing between legal units and groups of companies under common control. Statistics Canada data are organized in the ICO (Inter Corporate Ownership) database and published quarterly. Of the more than 90,000 firms considered in the 1998 database about 80% were multi-unit firms (i.e. groups), the remaining 20% being single unit firms. Unfortunately the ICO database does not provide information on the size of firms; for this reason it is impossible to assess how the relevance of the phenomenon varies according to the size of the companies.

The presence and characteristics of business groups in the Asian countries has received much attention in the literature, although the focus is almost exclusively on the large firm sector, and no general statistics are provided on the phenomenon (Chang, 2006a; Peng and Delios, 2006). Business groups are a growing phenomenon in China (Keister, 2000), Korea (Choi and Cowing, 2002), and India (Khanna and Palepu, 2000)[9] and the case of Japan has been studied in some depth. The organization of large Japanese firms is characterized by the presence of groups that are tied together in close networks involving ownership, management and supply relationships (Gerlach, 1997). Shimotani (1997, p. 24) identifies three types of groups: i) corporate complexes (such as *keiretsu*); ii) corporate groups; and iii) subcontractors (networks of

[8] The two percentages are not exactly comparable given the slight differences in the composition of the numerators and denominators.
[9] The presence and characteristics of business group in Asian countries were the subject of an issue of the Asia-Pacific Journal of Management (Vol. 23, n. 4, 2006).

suppliers). While the literature on Japanese firms focuses mainly on the first and third of these three forms, it is corporate groups (i.e. pyramidal groups) that are the most widespread in Japan.[10]

Notwithstanding the absence of systematic empirical data on the phenomenon of business groups, that are comparable in terms of definitions and statistical methodologies, the above analysis shows the relevance and the widespread presence of business groups in all countries, industries and firm size classes.

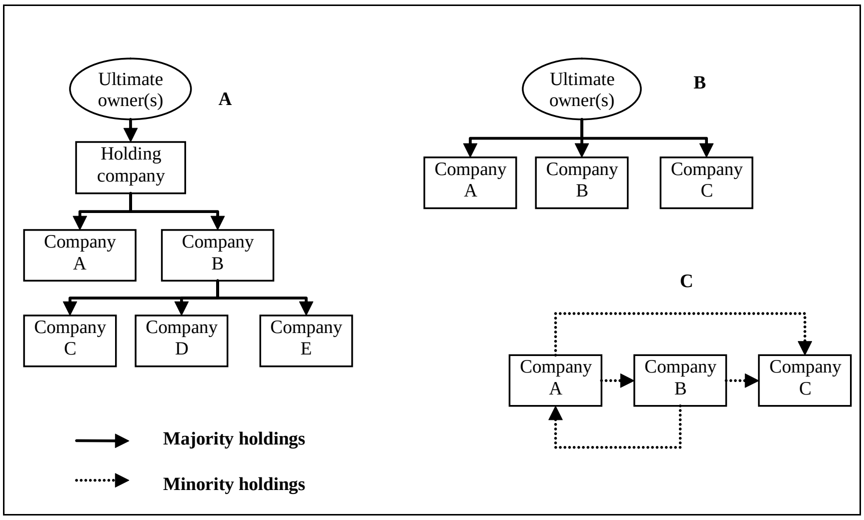
3.2 A taxonomy

Several classifications of business groups have been proposed in the literature. A first distinction can be made between pyramidal and joint groups (Goto, 1982). The former are similar to a multidivisional firm in which there is one or more layers of companies controlled by the same ultimate owner, either directly or through a holding company (cases A and B in Figure 1). A joint group is one in which several firms share minority cross-holdings (and have some common board members), which allows them to coordinate their strategies (case C in Figure 1). The latter are peculiar to the largest firms in Japan (Shimotani, 1997); however, it is not possible to identify unitary control in this type of group. For this reason in this paper we consider only types A and B where it is possible to identify common ownership and control. There are two basic ways in which ownership relationships in a business group can be organized. The most common case is where the ultimate owner retains control over several companies through majority share ownership in a holding company, which is at the top of one or more layers of these companies (case A in Figure 1). This is referred to as a pyramid or pyramidal group. In the other case the ultimate owner directly controls several companies through majority holdings in all of them (case

[10] "Of the three types, the one that occupies the most central position is the corporate group, composed of a large number of subsidiaries and forming a fundamental unit of business enterprise" (Shimotani, 1997, p. 9). Corporate groups correspond to the definition of the business group used in our study: "The term 'corporate group' is used here to identify the organic whole consisting of a parent company at the apex of a supporting cast of group companies, each linked to the parent by capital and operational ties. Virtually all major Japanese companies are organized in this corporate group form" (Shimotani, 1997, p. 9).

B in Figure 1). This is sometimes referred to as a horizontal group (Almeida and Wolfenzon, 2005). Horizontal groups occur mainly in the small business sector and, in most cases, they are the forerunners of a pyramidal group.

Figure 1 – Types of business groups

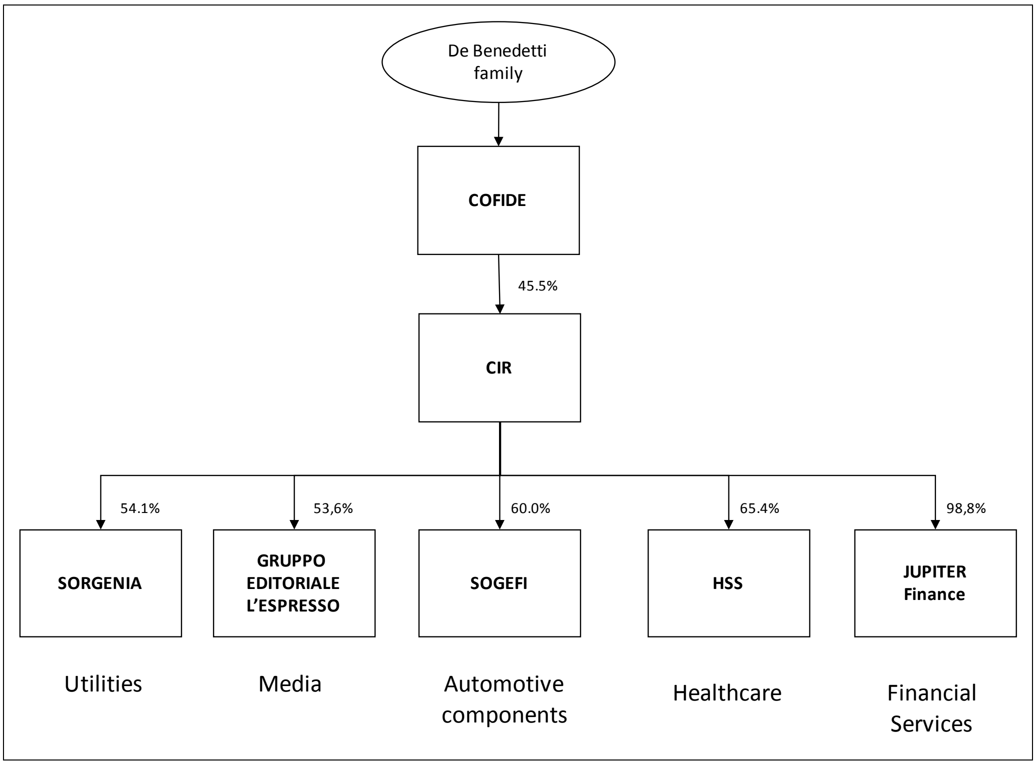


One of the main limitations in the literature on business groups is that they are often treated as a single phenomenon, their variety in terms of size and internal organization being ignored. For the purposes of this paper we distinguish between two types of groups, which we label portfolio and industrial groups.

Portfolio groups are characterized by the fact that the companies forming them have no economic synergies and respond to strategies of conglomerate diversification. They include mainly the largest firms in a country, which seek to diversify their portfolio offerings, and benefit from a re-allocation of the financial resources of the companies in the group (internal capital market). Most of the work on business groups refers to this type of group. The main research question in this literature is whether the allocation of capital within a group is more or less efficient than its allocation by capital markets.

To exemplify a portfolio group we consider the CIR group in Italy, controlled by the De Benedetti Family and listed on the Milan stock exchange (Figure 2).

Figure 2 – Main companies owned by CIR, 2009



Source: Group CIR website (www.cirgroup.it)

The holding company (CIR) manages a portfolio of holding companies that control other companies related to their business. The role of the parent company is to allocate financial resources to different lines of business.[11] Each of the companies controlled by CIR is an industrial group, since they control other companies belonging to the same industry. Thus, an industrial group can be considered a subsystem of a portfolio group. Another example of a portfolio group is the Bronfman family group analysed in Morck and Yeung (2003).

Portfolio groups have attracted the most attention from both empirical and theoretical research. The literature stresses the interpretation of this type of group as a financial device. However, the majority of groups are industrial groups. The characteristic feature of an industrial

[11] This was made clear in the letter sent to shareholders in 2006 from the President and CEO of CIR: "The main objective of our role in allocating investment capital has always been to continue to create value, and we do this by defining strategies and checking that business plans are being implemented in conjunction with the managers of the operating companies. Today we can say that we have completed our transformation from a traditional holding company into a modern Group able to create and sustain new businesses in high growth sectors following an investment logic of deep value in the long term" (source: CIR Annual Report 2006).

group is the presence of economic synergies among the companies in the group. Companies within a group normally belong to the same industry or production filiere. They may cover different segments of the same market or different phases in the production chain (Cainelli and Iacobucci, 2007).

Systematic evidence on these groups is not readily available. For the Italian case, we draw on the Capitalia survey, which periodically collects information on a representative sample of Italian manufacturing firms. Firms are asked whether or not they belong to a business group and if the answer is affirmative, they are asked about the internal organization of the group. According to the last Capitalia survey, referring to 2003, about two-thirds of small and medium sized business groups (those between 11 and 2500 employees) controlled companies belonging to the same industry. This dropped to 42.4% for groups with more than 2,500 employees. This confirms the prevalence of what we label industrial groups, especially in the case of small and medium sized groups. Moreover, even when the companies of the groups operate in different industries there are usually economic synergies between companies in the form of vertical relations or shared activities (Cainelli and Iacobucci, 2009). The Capitalia survey included also a specific question about the presence of operative relations between the companies in the group; these exist in the large majority of mono-industry groups but also in groups operating in more than one industry (see *Table 3*).

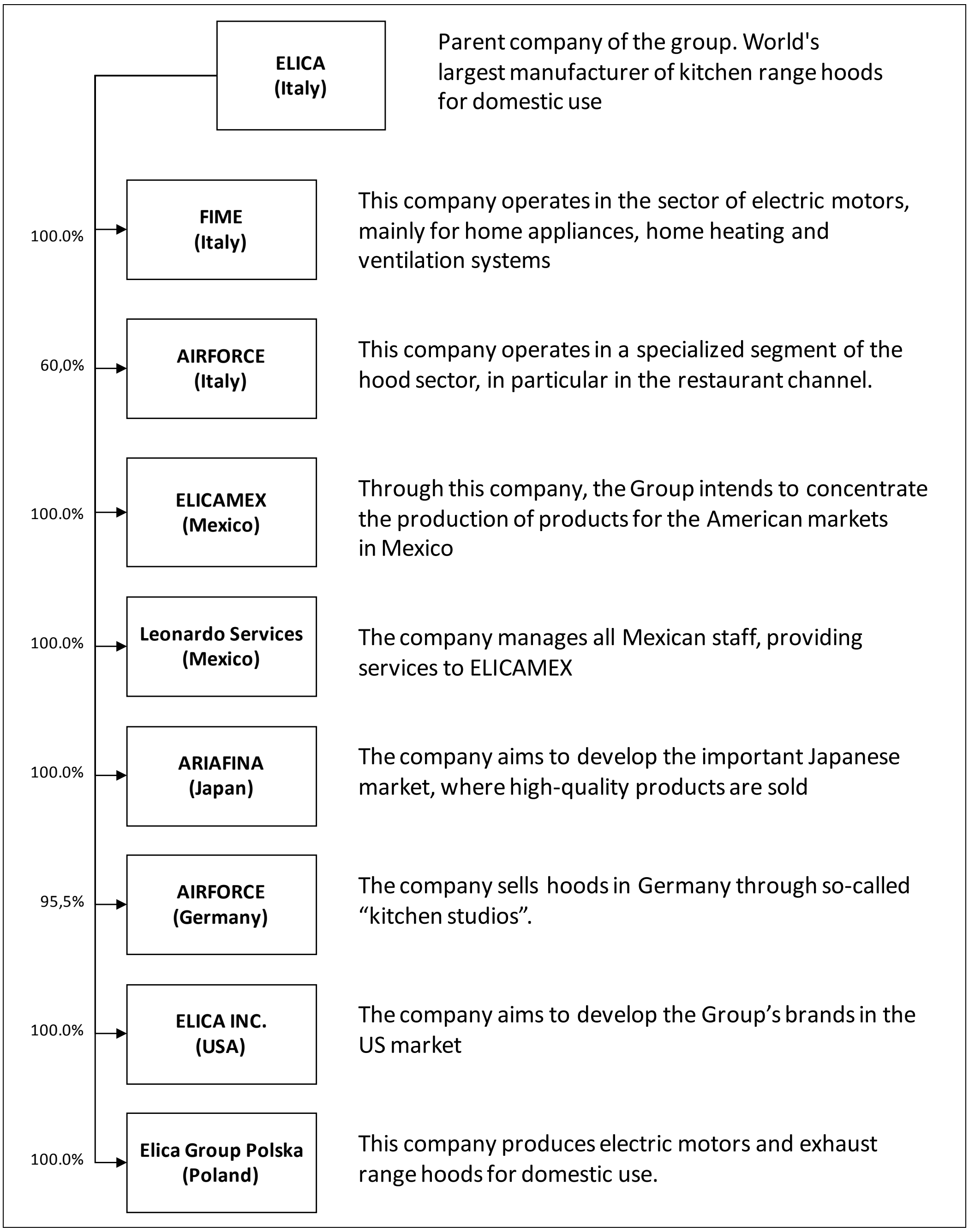
Table 3 – Operative relations between companies belonging to groups (1,271 groups)

	Presence of operative relations between companies		
The group is mono-industry	yes	No	Total
Yes	90.4	9.6	100.0
No	81.5	18.5	100.0
Total	86.9	13.1	100.0

Source: Capitalia, 2003

As example of an industrial group is the Elica group, whose main company produces kitchen range hoods for domestic use and is listed on the Milan stock exchange (see Figure 3).

Figure 3 – The Elica group - 2008



Source: Elica Group Annual report 2008

The companies forming the group operate in different geographic areas and specific segments of the kitchen range hood market – as in the case of Elicamex, Ariafina and Airforce –

or produce goods and services for other companies in the group as in the case of Fime and Leonardo Services.

Industrial groups are managed as unitary organizations to exploit the economic synergies among companies and to maximize scale and scope economies. The legal autonomy accorded to the different business units allows the entrepreneurs and managers controlling the groups to implement the most beneficial mix of autonomous and centralized business activities.

In the case of small groups several studies show that they are an organizational form used by entrepreneurs to implement growth strategies and are designed and managed as a unitary strategic construct (Rosa, 1998; Iacobucci, 2002; Lechner and Leyronas, 2009).

We can conclude then that business groups are widespread in all countries, industries, and firm size classes and should not be seen as an 'anomaly' resulting from market imperfections or specific institutional conditions. On the contrary, they should be considered as one of the organizational forms adopted by managers and entrepreneurs seeking to expand the activities under their control. Efficiency motives, associated with growth strategies and the management of diversified activities, are as important as overcoming market imperfections.

4. The business group as a firm

From a theoretical point of view, the institutional economics literature gives the greatest emphasis to the problem of firms' boundary and also specifically addresses the issue of the nature and internal organization of business groups. However, it is not unanimous about the group being the most appropriate unit to delimit the boundary of firms. The difficulty involved in considering the group as a firm is underlined, for example, by Penrose (1959, p. 20):

> The extensive and elusive lines of control in the modern business world … make it more difficult to decide what should be included within a given firm. The unincorporated individual proprietorship, the partnership and the small corporation without subsidiaries create in general no trouble, but the large corporation with many subsidiaries over which it exercises some degree of control does.

Williamson (1975, p. 144) considers the group (the holding form) to be a 'loosely' divisionalized structure that does not benefit from internal relationships among its divisions; these relationships are again associated with the legal boundaries of the firm. Indeed, the transaction cost approach considers business groups as a hybrid organizational form, intermediate between the market and the hierarchical (internal) form of co-ordination (Goto, 1982; Kester, 1992).

What is common to these views is that they identify the presence of 'administrative co-ordination' with a firm, this function being conducted typically within a legal boundary. For this reason, both Penrose and Williamson would not consider those groups in which there is a lack of administrative co-ordination between legal units to be firms. Specifically, Williamson (1975) sustains that this administrative co-ordination is present in M-form organization but not in business groups. In contrast to this perspective, we consider that the forms of unitary direction and administrative co-ordination observed in business groups (especially, industrial groups) are similar to those characterizing the internal organization of firms.

4.1 Unitary direction

Our main point is that in business groups we observe forms of unitary direction which assimilate the group to the internal organization of what is generally referred to as a firm. In other words, the business group is a decentralized organizational form that resembles an M-form organization. It is not a case that Chandler (1982) interprets the M-form as the American style industrial group.

Williamson (1975, p. 137) referring to the M-form organization underlines that:

> The characteristics and advantages of the M-form innovation can be summarized in the following way:
>
> 1. The responsibility for operating decisions is assigned to (essentially self-contained) operating divisions or quasi firms.
> 2. The elite staff attached to the general office performs both advisory and auditing functions. Both have the effect of securing greater control over operating division behaviour.
> 3. The general office is principally concerned with strategic decisions, involving planning, appraisal, and control, including the allocation of resources among the (competitive) operating divisions.

4. The separation of the general office from operations provide general office executives with the psychological commitment to be concerned with the overall performance of the organization rather than become absorbed in affaires of the functional part.
5. The resulting structure displays both rationality and synergy: the whole is greater (more effective, more efficient) than the sum of the parts.

This quote shows that the functions of the general office in the M-form is twofold: i) the definition of long run-strategies (such as the opening, closing or development of divisions) and the corresponding allocation of resources; ii) the monitoring and supervision of divisions and appointment (or removal) of the heads of divisions. In business groups these functions are the responsibility of the ultimate owner(s). In fact, ownership gives the right to appoint members to the boards of controlled companies, acquire or sell companies, allocate financial resources to them and monitor their performance (Demsetz, 1988; Hart and Moore, 1990). These control rights allow the ultimate owner to exercise unitary direction over the group: that is, to influence the decisions taken by individual companies on strategic issues such as investment, vertical integration, financial structure, etc.

Besides the control rights associated with ownership, unitary direction in business groups can also be proved by referring to corporate law. In fact, the unitary direction of the companies in a group is explicitly recognized by corporate law. For example, in German law the *Konzernreckt* (groups law) defines the concept of unitary direction (*einheitliche leitung*) as the possibility of determining the long-term objectives and strategies of the companies belonging to a group (Rinaldi, 2008). Through the concept of unitary direction, this legal system identifies the legal responsibilities of individual companies by recognizing that they are part of a unitary strategic design. Also, in Italy, the recent (2003) reform of corporate law recognizes the presence of a unitary direction as a basis for the identification of a business group. Previously, the Supreme Court (n. 1439, 1990) stated that the relevance of unitary direction was that it was a characteristic of the business group and defined a business group as an aggregation of production units legally distinct but with organizational links, in pursuit of a common aim. Finally, there are several judgments by the Italian Court of Cassation that confirm the presence of a unitary direction in business that is exercised over the controlled companies by the ultimate owner (Rinaldi, 2008).

4.2 Administrative co-ordination

Unitary direction is also exercised through forms of administrative co-ordination of controlled companies. According to Mintzberg (1989) and Radner (1992), administrative co-ordination is achieved in three ways: i) mutual adjustments in planning and implementing decisions ii) standardization of processes and procedures; and iii) direct supervision and authority.

Case studies and empirical surveys conducted on business groups located in different countries, industries and size classes show that all these forms of co-ordination are observed in industrial groups (Guillen, 2000; Brioschi *et al.*, 2004; Iacobucci, 2004). These studies show that mutual adjustment and standardization is also achieved through centralization and joint management of activities and services, such as R&D, finance, etc., which benefit all the companies in the group. The relevance of these organizational mechanisms is supported by evidence from the Capitalia survey for the Italian case. The Capitalia survey asked companies belonging to business groups about the degree of autonomy in coordinating the main business functions: administration, finance, sales and marketing, R&D (see *Table 4*). Independence in the co-ordination of these functions was recorded by just under half of the companies surveyed; the rest declared complete centralization or some form of co-ordination managed by the head of the group. The presence of some form of control over the group by the management functions implies the presence of appropriate information systems and day-to-day involvement in the operations of the controlled companies.

Table 4 – Groups by degree of autonomy in managing business functions

	Administration	Finance	Sales and marketing	Research and Development
Centralized management by the group	17.8	24.3	20.2	25.3
Some autonomy by the controlled company	33.8	33.1	33.3	28.3
Independence by the controlled company	48.4	42.6	46.5	46.4
Total	100.0	100.0	100.0	100.0

Source: Capitalia, 2003

Also, autonomy of the business function in controlled companies does not reduce the possibilities for the parent company selectively to intervene and influence the choices they make. It does not mean that, in this case, administrative co-ordination of the group is not operative; but simply that the 'potential' exist and can be activated any time that this is considered to be in the interests of the group.

The supervision and authority exercised by the ultimate owner are fundamental to considering the group as a firm. While authority is exercised through the forms of control rights already mentioned, supervision requires the development and implementation of 'administrative systems' that allow the ultimate owner to collect and elaborate information on the business activities of individual companies.

In terms of accounting and financial reporting, the need for consolidated accounts requires groups to adopt standardized administrative procedures and accounting systems. This is achieved by implementing unified financial management and issuing a standard set of business statements, financial charts, and accounting rules to be used by all subsidiaries. All countries require companies controlling other companies to present consolidated accounts. At EU level, in 1983 the European Community's Seventh Directive required member countries to introduce its legal definition of a group and the requirements for group accounts (Gray *et al.*, 1993). Any company (parent company) that legally controls or exercises a dominant influence on another company (subsidiary company) has a duty to prepare consolidated accounts. In the subsequent years, this definition of the group and requirement for parent companies to produce consolidated accounts was adopted in the legal systems of member countries.

In 1989, the International Accounting Standard Board (IASB) issued IAS 27 on consolidated accounts, setting the standards to be applied in the preparation and presentation of consolidated financial statements for a group of entities under the control of a parent. According to IAS 27, consolidated financial statements are the financial statements of a group presented as being for single economic entity. The identification of controlled companies (subsidiaries) is based on the notion of control, defined as the power to govern the financial and operating policies of an enterprise so as to obtain benefits from its activities. Control is presumed when the parent owns more than half of the voting rights of the enterprise. However, even in the case that there is a majority holding voting rights, control may be evidenced by power [IAS 27.13] which is present if one of the following condition is satisfied: i) power over more than one half of the voting rights by virtue of an agreement with other investors; ii) power to govern the financial and operating policies of the other enterprise under a statute or other type of agreement; iii) power to appoint or remove the majority of the members of the board of directors; iv) power to cast the majority of votes at a meeting of the board of directors. Consolidated accounts are almost always what matters to investors.

In addition to these accounting principles, the spread of information systems, such as enterprise resource planning (ERP), in business groups allows the controlling owner to standardize and automate core business processes, integrate financial accounting information, improve cost control and make financial planning more effective. This is supported by evidence from the main producers of ERP, such as SAP, Oracle and Microsoft, which report several cases of business groups implementing integrated systems to optimize co-ordination and gain enterprise-wide control over subsidiaries. The development of these information systems allows ultimate owners to improve, not only the exercise of their unitary direction over the controlled companies, but also their administrative co-ordination.

5. Conclusions

A growing stream of empirical and theoretical research is highlighting the relevance of business groups in economic systems. Business groups are widespread in all countries, industries and firm size classes. Despite the increase in this phenomenon, the literature does not always acknowledge the business group as a specific organizational form; in most studies, the firm boundary coincides with the legal unit, that is, the company. This is mainly due to the availability of data since national statistics agencies tend to consider the legal unit and its sub-units (plants or establishments) as the appropriate level for the collection on firm statistics.

Business groups have been studied from two main perspectives: i) as the result of market failure; ii) as a financial device. In this literature large groups are usually characterized by the fact that the companies that form them do not show economic synergies and respond to a strategy of conglomerate diversification. The first perspective considers the group as resulting from the specificity of the economic and institutional context of emerging countries. As a result, the importance of groups is expected to reduce as the economy develops towards more efficient market institutions. However, this interpretation is contradicted by the large and increasing presence of business groups in advanced economies. The other perspective considers the business group as a financial device, focusing on mechanism such as internal capital markets, tunneling and equity leverage. This approach undervalues the role of the group as an organizational form. Both these approaches are at odds with the growing amount of evidence showing that most groups are characterized by ownership of companies belonging to the same industries and unitary management to exploit the economic synergies among member companies. We label these 'industrial groups'.

Penrose (1959) and Williamson (1975) were among the first authors to discuss the relationships between the firm boundary and the presence of business groups and developed notions of unitary direction and administrative co-ordination. Unitary direction can be defined as influence over the decisions taken by the controlled companies in strategic areas such as investment, vertical integration, financial structure, etc. Administrative co-ordination is achieved through the development and implementation of administrative systems (such as business processes and information systems) that allow managers to exercise supervision and authority over controlled companies.

Starting from these contributions we show that forms of unitary direction and administrative co-ordination are common in business groups; these forms can be assimilated to the internal organization of firms. For this reason we propose that the group rather than the individual company is the appropriate unit to delimit the boundary of the firm.

The presence of unitary direction in business groups, and its implications for the behavior of the individual companies in the group, are confirmed by considering the control rights associated with ownership and by referring to corporate law. Corporate law in European countries recognize the existence of a unitary direction exercised by the ultimate owner on companies belonging to business groups but unitary direction can be exercised also through forms of administrative co-ordination of controlled companies. This co-ordination is achieved in different ways, such as mutual adjustment in decisions planning and implementation, standardization of processes and procedures and direct supervision and authority. In this context, the role of EU regulation and international accounting standards for consolidated accounts play a relevant role. We show that in the majority of groups coordinating mechanisms are at work; in the other cases there is a 'potential' for these mechanisms which can be activated whenever this is considered to be in the interests of the group.

The development of information and communication technology and the adoption of more efficient information systems are facilitating the exercise of unitary direction and administrative co-ordination in business groups. In this sense, technology is playing a role in defining the boundaries of firms and affecting the ways in which business activities are organized in the real world.

What are the empirical implications of considering the group as the unit of analysis? We suggest that this could have important consequences for the study of firm behaviour in areas such as investment, innovation and growth strategies. The presence of business groups shows that growth is achieved not only through expanding the original legal unit, but also by setting up new firms or acquiring established ones. This results in the formation of a business group and the organizational advantage of retaining the legal autonomy of each business unit. If the group form is not considered this risks an underestimate of the actual size of firms. Moreover, the group is the organizational form suited to managing diversification and especially vertical integration (Cainelli and Iacobucci, 2009); in fact, not considering business groups "... might underestimate the overall incidence of vertical integration by omitting integration accomplished through business group formation or expansion." (Fan *et al.*, 2009, p. 21).

Our main conclusion is that not considering the business group underestimates the actual firm boundaries.

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