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Social Capital and Organizational Structure in Colombian Enterprises

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Several studies on the importance of social capital in small and medium-sized enterprises have taken the enterprise as the basic unit of analysis and focused on the relationships that it maintains with other individuals and entities. However, studying the enterprise as if it were a single decision maker overlooks some important social relations within the firm itself, principally among the firm's owners.

A firm's organizational structure determines the rights, responsibilities, and obligations of firm owners with respect to each other and to society in general. Therefore, we would expect that the way a firm's owners choose to organize themselves will be influenced by the nature of the personal ties among them. In fact, the legal definitions of different organizational structures—e.g. cooperatives, partnerships, corporations--reflect underlying assumptions about the levels of trust and solidarity among the individuals involved. Firms that do not consider these factors when selecting an organizational form may end up with one whose internal incentive structure hinders rather than supports firm performance.

This paper examines the social capital within firms by analyzing the implications of the personal relationships among firm owners for firm structure and performance. We propose a typology of organizational structures based on key aspects of owner's personal relationships. Hypotheses for performance and impact are derived based on the typology, and they typology is validated and the hypotheses tested using data from rural agro-enterprises in Colombia. Based on the results, recommendations for firms and for the institutions that support them are developed.

Keywords: social capital, Colombia, agroenterprises, organizational structures, legal entities

1. INTRODUCTION

Social capital plays an important role in economic and social development (Bebbington 1999; Dasgupta and Serageldin 2000; Fukuyama 1995). On one hand, it can be an input whose function is to facilitate economic activity via mechanisms of information gathering, coordination and trust. On the other hand, social capital can be an output in itself, something that contributes directly to individual and social well-being. Both aspects of social capital are important for small rural agroenterprises because organization and integration all along the production chain are important elements for both performance and impact (Reardon and Berdegue 2002; La Fourcade 2002).

Several studies on the importance of social capital in small and medium-sized enterprises have taken the enterprise as the basic unit of analysis and focused on the relationships that it maintains with other individuals and entities (Barr 2000a and 2000b; Johnson et al. 2002). These studies confirm that social ties can affect firm behavior and enhance economic performance. However, studying the enterprise as if it were a single decision maker overlooks some important social relations within the firm itself, principally among the firm's owners.

A firm's organizational structure determines the rights, responsibilities, and obligations of firm owners¹ with respect to each other and to society in general. Therefore, we would expect that the way a firm's owners choose to organize themselves will be influenced by the nature of the personal ties among them. In fact, the legal definitions of different organizational structures reflect underlying assumptions about the levels of trust and solidarity among the individuals involved. Firms that do not consider these factors when selecting an organizational form may end up with one whose internal incentive structure hinders rather than supports firm performance.

This paper examines the social capital within firms by analyzing the implications of the personal relationships among firm owners for firm structure and performance. In section 2, we propose a typology of organizational structures² based on key aspects of owner's personal relationships. Hypotheses for performance and impact are derived based on the typology. In section 3, the typology is validated and the hypotheses tested using data from rural agro-enterprises in Colombia. Section 4 summarizes and concludes with recommendations for firms and for the institutions that support them.

2. SOCIAL CAPITAL AND ORGANIZATIONAL STRUCTURE: A TYPOLOGY

In economic terms, the importance of organizational form relates to the incentives that it offers owners to invest capital. In the economics literature, firms are generally divided into two types, "member-owned" entities such as cooperatives and "investor-owned" firms such as corporations or partnerships. These types can be seen as the two extremes of a continuum of property rights (Chaddad and Cook 2002; Cook and Ilippoulos 1998; Cook 1995). This distinction is very useful in explaining the investment behavior of owners/members, however it is less useful for selecting an appropriate structure. In fact, the difference between member-owned and investor-owned entities reflects a fundamental difference in enterprise objective: the member-owned enterprise is founded for social as well as economic ends, while in investor-owned firm is a purely commercial entity with profit motives.

The growing literature on social capital argues that financial capital is not the only resource that owners bring to an economic activity (Fukuyama 1995; Bebbington 1999). Their social capital can also be an important asset for the firm. Close, trust-based relationships among firm owners can reduce transaction costs and increase internal flexibility.

2.1 RELATIONSHIPS BETWEEN THE ENTERPRISE AND SOCIETY: FOR-PROFIT AND NOT-FOR-PROFIT ENTITIES

Collective action for the benefit of both the individual and the group has always existed, however since the beginning of the 20th century, the objective of an organization has become a parameter by which diverse organizations can be distinguished. If an organization pursues a solely economic end, then it is considered a for-profit entity. From a legal perspective the purpose is of an idealistic nature (e.g., cultural, scientific, philanthropic, or welfare), then it is considered a nonprofit entity.

¹ We use the terms "owners" in a general sense that includes proprietors, shareholders, partners or members in the case of cooperatives and associations.

² The term organizational rather than legal structure is used to include both formal and informal enterprises. "Formality" depends on whether the business is registered with the Chamber of Commerce, an entity whose function is to keep a registry of all types of private entities and their commercial activities.

For-profit entities may or may not be "legal personas"³. Their profit-making character is manifested through behavior such as (1) developing a trading or mercantile activity⁴; (2) involving capital with the express purpose of obtaining a revenue or product, which is then distributed among those who contributed the capital; (3) the possibility, when the enterprise is liquidated and the existing liabilities are covered, of recovering some or all of the initial investment.

For-profit entities include all the types of enterprises covered by Colombian mercantile law such as companies (general and limited partnerships, joint-stock companies, limited liability companies, stock companies, corporations in fact, and mixed-economy companies), for-profit corporations, and sole proprietorships. Likewise, the law covers natural persons⁵ who may register as traders in the Chamber of Commerce without having to constitute a different legal persona.

Non-profit entities are legal entities established for altruistic ends or for achieving community benefits where the State is unable to fully serve the needs of a given community. The State provides a legal basis on which people can develop activities of this nature. An appreciable monetary yield or benefit in the development of its activities is permitted, but pursuit of profit cannot be the sole objective of this type of entity. Non-profit organizations include cooperatives, associations, and foundations. While no explicit assumptions are made about the nature of the personal relationships among investors in non-profits, they are presumed to share the altruistic objectives of the entity.

Non-profit status has two important consequences for investment. First, when profits are earned, they cannot be distributed, but rather must be reinvested in the same entity. The second consequence lies in the transfer of patrimony, which, once the entity's liabilities are covered, must pass to other entities of the same category. This means that the investors in a non-profit entity can never be recovered directly. Rather, investor's benefit by utilizing the services provided by the entity. In recognition of their social objectives and to reduce the conflict that their internal norms might generate between individual economic incentives and social good, the State authorizes a series of fiscal incentives to promote the formation of non-profit organizations.

2.2 RELATIONSHIPS AMONG INVESTORS: SOCIETIES OF PERSONS AND OF CAPITAL

While it is difficult to separate an investor from his or her investment, an Italian classification (Narváez 1997) distinguishes between societies of persons and societies of capital. For societies of persons, the legal person is created *intuitus personae*, i.e., by the personal factor. Persons within the entity know each other, represent each other, and have a high degree of confidence in each other. In relationships with third parties, individual investors are personally responsible for the society's obligations.

In firms of this sort, less internal regulation is required in part because of the presumed high levels of trust among the investors. For example, to totally or partially cede a member's capital, there must be express authorization from co-members. Management in societies of persons corresponds to all

³ "Legal persona" is a legal tool by which a fictitious person is created, who is able to exercise rights and contract obligations, and is represented judicially and extra judicially.

⁴ Colombian legislation describes what it considers are mercantile activities but, generally, these could be said to be those activities that involve processing, industrialization, marketing, and the delivery of services.

⁵ "Natural persons" include all individuals of the human species, regardless of age, sex, lineage, or condition. In legal language, they are beings capable of having rights and contracting obligations (Civil Code, Art. 74).

members, who can delegate it to co-members or to outsiders. It is not necessary to appoint an external auditor⁶ and there is no obligation to constitute a legal reserve. Organizational forms that are considered entities of persons are general and limited partnerships, natural persons, and corporations in fact (*corporaciones de hecho*).

For entities of capital, the legal persona is formed *intuitus rei*, i.e., by the capital factor. The personal attributes of the investors are unimportant; all that matters is their financial investment. Rotation of investors is easy since they do not have to know each other and often never even meet. Third parties have as a guarantee the entity's capital, not that of the individual investors. The State performs greater oversight role in this type of legal entity.

The following conditions characterize entity of capital: (a) freedom of negotiation of shares, with exceptions according to type of share; (b) members' liability is according to the amount of their contributions; (c) members do not have management responsibility (except in limited and joint-stock companies where the collective members are also administrators); and (d) entities must constitute a compulsory legal reserve and name an auditor. This category includes joint-stock companies, corporations, and mixed-economy companies⁷.

The distinction between entities of persons or capital was originally developed for for-profit entities such as corporations and partnerships. In this paper, we extend it to include sole proprietorships, associations, cooperatives, and foundations. These forms are consistent with the general definition of entities of persons, though there are some differences in their specific regulations.⁸

In some types of limited partnerships, the two elements are of equal importance. In these cases, the investors usually know each other before establishing the organization, however at the same time, before third parties, the entity figures as one of capital. For that reason, we have included them as entities of capital.

2.3 IMPLICATIONS OF THE TYPOLOGY FOR FIRM STRUCTURE

Based on the two factors identified in the previous sections (objective of entity and relations among the investors) organizational forms can be classified into four categories: (1) for-profit entities of persons; (2) for-profit entities of capital; (3) non-profit entities of persons; and (4) non-profit entities of capital (Table 1). The characteristics of the categories have implications for selection of members, costs of administration, and incentives to invest. In general, each type can be characterized as:

Category 1- For-profit entities of persons: These enterprises have few members but strong personal ties. Such confidence means that internal transaction costs are low. However, such enterprises may have difficulty in obtaining financing because they do not easily incorporate new members and because the lack of separation between business and personal patrimony discourages acquisition of credit. As a consequence, such entities tend to be small in terms of number of employees and capital value.

⁶ The "auditor", by law, must be an accountant, whose function is to control the enterprise, and who must be a person who is not part of the enterprise.

⁷ When these assume the same structure as corporations

⁸ Unlimited liability with respect to third parties is not the case for associations, cooperatives or sole proprietorships, and cooperatives must establish legal reserves

Category 2 - For-profit entities of capital: Since owners do not have to trust or even know each others, both the exit or entry of investors is easy. Guarantees exist to stimulate investment by members, though access to credit may be limited unless the firm has substantial assets. External transaction costs can be high because of the legal regulation associated with these guarantees. Usually, such costs are justified only in relatively large enterprises.

Category 3 - Non-profit entities of persons: This category offers inherent contradictions. Since its social mission depends on collective action, the number of members is usually large. Members are presumed to share the social objectives and be willing to work collectively, however the assumption of high-levels of trust among owner/members is not explicit. Entrance is often relatively easy, but turnover can be high and can undermine the collective action. Because of the restrictions on the distribution of profits, incentives to invest are not clear and may vary considerably among members. Fiscal and administrative incentives may promote the formation and capitalization of these enterprises, but simultaneously sustaining collective commitment and individual incentive is a difficult managerial challenge. In the absence of strong social commitment among members and/or skilled managers, these enterprises end up comprising many members but little capital.

Category 4 - Nonprofit entities of capital: The objective of these entities is to develop a social activity through the appropriation of the patrimony of one or more individuals. The decision to establish such an entity is irrevocable, and individuals can never recover the capital once it is committed. Because these entities do not provide an economic return to investors, they do not promote investment. Again State offers fiscal incentives to encourage their establishment.

2.4 IMPLICATIONS OF THE TYPOLOGY FOR FIRM PERFORMANCE AND IMPACT

The different types of organizational structures provide different incentives to owners/investors. Legal norms associated with different organizational structures recognize and, in a sense, mediate the implications of these differences for firm performance and impact. For example, where trust is presumed to be high, there are fewer requirements for costly internal regulation. Where social objectives dominate individual ones, fiscal incentives are available to help ensure sustainability of the entity. If legal norms are appropriate and if firms select appropriate structures, then the following two hypotheses should hold:

Although differences may exist between categories in terms of firm structure, there should be no systematic differences in their economic performance. This means that no one form is always better than another.

Because of their *raison d'être*, enterprises in categories 3 and 4 (not-for-profit entities) should have higher social impact than firms in other categories.

3. EMPIRICAL VALIDATION OF THE TYPOLOGY

In this section, we evaluate the hypotheses about the relationships between structure, performance and impact using data from Colombian rural agroenterprises. The promotion of these agroenterprises is an

important element of rural development strategy in Colombia and in many other countries (Lafourcade 2002; Carter et al. 1995; CEPAL et al. 1998; Barham et al. 1992). Because support for such enterprises often requires that they be constituted legally, many firms currently face the task of selecting an appropriate organizational structure.

Data are from a sample of 50 small and medium-sized rural agroenterprises in five regions of Colombia: the Caribbean Coastal Region, eastern Antioquia, Vélez (Department of Santander), Ubaté (Department of Cundinamarca), and the Manizales region in the Coffee Zone⁹. The areas were selected because they are centers of agro-industrial activity but vary in terms of their historical, cultural, and institutional contexts. Table 2 summarizes some general characteristics of the enterprises. It is important to note that in order to be able to obtain firm histories, only firms with five or more years of experience were included in the sample. This selection criterion implicitly biases the sample towards more successful firms.

For each enterprise, a semi-structured interview was conducted with the person in charge of the enterprise (owner or manager) about the firm's history, business practices, decision making, resolution of conflicts, relationships with other individuals and organizations, and important challenges and opportunities. The questions were aimed at understanding the enterprise's specific context, and at documenting how social capital was used to achieve economic objectives. In addition, quantitative data on a range of demographic and economic variables of the enterprises and their owners were collected. Key informants were asked about the impact that the enterprises have had on their communities.

3.1 ORGANIZATIONAL FORMS OF 50 COLOMBIAN ENTERPRISES

Within the sample of 50 enterprises, 10 organizational forms were found. The limited partnership was the most used (28%), followed by corporation in fact (24%), cooperative (12%), sole proprietorship (12%), and corporation (6%). The remaining 18% included associations, sub-categories of limited partnerships (*sociedades en comandita*), mixed-economy entities, general partnerships, and natural persons. The presence of forms such as general partnerships¹⁰, which are widely considered to be obsolete, suggests that decisions regarding organizational form may not be made based on the best available information.

In terms of the typology, of the sample's 50 enterprises, 21 belonged to category 1 (for-profit entities of persons), 20 to category 2 (for-profit entities of capital), and 9 to category 3 (nonprofit entities of persons). No category-4 type entities (nonprofit entities of capital) were found. The preference of one category over another was related to the region. The Coffee Zone had more cases of category 2, whereas Ubaté and Vélez had no category-3 type entities (Table 3). Economic activity is related to organizational structure. Dairy and fruit processing are exclusively done by for-profit firms, 60 percent by category 1 and 40 percent by category 2. As expected, category 3 firms are more likely to be engaged in collective commercialization and less likely to do significant product transformation than firms in other categories.

⁹ Fieldwork in the Caribbean Coastal Region and eastern Antioquia was carried out by the International Colombian Corporation (CCI, its Spanish acronym), and in Ubaté, Vélez, and the Coffee Zone by the Center for Livestock and Agricultural Studies (CEGA, its Spanish acronym).

¹⁰ This form generates few incentives for third parties to invest, not only for the type of responsibility being handled, which is joint and unlimited, but also for the numerous transactions that must be fulfilled to make a capital investment possible through a new member

3.2 STRUCTURE AND ORGANIZATION OF ECONOMIC ACTIVITY

To validate the typology, we compared the characteristics of cases from the sample with the descriptions presented in the section 2.3 and Table 1.

Firm size (number of employees, value of capital, and value of sales)

It was expected that category-2 firms would be the largest and the data support this hypothesis. Category-1 enterprises had the fewest employees, an average of 6 compared with nearly 13 for category-3 and 22 for category-2 enterprises (Table 4). In terms of physical plant, the average value of machinery in category-2 enterprises was nearly triple that for category 1 and almost 4 times greater than for category-3 firms, however due to high variability within categories, the differences are not statistically significant at conventional levels ($p=.132$) (Table 4). A similar pattern is observed for average annual revenues ($p=.11$).

Owners (initial relationships, number, and turnover)

We expected that category-1 enterprises would have fewer owners than firms in the other categories. Enterprises in categories 2 and 3 were expected to have more owners and high rates of turnover among them. Quantitative data confirm this hypothesis with regard to number of owners (Table 4).

Analysis of qualitative data reveals that many category-1 firms are small enterprises with owners/members reduced to the family nucleus. These same family members also supply labor. Many of these enterprises were formed by a husband, with his wife's assistance. As they grew and gained knowledge and experience, the children helped in the operation, often in addition to their other activities. The same situation occurred in the case of natural-person traders. Though legalized and registered as a single individual, the family continued being the principal structure behind the enterprise.

In theory, the personal qualities of the members are not important in category-2 enterprises. This supposition is valid in the case of corporations, joint-stock companies, and mixed-economy companies, where the role of members is reduced to decisions on capital which are separated from the enterprise's administrative and operational activities. Examples do exist of members and/or investors who participate personally to help advance the activities of enterprises in this category, but they are uncommon.

Regarding the number of members of category-2 enterprises, the results, on the whole, agree with the hypothesis. One exception is a mixed-economy company that had only three members, although the links between them were clearly of an economic nature. The reason for this is that a situation that the member entities are public institutions whose representation is the responsibility of natural persons who can come and go over time. Another exception is a corporation formed by seven people. Initially, it had a family structure but in recent years, in order to receive external investment, the family scheme was changed to an entity of capital.

Although limited partnerships belong to category 2, they have a different structure. In most of them, the people who form them are members of a single family, except for one case in the Coffee Zone and

another in the Caribbean Coastal Region, whose members were investors or institutions, and where a family or friendship tie did not exist.

In category-3 enterprises, interviewees generally characterized relationships among members as strong, stable and difficult to replace. Nevertheless, firm histories reveal another story. Nearly all cooperatives and associations in the survey at some point in their histories experienced traumatic periods of restructuring and massive loss of members. Often this occurred because of disagreements among members or the loss of a powerful leader. If the organization was able to survive the experience, it was often strengthened, which explains observed high levels of current membership commitment. Many enterprises do not survive, however. The interviews contain many references to other associations or coops that either closed down or “privatized.”

Access to credit and stimulation of investment

Again, given the conflicting internal and external incentives within categories, we cannot make any theoretical predictions about difference among categories in terms of credit use or investment. While it is an empirical question, credit use and investment intensity are generally expected to be greater among category-2 enterprises.

According to various indicators used to measure credit use and investment levels, no significant differences were found among the categories (Table 4). Category-2 enterprises are more likely to have formal credit from banks or other financial institutions, but the difference is not significant. Category-3 firms are more likely to have informal credit, but not significantly so. Comparing the value of equipment per owner and per employee—both measures of capital intensity—shows no significant differences among categories. Average values for category 3-firms are the lowest in both cases, supporting the hypothesis of lots of members but little capital. An analysis of variance found that category of organization does not have a significant effect on capital per member.

3.3 DIFFERENCES IN OBJECTIVE, PERFORMANCE, AND IMPACT

According to the above analysis, the typology appears valid for characterizing enterprises in terms of influence of social capital on firm characteristics. In this section, we examine the hypotheses on the relationships between category and objective, performance, and impact.

The enterprise's objective

As already mentioned, for-profit entities are created for the purpose of executing mercantile activities. Enhancing community well-being is the main motive of non-profit entities, though they must also maintain their economic viability. In most cases, these differences in objectives were notable between for-profits (categories 1 and 2) and non-profits (category 3). Only in a few cases did we find examples of category-1 and 2 firms pursuing explicit social goals or category-3 firms focused exclusively on economic objectives. However, several firms in the sample are considering or are in the process of converting from for-profit to non-profit structures in order improve access to credit from sources available only to this organizational category.

Performance

We hypothesize that firm performance does not vary systematically by typology category. To measure performance, we used annual income per employee. Although there are large differences among averages by category, they are not statistically significant because of high variability within the categories themselves (Table 4). A productivity equation was estimated in which income per employee was regressed on a series of variables including labor, capital, owner's education, and typology category and zone dummy variables. The results confirm that the organizational-structure category is not a significant determinant of productivity (Table 5). Category-3 firms have lower revenue per employee, however not significantly so which suggests that in spite of their social objectives these enterprises are not less productive, *ceteris paribus*.

Impact

We hypothesized that, given their explicit social objectives, category-3 enterprises would be more likely to have social impact than firms in other categories. To test this hypothesis, we used responses of key informants who were asked to assess the incidence of firms' economic, social, political, environmental, and infrastructure impacts. For each firm, key informants included an agriculture producer who sells to the firm, a client who buys from the firm, and a community leader familiar with the area where the firm is located. In addition, the narrative information included in the survey format was also analyzed for evidence of different types of impact. For each firm, categorical variables (0/1) were created for each type of impact.

The hypothesis that category-3 firms are more likely to have social impact is not strongly supported by data. Fifty six percent of category-3 enterprises had a social impact, compared with 25% for category 2 and 19% for category 1, however the difference is not statistically significant (Table 6). No significant differences were found in incidence of other types of impact.

One way to interpret this result is that some category-3 firms are not meeting the objectives for which they were established. This could be because they are not properly managed, or because they did not select their form appropriately. Another interpretation may be that a surprisingly high percentage of category – 1 and 2 firms are having social impact. For example, one category-1 exporting enterprise invested more than half of its profits in the community in activities ranging from an old-age pension fund for a group of 20 to 30 producers to an effort to encourage "clean" (environmentally-sensitive) production and processing practices. Category-2 enterprises generate high economic and, indirectly, social impact. Most bring together a significant number of suppliers or producers who receive training to improve the quality of their products. Category 2 firms are also more likely than other firms to provide training and benefits to workers.

Internal versus external social capital

In this section we examine how use of social capital within the firm relates to use of social capital externally. As mentioned earlier, many studies of social capital use by firms take the firm as the unit of analysis and focus on relationships with external actor. Such an analysis was done using these data (Johnson et al, 2002). Qualitative analysis documented that social capital performed three functions within the enterprises: 1) providing access to information, 2) reducing contracting and monitoring costs via trust, and 3) supporting collective action. Firms were ranked on a scale of 1-3 according to their incidence of use of the different functions, and cluster analysis identified four groups: 1) High users

social capital (10 firms), 2) medium users of social capital (10 firms), 3) lower users of social capital (25 firms) and 4) high users of network social capital but low users of trust and collective action (4 firms). These categories correlated strongly with both the number and strength of external relationships maintained by firms.

A comparison of the typology categories to the social capital clusters shows significant differences among categories in terms of use of social capital (Table 7). Firms in category 1, hypothesized to have high internal trust, are by far the lowest users of external social capital, with 76% in the low category. Category-3 firms, hypothesized to share social objectives if not exactly personal trust, are the highest users of external social capital, with 44 percent of firms in the high category and another 44 in the medium category. Among category 2 firms, results are mixed. Many are low users, however 26 percent are high users and an additional 16 are high users of network social capital.

These results show that we cannot necessarily equate high internal social capital with high external social capital. Category 1 firms may have high level of trust, however they are internally focused and have only limited links to the community. Since these firms are often the targets of development efforts, attention must be paid to their external relationships. The importance of social capital in the category 3 firms underscores the importance of considering relationships among members when selecting organizational structure. High levels of social capital are not explicit legally, but are clearly important in practice.

4. CONCLUSIONS

This paper analyzed the importance of social capital in a firm's organizational structure. A typology was proposed based the importance of personal relationships among owners and on the social versus economic objectives of the firm. These two categories reflect legal distinctions between different organizational structures.

Firms in different categories face different economic incentives, which means that firms might be expected to vary systematically in terms of size, number of owners/members, credit use and other operational characteristics. If organizational structures were appropriately selected, however, firm economic performance would not be expected to vary systematically by category. Data from Colombian agro-enterprises support this hypothesis. While some operational characteristics such as size and number of members do vary according to categories defined by the typology, economic performance does not. The conclusion is that no one organizational structure is always best for economic performance. Rather, what is important is that the structure is appropriate given the goals and resources of the firm.

It was also hypothesized that firms with both social and economic goals (non profits) would be more likely to generate social impact than firms with strictly economic objectives. In this case, the data do not support the hypothesis. Non-profit firms were not significantly more likely to have social impact than for-profit firms. This is because some for-profit firms had social impact while some non-profits did not.

The failure to find significant differences between non-profits and for-profits in terms of social impact raises two policy issues. First, it is likely that some firms erroneously selected non-profit structures

either because they were not aware of the differences or because the costs of registering non-profit business are low and the tax incentives are appealing (Gonzalez, 2001). Organizational structures chosen this way can become obstacles for the long-term development of an enterprise. Therefore it is important that businesses be made aware of the advantages and disadvantages of different structures, and of the key factors to consider when selecting a structure. To the extent that differences in legal and administrative costs between types of enterprises can be reduced, the probability of firms selecting structures for the wrong reasons will also likely decline. Similarly, obsolete forms such as general partnerships should be abolished.

These findings on social impact also suggest that organizations that seek to support community development by promoting rural agro-enterprises need not focus on just one category of organizational structures (non-profits), since other types of firms can also achieve social impact. Further, the favorable policies of these organizations on credit and other technical assistance can create perverse incentives for firms making decisions about organizational structure. Organizations supporting community development might better focus on whether firm structure is appropriate and on whether leadership and management capacity is adequate.

The results also suggest that different categories of firms may require different types of support services. For category-1 enterprises, options include (a) initiatives for establishing or strengthening networks for exchange, innovation, and support among enterprises; (b) improvements in the access that these enterprises have to sources of non-family capital through shared-risk schemes or revolving funds for savings and credit; and (c) applying lessons learned from successful examples of family enterprises or sole proprietorships that have achieved growth using this organizational form.

Options for supporting category-2 enterprises are more limited because their greatest asset is not social capital but financial capital. In these cases, ways can be sought to reduce transactions costs for enterprises wanting to move from category 1 to category 2. Concrete activities might include dissemination of up-to-date and reliable information on the steps toward achieving this transition or on how to access, at reasonable cost, advisory services specialized in this area.

For category-3 enterprises, several clear recommendations arise. First, if members are not committed to the enterprise's objectives and capable of sustaining collective action, then this organizational form is not recommended. Where these factors exist, then they can be very effective. However where they do not exist, firm survival will be difficult.

Second, enterprises that are organized in this way must make periodic or, in some cases, continuous investments in maintaining their levels of social capital and, thus, their cohesion (Johnson et al. 2002). They also need to pay careful attention to ensuring an adequate flow of information among members, to maintaining transparency in decision-making, and to establishing and maintaining clear rules of game understood and applied by all members. The fact that cooperatives tend to have limited capital is not necessarily a negative factor, provided that this deficiency is covered by intensive use of social capital.

Table 1 – General characteristics of four categories of enterprises, and the specific organizational forms included in each category.

<p><i>Category 1. For-profit entities of persons</i></p> <ul style="list-style-type: none"> • Objective is to develop mercantile activities and obtain profits • Access to credit is dependent on the owner’s solvency • The law permits a certain flexibility in the enterprise’s administrative organization <p>Specific forms include: General partnerships, Corporation in fact, Trader registered in the Chamber of Commerce, Informal, Sole proprietorship</p>	<p><i>Category 2. For-profit entities of capital</i></p> <ul style="list-style-type: none"> • Objective is to develop mercantile activities and obtain profits • Access to credit depends on the enterprise’s solvency • Strong regulation and supervision of the enterprise’s administrative operations by the State <p>Specific forms include: corporations, all forms of limited partnerships^a. Mixed-economy company (if it assumes the corporative form)</p>
<p><i>Category 3. Nonprofit entities of persons</i></p> <ul style="list-style-type: none"> • Objective is to improve the community’s well-being, except for cooperatives, which combine a business character with community service • Although relationships between members do not imply links of confidence, they imply a sharing of social objectives and a disposition toward collective action • The State offers fiscal incentives to improve the entity’s profitability • The law is relatively flexible with the entities’ administrative organization, except for cooperatives <p>Specific forms include: Associations and cooperatives</p>	<p><i>Category 4. Nonprofit entities of capital</i></p> <ul style="list-style-type: none"> • Objective is to function as a patrimony designed to improve the community’s well-being • The State encourages the creation of these entities through fiscal incentives • The structure of these organizations does not encourage investment, given the irrevocable and formal decision of assigning patrimony to a determined end • The law is relatively flexible with the entities’ administrative organization <p>Specific forms include: Foundations^b</p>

- a. Limited partnership belongs to both categories in that both persons and capital have equal importance in its constitution, operation, and termination. For the purposes of this study, they are considered entities of capital.
- b. None of the rural agroenterprises studied used this type of legal entity.

Table 2 – Selected characteristics of enterprises, by region.

Characteristic	Area				
	Carib. Coast	Antioquia	Ubaté	Vélez	Coffee Zone
Economic activities (no. of enterprises)	Cassava (4), dairy (3), wood (2), sugarcane (1)	Fruits (4), vegetables (2), dairy (1), sugarcane (1), animal feed (1), medicinal plants (1)	Dairy (10)	Fruits (10)	Fruits (5), sugarcane (1), agrotourism (1), plantains (1), vegetables (1), wood (1)
% Nonprofits	40	40	0	0	10
Average number of employees	12.2 (7.1)	18.2 (9.1)	6.7 (12.7)	6.5 (4.5)	25.2 (22.0)
Average number of skilled workers	4.8 (6.1)	4.0 (4.4)	0.3 (0.67)	0.3 (0.67)	5.7 (7.8)
Average age of enterprise in years	10 (5.7)	8.3 (3.2)	21.3 (14.5)	23.6 (16.6)	8.5 (5.8)
Average annual value of product. (US\$)	41,489 (25,285)	237, 144 (314,525)	473,245 (1,242,254)	63,200 (64,211)	459,111 (546,827)
Average value of capital equipment (US\$)	86,435 (163,138)	64,115 (79,017)	74,720 (147,635)	14,124 (9,770)	145,200 (229,996)
% of firms generating negative environmental impact	50	0	0	0	30

Standard deviations are in parentheses

Table 3 – Regional distribution of firms by category

Location	Number of enterprises in category:		
	Cat. 1 ^a	Cat. 2	Cat 3
Caribbean Coastal Region	4	2	4
Eastern Antioquia	3	3	4
Ubate	6	4	0
Vélez	6	4	0
Coffee Zone	2	7	1
Total	21	20	9

a. Categories 1 = for-profit entities of persons; 2 = for-profit entities of capital; 3 = non-profit entities of persons

Table 4 – Average size of 50 Colombian enterprises according to legal category.

Size factor	Category ^a		
	1 (n = 21)	2 (n = 20)	3 (n = 9)
Number of members ^b	2.5 (2.2)	30 (102)	90 (103)
Number of employees ^c	6.1 (6.6)	22.3 (17.7)	12.7 (4.5)
Value of machinery (US\$) ^d	47,817 (118,418)	127,667 (189,559)	32,051 (29,348)
Value of annual production (US\$)	101,068 (217,006)	482,226 (925,128)	108,330 (195,568)
Enterprises with formal credit (% of enterprises)	52	80	67
Enterprises with informal credit (% of enterprises)	42	40	67
Capital per employee (US\$)	6,869 (13,719)	5,249 (6,459)	2,526 (2,087)
Capital per member (US\$)	41,613 (122,701)	25,780 (33,247)	670 (603)
Income per employee (US\$)	15,015 (11,486)	19,189 (22,481)	8,461 (14,993)
Income per member (US\$)	80,195 (229,550)	124,416 (230,811)	1,144 (830)

a. Categories 1 = for-profit entities of persons; 2 = for-profit entities of capital; 3 = nonprofit entities of persons.

b. Differences between categories significant at $P < 0.05$.

c. Differences between categories significant at $P < 0.01$.

d. If limited partnerships are in category 1, differences are significant at $P < 0.01$.

Table 5 – Determinants of firm productivity (n=47)

	Log of annual revenue per worker
	Standardized Coefficient
Constant	***
Log Number of employees	-.130
Log Value of Machinery	.358**
Education index	.112
Category 1 dummy	.107
Category 3 dummy	-.046
Caribbean Coast dummy	-.335*
Antioquia dummy	-.115
Ubaté dummy	.320*
Velez dummy	.032
Adjusted R2	.306

*** = sig level $< .01$; ** = sig level = .055 ; * = sig $< .10$

Table 6 – Percentage of enterprises in terms of type of impact, by category, Colombia

Impact type	Category ^a		
	1 (n = 21)	2 (n = 20)	3 (n = 9)
Economic	42	60	33
Social ^b	19	25	56
Political	14	0	11
Infrastructure	19	15	11
Negative on environment	19	15	13

a. Categories 1 = for-profit entities of persons; 2 = for-profit entities of capital; 3 = nonprofit entities of persons.

Table 7 – Distribution of firms by use of external social capital

	High external social capital	Medium external social capital	Low external social capital	High network, low trust
Category 1- for-profit, personal (n=21)	5%	14%	76%	4%
Category 2 – for profit, capital (n=19)	26%	16%	42%	16%
Category 3 – non-profit, personal(n=9)	44%	44%	11%	0%

Pearson Chi square, sig p=.011

REFERENCES

- Barham, B. M. Clark, E. Katz and R. Schurman. 1992. Non-traditional agricultural exports in Latin America: Towards an appraisal. *Latin American Research Review*, 27 (2): 43-82.
- Barr A. 2000a. Collective action and bilateral interaction in Ghanaian entrepreneurial networks. Working paper no. 182. WIDER, the United Nations University, Helsinki.
- Barr A. 2000b. Social capital and technical information flows in the Ghanaian manufacturing sector. *Oxford Econ Papers* 52:539-559.
- Bebbington, A. 1999. Capitals and capabilities; a framework for analyzing peasant viability, rural livelihoods and poverty. *World Development* 27(12):2021-2044.
- Carter, M., B. Barham B and D. Mesbah. 1995. Agro-export booms and the rural poor in Chile, Guatemala, and Paraguay. LTC Research Paper No.125. Madison, WI: University of Wisconsin-Madison.
- CEPAL/GTZ/FAO. 1998. Agroindustria y pequeña agricultura: Vinculos potencialidades y oportunidades comerciales. Santiago, Chile: United Nations Publication.
- Chaddad, F. and Cook, M. 2002. An ownership rights typology or cooperative models. Department of Agricultural Economics working paper AEW2002-6. University of Missouri, Colombia, MS.
- Cook, M. 1995. The future of agricultural coops: an NGO-institutional approach. *American Journal of Agricultural Economics* 77(5):1153-1159.
- Cook, M and Ilippoulos, C. 1999. Beginning to inform the theory of the cooperative firm: Emergence of the new generation cooperative. *Finnish Journal of Business Economics* Volume 4, Vammalla, Finland.
- Colombian Civil Code*. Edition: LEGIS. Bogotá. Article 74
- Dasgupta, P., y Serageldin, I. (2000) Social Capital. A Multifaceted Perspective, Washington, D.C., The World Bank.
- Fukuyama F. 1995. Social capital and the overall economy. *Foreign Affairs* 74(5):89-103.
- González, M.C. 2001. Incidencia de las instituciones legales en las agroempresas rurales. Pontificia Universidad Javeriana. Tesis de Maestría en Economía.
- Johnson N; Suárez R; Lundy M. 2002. The importance of social capital in Colombian rural agroenterprises. Working paper No. CAPRI, IFPRI, Washington, DC.

Lafourcade, O. 2002. Préstamo de US\$32 millones para Colombia [opiniones citadas]. El País (Cali, Colombia), 23 de enero de 2002. Sección A, p.4.

Narváez G, I. 1997. Teoría general de las sociedades [*General theory of societies*]. LEGIS, Bogotá, Colombia.

Reardon T and J Berdegue. 2002, The rise of supermarkets in Latin America: challenges and opportunities for development, *Development Policy Review* 20 (4), September:317-34

Torrent B, C; Bustamante E. 2000. *Nonprofit entities*. Chamber of Commerce, Bogotá, Colombia. (In Spanish.) pp 1-108

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