SOCIAL CAPITAL AND EXPORT GROWTH:
AN INDUSTRIAL COMMUNITY
IN SOUTHERN BRAZIL

by
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Summary
This paper explores the relevance of social capital for industrial development by way of a case study. The paper shows that there are causal connections both ways and that these connections only become apparent by adopting an historical approach. The critical steps in the enquiry are the distinctions between different kinds of social capital and between different stages of economic growth. The paper shows how social capital was generated in a period which preceded industrialisation, how the early phase of industrial growth drew on that social capital and strengthened it further; how a later period of rapid export growth benefited from this social capital but then contributed to its decline; and how that social capital is now being rebuilt on a different basis. The paper concludes with an optimistic note, suggesting that social capital is not necessarily an asset which some regions are endowed with and others not, but that it is an asset which can be created.
1. INTRODUCTION

There is an increasing interest in social capital and its relevance for economic development. This paper explores how social capital helps explain the growth of a small export-oriented town in southern Brazil.

The paper is structured as follows: in Section 2 we ask what the notion of social capital means and introduce the literature which claims that community ties matter for home-grown industrialisation. Subsequent sections of the paper discuss the validity of this causal connection by way of a case study. Section 3 introduces the economy and community of Dois Irmãos, a small town of 18,000 inhabitants in the state of Rio Grande do Sul in southern Brazil. Section 4 examines the historical roots of social capital in this industrial community. Section 5 then concentrates on the relationships between enterprises, while Section 6 affords a view inside the enterprises focusing on the relationships between entrepreneurs and workers. Section 7 draws together the main findings.

The case material confirms the relevance of social capital for industrial growth. However, the most significant conclusions are that its relevance changes over time and that the causal relationship is not one way. To unravel this we use an historical approach. The paper shows how social capital was generated in a period which preceded industrialisation; how the early phase of industrial growth drew on that social capital and strengthened it further; how a later period of rapid export growth benefited from this social capital but then contributed to its decline; and how social capital is now being rebuilt on a different basis.

In terms of method, the paper suggests that understanding the economic relevance of social communities requires an approach which is, first, historical, and second, disaggregates the community. The crucial insights come from tracing changes over time and observing how different constellations of co-operation and conflict within the community are linked to changes in the outside world. It should be emphasised that this is an exploratory paper which examines the relevance of social capital for local industrial development by drawing on empirical work carried out previously for other purposes (Bazan 1997; Schmitz 1995a).

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2. THE MEANING OF SOCIAL CAPITAL

The concept of social capital is both useful and problematic. It is useful because it helps to put centre-stage something that has been a mere side-show in debates on how to explain or foster economic development. In simple terms, this is the proposition that the quality of relationships amongst people has a major influence on economic performance. The concept is problematic because it is hard to define and operationalise. In this article, we cannot solve these problems. Our objectives are more modest; we want to explore whether and how engaging with the idea of social capital helps to explain an experience of successful industrialisation; this is done in the later empirical sections of the paper which are concerned with the transition from artisan production for local markets to capitalist production for international markets. This section elaborates on what social capital means and how it connects with the literature on the role of communities in home-grown industrialisation. This section also prepares the ground for the subsequent sections by disaggregating the concept of social capital and its relationships with economic performance.

2.1 Problems of Definition

The recent surge of interest in social capital was triggered by Putnam's (1993) work on differences in institutional performance in Italy. Putnam asks why some Italian regions have had effective governments and prospered and others not. He concludes that the answer lies in civic traditions. The successful regions are made up of communities with strong norms of reciprocity and dense networks of civic engagement. These features are thought to matter because they make voluntary co-operation more likely and such co-operation is seen as the key to institutional and - ultimately - economic performance. "Voluntary co-operation is easier in a community that has inherited a substantial stock of social capital in the form of norms of reciprocity and networks of civic engagement. Social capital here refers to features of social organisation, such as trust, norms and networks, that can improve the efficiency of society facilitating co-ordinated actions" (1993: 167). In schematic terms, the core of Putnam's thesis is social capital → voluntary co-operation → performance. This is the argument which we will keep coming back to in the course of this paper.
There are many difficulties in examining these causal connections. The main initial hurdle is to clarify the meaning of social capital. Putnam himself does not bother with a definition\(^2\) and merely refers to "features of social organisation such as trust, norms and networks" (1993: 167). This is hardly satisfactory, since trust, norms and networks are categories which operate at different levels. A more explicit conceptual discussion is offered by Coleman (1990) who can be credited with introducing the concept into mainstream social science. In his *Foundations of Social Theory* he proceeds by comparing social capital with other forms of capital.

Just as physical capital is created by making changes in materials so as to form tools that facilitate production, human capital is created by changing persons so as to give them skills and capabilities that make them able to act in new ways. Social capital in turn is created when relations among persons change in ways that facilitate action. Physical capital is wholly tangible, being embodied in observable material form; human capital is less tangible, being embodied in the skills and knowledge acquired by an individual; social capital is even less tangible, for it is embodied in the *relations* among persons. Physical capital and human capital facilitate productive activity, and social capital does so as well. For example, a group whose members manifest trustworthiness and place extensive trust in one another will be able to accomplish much more than a comparable group lacking that trustworthiness and trust (1990: 304).

This helps to explain social capital but does not define it. The basic elements are that the concept is *relational* and *functional*. Both are stressed by Coleman: "social capital consists of relations among persons" (1990: 316); "social capital is defined by its function" (1990: 302), and "the function identified by the concept 'social capital' is the value of those aspects of social structure to actors as resources that can be used by the actors to realise their interests" (1990: 305).

The critical question is whose interests. Coleman is interested in social relationships mainly because they provide a resource to the individual actor;

I will conceive of these social-structural resources as a capital asset for the individual....social capital is...not a single entity, but a variety of different entities having two characteristics in common; they all consist of some aspect of a social structure, and they facilitate certain activities of individuals who are within that structure (1990: 302).

\(^2\) This is surprising given that Putnam's seminal book brings together over 20 years of scholarly research. It is only in the final chapter that the concept of social capital is introduced. It is not defined but becomes the central concept around which the main conclusions of the book are organised. Interestingly, social capital is both the source of the book’s vulnerability and its success (in terms of attention received).
There is no denying that social ties can be a resource for furthering individual interests; we experience it in our daily lives. For example, we can take risky decisions because our families provide a safety net, former class-mates inform us about new job opportunities, or a friend provides valuable business contacts. The problem is that by making individual (rather than joint) action the focus of analysis, we lose our concern with societal outcomes (such as the performance of government institutions, or the economic growth of regions or sectors).\(^3\) Coleman’s focus on individual action also exacerbates the problem of defining social capital. We end up with a very broad concept of social capital, probably covering all situations in which we are not atomistic economic agents. If used in this sense, it seems too broad a concept to be useful for analytical or empirical purposes.

A further question arises from the combination of the relational and functional dimensions inherent in the concept of social capital. Passages such as "social organisation constitutes social capital" (Coleman, 1990: 304) suggest that social relationships in themselves constitute social capital. This seems problematic. For instance, various forms of social relationships, such as family ties, ethnic ties, political affiliation, or bonds amongst alumni, could be irrelevant. Or they could be important at some stages and then become unimportant. Recognising this matters for both the meaning of social capital and the way the analysis is conducted. With regard to the former, it seems that - strictly speaking - social capital is not defined by the social relationship but by the resource it gives access to. This could relate to the ability to trust, a safety net, to particular information, and so on. These resources may or may not result from the social relationship. Unless this is allowed for, the research itself becomes purely functionalist if not tautological.

Where does this leave us? It seems that Coleman, through his explicit discussion of the meaning of social capital, exposes (unwillingly) the problem of defining it. Definitions are not necessarily right or wrong but more or less useful, depending on the purpose of the investigation. For example, our purpose is the explanation of societal outcomes, more specifically the economic performance of social agents in a small town. There are multiple agents in this town, and the growth of it industry cannot be understood by analysing individual actors or adding up their output. The proposition is that co-operation between those agents played a major role and that social relationships help to explain their co-operation. As we will see later, the actual story is more complicated, but our purpose for using the notion of social capital is closer to Putnam's concern with voluntary joint action than Coleman's concern with individual action.

2.2 Disaggregating Social Capital

More generally, we conclude that trying to define social capital in an abstract sense is futile. In order to clarify its meaning, we need to specify what we are trying to explain and whether the

\(^3\) Unless one subscribes to methodological individualism which we do not.
focus is on individual agents or co-operation between agents. This helps, but is not sufficient. Perhaps the most important step is to disaggregate the notion of social capital. The way one goes about the disaggregation will depend again on the purpose of the investigation. The main categories useful for our investigation are summarised in Table 1.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Distinctions</th>
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<tr>
<td>Origin</td>
<td>By-product of existing social relations</td>
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<tr>
<td>Reach</td>
<td>Selective</td>
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<tr>
<td>Scope</td>
<td>Bilateral Co-operation</td>
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<td>Institutionalisation</td>
<td>Informal</td>
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<td>Balance</td>
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<td>Reinforcement</td>
<td>External Sanctions</td>
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The first category, that of *origin*, tells us that social capital can be generated either as a by-product of existing social relations, or as a direct product of new structures of social interaction created by agents to meet specific objectives (Coleman 1990). The former type of social capital is generally based on those relations in which agents are historically rooted, such as family or ethnic ties. The latter type, on the other hand, is built up for specific purposes, such as the successful completion of a production target that requires important inputs from other actors. This leads us to question what it is that gives agents the incentive to invest - or disinvest - in social relations.

The second and third categories are similar in that they both deal with the range over which the generation and use of social capital extends throughout a particular community. The category of *reach* reminds us that the strong social ties which produce social capital may exist only in a selective group or can be generalised in a community. The third category, that of *scope*, also concentrates on the extent of the social relationships and interaction for which social capital is relevant. It is possible to distinguish between bilateral co-operation, for example between producers and users of equipment, and multilateral co-operation, involving many (if not all) members of a sector or community.

The fourth category relates to the *institutionalisation* of social capital. This may take one of two forms; the informal, characterised by day-to-day social relationships, often associated with
bilateral co-operation; and the formal, characterised by more institutionalised forms of social relationships as in social or business associations.

The fifth category, that of balance, refers to the balance of power and status in the relations between interacting agents, which may be either symmetric or asymmetric. Which distinction social relations fall into can have important implications for the construction of social capital. Putnam (1993), for example, argues that vertical social ties, such as patron-client relations or "clientelism", are ineffective in generating social capital. They involve reciprocal obligations that are asymmetric and much less likely to lead to norms of reciprocity and trust because "the sanctions that support them are less likely to be imposed upwards and less likely to be acceded to, if imposed" (1993: 174). He argues that horizontal ties - characterised by more symmetric social relations that bring together agents of similar power and status - are more significant in terms of generating social capital.

A further distinction can be made between two ways in which social capital is reinforced. On the one hand, reinforcement may take place through internal sanctions, such as feelings of guilt or a sense of morality; on the other, it may take place through external sanctions, such as the threat of ostracism from a community as punishment for non co-operative behaviour. Finally, it is also possible to distinguish between traditional and modern social ties. Social capital can result either from traditional social ties, such as kinship or ethnicity, or more modern social ties, such as those based on professional activity or political affiliation.

Rather than being mutually exclusive, the various distinctions included for each criterion can coexist within one single community. Furthermore, while there is undoubtedly a bias for certain combinations - bilateral co-operation, for example, is more likely to be associated with informal social relationships - there are many possibilities for a wide range of combinations. In sum, the distinctions presented in Table 1 are meant to provide a minimal set of tools that can be usefully employed in the later empirical sections.

2.3 Social Capital and Industrial Clusters

As stated above, social capital is an explicitly functional concept. Functional to what? Putnam (1993) employs it to explain differences in institutional performance. Moser (1996) uses it to explain how poor urban households cope with crisis. We are interested in economic performance and will explore the relevance of social capital for explaining the growth of industry in a small town.

For this purpose we can dip into the specialised literature on industrial districts. This literature has shown that firms, due to local external economies and joint action, can derive substantial efficiency advantages from clustering that help them to compete successfully against
imports and to sell in international markets. Importantly, attention is drawn to the communities in which the local enterprises are embedded, and to the socio-cultural ties which promote a cluster's growth by facilitating dense transactions and inter-firm co-operation. The Italian economist Becattini (1990) goes as far as including local community in the definition of the term industrial district: "I define the industrial district as a socio-territorial entity which is characterised by the active presence of both a community of people and a population of firms in one naturally and historically bounded area" (1990: 38). Dei Ottati (1994), building on Becattini's work, defines the "social environment of the ideal-type industrial district" in terms of a common culture, frequent face to face relations, and "norms of reciprocity accompanied by relevant social sanctions" (1994: 530). She recognises that "because of its industrial specialisation and the connected necessity of importing and exporting......the environment of the district cannot be as closed to the external world as a traditional community" (1994: 531); however, the values and social relations in the community are considered functional to the economic performance of local enterprises.

Whether or not this is the case is precisely what we want to examine in this paper. We will not, however, use the term "industrial district" because the above authors subsume the existence of socio-cultural ties in its definition, whereas in this paper it is a matter for empirical research. Instead we will use the term "cluster" which merely refers to a sectoral and geographical concentration of firms.

2.4 Conclusion

We conclude this section with a number of broad points. The concept of social capital is relatively new, but has attracted a lot of attention. Its meaning is far from clear. Putnam (1993) explains social capital by its proximity to other concepts such as trust, norms and networks. He refers the reader to Coleman's (1990) work without mentioning that the latter is concerned with individual action, while his own particular focus is on the capacity for voluntary joint action. This would not be a problem if the stock of social capital in a community or society could be derived from adding up individual social capital. The case study which follows is an argument against such methodological individualism (explaining social or economic wholes in terms of the individuals constituting them).

Given the numerous problems regarding its definition, measurement, and operationalisation, it would be easy to dismiss the concept of social capital. This is not what we do in this paper. While the analytical use of the concept remains to be proven, we regard the idea of social capital as having an important political function: it helps to move social ties from the margin to the centre of the development agenda; it helps create new space for investigating the links between social ties and economic outcomes. The task is therefore to fill this space to which we seek to contribute with this exploratory paper. Rather than aiming to provide a "hard sell" of the concept of social capital, the paper is written in the spirit of giving the concept "a good run" and experimenting with an idea.
3. THE INDUSTRIAL COMMUNITY OF DOIS IRMÃOS

This section introduces the case study and charts the path for the rest of the paper. Dois Irmãos, is small town of 19,000 people located in the state of Rio Grande do Sul, in the far south of Brazil. From both a historic and economic perspective it forms part of the Sinos Valley, a region colonised by German immigrants during the course of the eighteenth century. Currently this region comprises some 14 small towns, all specialised in the production of shoe and leather products. Shoe manufacturing in the Sinos Valley has developed from a cluster of small enterprises producing only for the internal market to a cluster of enterprises of all sizes producing mainly for the international market (documented in Schmitz 1995a). Today there are approximately 500 shoe manufacturers in the region, drawing on over 1,000 suppliers of specialised inputs and services and a range of self-help institutions.

The Sinos Valley put Brazil on the world map in leather footwear. Between 1970 and 1990, Brazil raised its share of world exports of leather shoes from 0.5 to 12.3% (Schmitz 1995a). Shoe and leather products as a whole have ranked among Brazil’s main manufactured exports for many years (Ruas et al. 1992). Although not the only shoe producing cluster in Brazil, the Sinos Valley is largely responsible for this performance. Between 1973 and 1988, the Valley accounted for 72% of Brazil’s shoe exports (Santos 1989). While in recent years its relative importance has declined somewhat, as neighbouring valleys have also engaged in the manufacture of shoes and leather products, the Sinos Valley remains one of the most successful examples of home-grown industrialisation in the developing world.

3.1 Why Dois Irmãos?

To explore the role of social capital we chose the town of Dois Irmãos for two main reasons. First, we have studied the town’s enterprises and community before, and as a result we could investigate the issue of social capital's contribution to the industrialisation process on the basis of data previously collected. Secondly, in many ways Dois Irmãos may be regarded as a "microcosm" of the Sinos Valley as a whole, in that it allows us to analyse the impact of social ties on economic performance without having to consider a range of interfering variables that operate at the level of the Valley. One possible danger is that the small size itself becomes an interfering variable in our analysis. In order to compensate for this problem, we have compared - either through our own research or that of others - the findings of the Dois Irmãos case with findings from other towns in the Sinos Valley.

The industrial structure of Dois Irmãos is in fact one that mirrors very closely that of the Sinos Valley as a whole. Industrial production accounts for 72% of its output (Secretaria da Fazenda do RS 1991). Shoe production is the town’s dominant industrial activity, accounting in 1993 for 65.3% of its industrial establishments and 84.7% of its industrial labour force (FEE 1996).
In 1993 there were a total of 105 shoe firms in Dois Irmãos, either in shoe assembly or components production, employing a total of 5,248 people (FEE 1996). The bulk of the town's production is geared toward the international market, in particular the US and Europe.

3.2 Stages of Economic Development

The economic development of Dois Irmãos - like that of many other small towns in the Sinos Valley - can be characterised by a number of distinct stages. The first, which began in the early nineteenth century and continued until the 1930s, can be described as a pre-industrial stage, in which economic activities were based mostly on small-scale peasant agriculture and handicraft. During the second stage, which lasted from the 1940s until the late 1960s, industrialisation began and gathered pace. However, small-scale agriculture and artisan production continued to exist, the majority of new manufacturing enterprises were relatively small in size, and production was geared toward the internal market only. The third stage, which extended throughout the 1970s and 1980s, was characterised by entry into international markets and a subsequent boom of production for export. During this stage some enterprises grew rapidly along Fordist lines, and a considerable number of new firms began to emerge. Finally, it is possible to identify another more recent stage in the town's economic development. The early 1990s have been characterised by marked changes in the international environment, which have generated clear moves in Dois Irmãos away from production along Fordist lines toward flexible specialisation.

As we hope to show below, each change in the economic structure of Dois Irmãos was closely associated with changes in its social structure, as well as with the amount and type of social capital available to economic agents. Throughout the next sections we examine how social capital influenced industrial growth. We do this by analysing relationships at the inter-firm level (Section 5), and at the intra-firm level (Section 6). Prior to this however, Section 4 concentrates on the historical roots of Dois Irmãos that were common to both inter- and intra-firm relations, and illustrates how these roots generated social capital relevant for the later industrialisation drive.

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4 The data includes the municipality of "Morro Reuter", a village that, although politically independent from Dois Irmãos, until 1995 remained one of its rural districts. Currently, Morro Reuter has a population of 4,044 and contains some industrial establishments that belong to firms of Dois Irmãos. As a result, we leave the data on Dois Irmãos in the form in which it is available in the official statistics, i.e. including Morro Reuter.
4. HISTORICAL ROOTS: BUILDING UP SOCIAL CAPITAL

This section covers the first, pre-industrial, stage of Dois Irmãos’ economic development. Its purpose is to help us understand how the social capital, which aided the later industrialisation drive, emerged.

4.1 Immigrant Community

Dois Irmãos was founded in the early nineteenth century as a settlement for German immigrants who had moved to Brazil in order to escape the dire poverty in the "Hunsrück", one of Germany's least developed regions. Most immigrants were poor rural labourers or artisans, who were able to acquire small pieces of land in Brazil and thereby achieve a somewhat better position than that which they had held previously. Immigration was actively encouraged by the Brazilian authorities, mainly because it allowed the occupation of previously empty territories, and because it offered the possibility of replacing slavery with free labour (Roche 1969, Santos 1978).

However, despite the fact that immigration served both Brazilian and German interests, the social integration of immigrants into Brazilian society was never an easy task. This was a particular feature of the pre-industrial communities of Dois Irmãos and other settlements of the Sinos Valley, and reflected a range of different problems. First, the process of colonisation itself implied a high degree of geographical isolation for the immigrants, as their settlements were normally established far apart from the "native" population. Secondly, German immigrants were perceived by Brazilians as a homogenous group of "outsiders", despite the fact that they often differed regarding religious beliefs or geographic origin. As a result, they were often discriminated against. Furthermore, the German immigrants, despite conceiving themselves as Brazilian citizens, continued to speak their mother language and practise their own cultural traditions, which tended to exacerbate conflicts regarding colonisation (Seyferth 1982a). Finally, with many Brazilians not prepared to accept German settlements on their territory, government measures regarding colonisation - and attempts at promoting the integration of immigrants - tended to fluctuate wildly according to the prevailing political atmosphere, and consistent policies were not adopted (Roche 1969).

As a result, Brazilian-Germans became a distinct ethnic minority group within Brazil. They were relatively isolated from Brazilian society, and generated in their settlements a distinct sense of community and social identity. This social identity was based to a large extent on being "Brazilian-Germans", giving a sense of dual nationality (Seyferth 1982a). Beyond these cultural ties, there were a number of other strong social linkages between immigrants, such as those generated by intermarriage and kinship, friendship and vicinity. Furthermore, the strong ties immigrants felt towards the land also gave them a sense of locality, so that they began to perceive themselves not only as part of culturally rooted communities but also as geographically rooted communities (Bazan...
1997). In all, the way in which colonisation occurred led to the establishment of ethnically homogenous micro-societies.

Within these societies, social relationships were by no means harmonious or non-hierarchical. On the contrary, they represented largely patriarchal societies, in which power within families was concentrated in the father (Schneider 1994). And within the community as a whole, power and prestige tended to be concentrated in certain people, such as priests, teachers, professionals or traders. However, their influence often varied between the Catholic and Protestant sections of the community (Roche 1969, Rambo 1988).

During the decades which followed immigration, some Brazilian-Germans began to attain a higher degree of social integration in Brazilian society, and became less economically and politically isolated. However, it was a relatively slow process, and did not apply to the majority who remained in small-scale peasant agriculture. During the 1930s and 1940s, and in particular following the Second World War, the Brazilian Government undertook a range of measures aimed at increasing the integration of foreign communities into Brazilian society. For Brazilian-German communities this implied that speaking their mother language was prohibited, as was keeping their "German schools", and publishing their own newspapers (Seyferth 1982b). However, these measures tended to increase, rather than suppress, the strong social identity of Brazilian-Germans.

The strong social identity that stemmed from the colonisation process was to provide a solid foundation for the generation of social capital. It is important to note that what mattered in this respect were the strong social ties between immigrants, formed along ethnic and cultural lines, rather than any particular cultural tradition or trait that they inherited from Germany. A number of studies indicate that the same phenomenon - the emergence of strong social ties - can be found in other immigrants' settlements in different parts of Rio Grande do Sul, for example in the case of Italian settlements (Azevedo 1975; Seyferth 1986; Mocellin 1993).

We have argued in Section 2 that strong social ties do not represent social capital in themselves, nor do they necessarily lead to the creation of social capital. In what follows we try to show how the observed social ties generated social capital in Dois Irmãos, and what conditions were conducive to this occurrence.

4.2 Social Associations

In terms of social relations, Dois Irmãos represented a highly integrated community during the first stage of its economic development. Like many other Brazilian-German settlements, solidarity and involvement in community affairs were commonplace. For many years, community members acted in close co-operation to build up their churches, to establish and keep their own community schools, to found mutual-help societies, and to create various leisure associations as
diverse as bowling clubs, shooting clubs and choral societies; at first these associations and communal practices were largely of an informal nature. Alternatively, they were often organised along religious lines, since Brazilian-Germans tended to organise their communities not only by ethnicity but also by religious affiliation. However, in both religious communities - Catholic and Protestant - the same type of mutual-help institutions existed.

One of the most notable was the "Chapel Society", an institution to which members of a religious community used to belong. This society consisted of a church, together with a range of other institutions built around it; the primary school, the church hall (where most religious and social parties took place), and the burial society. The Chapel Society was much more than a place for worship; it brought together the two most important social institutions in the community - the school and the chapel - and was a place around which social life was centred. In each rural community of the Sinos Valley there was at least one Chapel Society (Morigi 1988).

After 1850 communal practices began to take a more formalised structure and by 1920 there were at least 327 "German associations" in Rio Grande do Sul, including professional, youth, sport and charity associations amongst others. In São Leopoldo, the administrative centre of the district to which Dois Irmãos then belonged, there were at least 14 such social associations at this time (Rambo 1988, 1992). In 1886 there were so many different associations that an effort was made to gather them all under one umbrella organisation, the Federation of German Associations, which in 1914 became the German-Brazilian Popular Union. In Dois Irmãos itself, the high level of associational activity can still be noticed by the existence, to this day, of nine leisure associations, two shooting clubs (one founded in 1897 and one in 1927), one choral society (created in 1927), and 15 small parishes spread between the town and its surrounding villages. The 1992 Dois Irmãos calendar, published by the local government, presents some 204 different events ranging from charity balls to civic parades and other celebrations (Bazan 1997).

What was it that led to the emergence of so many social associations and co-operative social practices? Certainly their roots go far back in history. In the early days of the community following colonisation, mutual-help actions were primarily carried out as a strategy for self-protection and survival, or in other words, as a response to a hostile external environment. Closely linked to this was a desire among community members to build up the infrastructure of the community - its churches and schools for example. Furthermore, most social associations, in spite of having their own particular objectives, sought to strengthen the Brazilian-German cultural, religious and ethnic identity - in a similar way to the Brazilian-Italian communities of Rio Grande do Sul.

4.3 Economic Associations

Dois Irmãos, in its pre-industrial stage, was a small community in which people participated in all types of associations. This corresponds to what Gluckman (1967) has termed "multiplex
relations”; a situation in which members of a community belong to more than one association. There were also many examples of associations in the economic field, many of which emerged in response to growing economic difficulties faced by Brazilian-Germans after 1850 (Rambo 1988). Until then, small farmers and artisans produced all the goods that were needed locally, and by trading the surplus with Porto Alegre, the capital city of Rio Grande do Sul, the German settlements developed fast. However, from 1850 the local economy experienced decline. Families grew faster than they could acquire new land. Agricultural productivity was low (Roche 1969).

It was partly in response to such difficulties that economic associations began to emerge. One notable example was the Rio Grande do Sul Peasants Association, created in 1900 in order to establish mutual-help institutions able to promote economic development in the Brazilian-German settlements. The idea was to set up co-operatives to provide financial aid for the improvement of local crops and livestock and the manufacturing of local goods. One significant example of this approach was the promotion of new save and credit associations called "Caixas Rurais" (Rambo 1988, 1992).

In fact, informal credit associations had already emerged in many German settlements. Most were established as a product of the ties established between peasants and local traders. Shops generally represented more than just a trading place; they were also places of social interaction, and peasant farmers often trusted the traders with safeguarding their money. However, these informal arrangements were not always to peasants' benefit. The Peasants Association helped peasant farmers create their own savings and credit associations, suggesting the adoption of a German savings system known as the Raiffeisen. This enabled peasants to save small or large amounts of money and receive interest payments, while also being able to borrow money from the common fund by paying low interest rates. The core idea was to promote peasants' access to credit in order to buy new tools or agricultural inputs, or even to enlarge properties.

The Peasants Association was originally intended to be an institution that crossed ethnic and religious boundaries, but in the early 1900s it was replaced by two new associations based more explicitly along religious lines. The "Popular Union Society" was created in 1912 by the Catholic community, and the "Colonial Union League" was a similar Protestant association created in 1910. Like the Peasants Association, these new organisations were organised hierarchically, through a series of stages. The Union Society, for example, was organised into neighbourhood associations, which formed part of a district or parochial association, which in turn formed part of a municipal group association. The Union therefore had a highly integrated structure, linking local associations in colonial settlements such as Dois Irmãos to a state-level organisation (Rambo 1992).

Importantly, both the Popular Union Society and the Colonial Union League had as general objectives the promotion of welfare and the economic development of their respective communities. The Popular Union Society goals were, for instance, supporting Catholic schools,
providing legal assistance, helping people to find work, and helping the poorest through charity activities. Its main objective, however, was facilitating access to credit for the purpose of acquiring land and equipment. In fact, one of the most important roles played by the Popular Union was promoting the adoption of the Raiffeisen system. This was achieved not only by increasing the number of Caixas Rurais, but also by integrating them into one state-level organisation. As a result, it was possible to expand colonisation by the collective acquisition of new lands in the north of Rio Grande do Sul and the establishment of new settlements for the younger peasant farmers (Rambo 1988, 1992).

Credit associations undoubtedly became an important type of co-operative practice in the Sinos Valley. In 1933, for example, there were more than 400 members in the Nova Petropolis credit society, of which approximately 90% were peasants. Increasingly, however, they began to incorporate a wider range of interests and soon included industrial workers, entrepreneurs and traders, thereby facilitating industrialisation as well as agricultural development (Roche 1969). Dois Irmãos was a good example of the region as a whole, having by 1920 two Union Societies and one "Caixa Rural". Many of the credit associations died out with the development of a more formal financial and banking system in the settlements, but some continued to exist, often becoming banks themselves.

4.4 A Stock of Social Capital

The practices described above show that, for many different reasons, co-operation and reciprocity became "social norms" within Dois Irmãos and other immigrant communities. In the social field, this was mainly due to a desire to build up communities and strengthen cultural identities. In the economic field, it was largely due to growing economic adversity.

Coleman (1988: 104) states that "an especially important form of social capital is the norm that one should forgo self-interest and act in the interests of the collectivity". Such social norms provided one of the most important resources on which the immigrant communities could draw when facing common problems; in terms of material resources, the communities were poor. The relevance of these social rules as resources for industrial growth is explored when we examine the subsequent stage of the town's growth; here it only needs to be mentioned that they were linked to the combination of feelings of adversity, minority, and interdependence among immigrants, generated by the particular circumstances of colonisation.

The number of co-operative practices suggests a high degree of trust amongst members of the pre-industrial communities. This was an important aspect of the social capital generated in Dois Irmãos during this period. Trust was linked to the necessity for individuals to acquire reputations for honesty and reliability in order to be accepted in the immigrant communities. As we have seen, Brazilian-Germans developed their own social identity as a result of the particular circumstances of
colonisation. They perceived themselves as being hard workers and honest. This social identity of the immigrant communities is reflected in the statutory rules of the Rio Grande do Sul Peasants' Association, where it is stated that membership is only open to those "peasants or friends of peasants who possess an unquestionable reputation" (Rambo 1988: 110).

Trust was reinforced through internal and external sanctions. Starting with the latter, the most severe was the risk of being ostracised from community life, although they did not have to be so severe in order to be effective. In Dois Irmãos, the density of local relations meant that it was relatively easy for community members to influence each others' behaviour. External sanctions were not only evident in the form of punishment, but also in the form of rewards; individuals gained respect as a result of honest or selfless actions. However, the acceptance of social rules was more due to internal sanctions than a fear of punishment. To a large extent it was a result of internalised behaviour, in the form of a social *habitus* (Bourdieu 1989, 1994) rather than "community enforcement".

The generation of trust and effective social norms in Dois Irmãos was facilitated by the degree of social "closure" of the community. Coleman (1988) identifies the degree of "closure" of social networks as especially important in facilitating the creation of social capital (Coleman 1988: 105). During this period, there was little penetration of the immigrant communities by outside agents. This ensured that social norms were effective in guiding and monitoring behaviour, and enabled agents to combine in sanctioning others. A further enhancing factor was the low degree of economic stratification in Dois Irmãos; most of the population consisted of peasant farmers or artisan producers. The prevailing social structure of the period, that of religious or family hierarchies, tended to strengthen rather than limit the internal and external sanctions that were operating in the settlements. This stands in stark contrast with the growing economic and social stratification of the later industrialisation stage.

Looking at how social capital was generated and enhanced during this period also points to the presence of virtuous circles. Putnam (1993) highlights this possibility, in describing forms of social capital as "moral resources" that increase rather than decrease with use (Putnam 1993: 169, citing Hirschman). In Dois Irmãos, the first associations and co-operative practices generated social capital on which later associations and co-operative practices were able to draw, and in the process, add to. For example, the Caixas Rurais were able to function effectively by drawing on the existing stock of trust and social rules in the colonial settlements. They also represented investments in social capital themselves. It is of course difficult to differentiate between initial and later co-operative practices in the immigrant communities. But in the early development of Dois Irmãos, it seems that initial success in establishing relatively small-scale and informal co-operative practices (generally those designed to build up community infrastructure) enabled the community to cope with increasingly more difficult common problems in its development, and in the process accumulate a larger stock of social capital. In order to explore the relevance of this stock of social
capital for the industrial development of Dois Irmãos, we need to look at later stages of the community's development. This is done by focusing on inter-firm relations in Section 5, and intra-firm relations in Section 6.

5. RELATIONS BETWEEN ENTREPRENEURS

The previous section highlighted how, during its first stage of economic development, a large stock of social capital emerged in the community of Dois Irmãos. This section explores how this stock of social capital influenced the industrial growth witnessed in subsequent stages of the town's development, by focusing on inter-firm relations.

5.1 From Ethnic Community to Local Corporatism

The second stage in the economic development of Dois Irmãos extended approximately from the early 1940s until the late 1960s, and was characterised by economic growth based on industrialisation and focused on the manufacture of leather shoes. Between 1940 and 1950, the number of shoe firms in Rio Grande do Sul more than doubled, increasing from 219 to 471 (Costa 1978). A large part of this increase was concentrated in the Sinos Valley. By 1957, for example, over 243 manufacturing enterprises had been established, employing 8,238 workers, in Novo Hamburgo, the Valley's capital (Costa 1978; Petry 1959). Such growth, it has to be said, generally took the form of increases in the number of firms rather than in their size. However, in comparison with other periods, this stage certainly represented a time of significant industrial and economic growth in the Sinos Valley as a whole. In Dois Irmãos, 12 shoe firms were founded during this period, and almost all of the town's large shoe firms that are present today were established during this time (Bazan 1997).

To what extent was this growth linked to social capital? This paper is not seeking to provide a mono-causal account of economic growth on the basis of social capital. There is no doubt that a number of contributory factors were involved, notably the increasing returns from industrial clustering (Schmitz 1997). An account based merely on such economic forces would be possible; however, without reference to social capital it would be hard to understand how and why some of these economic forces came into play.

A closer look at the origins of the first shoe firms in Dois Irmãos shows that a number of local barriers to industrial development were overcome by co-operation between entrepreneurs. One such barrier related to the mobilisation of resources for industrialisation. During this period, the Sinos Valley remained a poor region in which the availability of financial capital was limited. This acted as a constraint to the setting up of new firms. Entrepreneurs in Dois Irmãos overcame this problem by forming partnerships to set up new firms; in other words by pooling their limited financial and entrepreneurial resources (documented in Bazan 1997). The formation of these
partnerships was greatly facilitated by the trust and social norms which had developed over previous decades, as outlined in the previous section.

Co-operation not only helped entrepreneurs in the mobilisation of resources; it also helped them overcome barriers to the effective use of those resources. This took place in Dois Irmãos through a constant exchange of goods and information between firms, relating, for example, to the sharing of technical knowledge and information, and the constant borrowing and lending of materials and tools. These practices were again facilitated by the norms of reciprocity and social relationships that were embedded in the traditional social structure of the community (Bazan 1997).

The entrepreneurial partnerships that characterised the early development of the town's industry were by no means free of conflict or the pursuit of individual interests. Within the community, being associated with a growing firm was seen by entrepreneurs as a key to obtaining respect and status. Sometimes partners would leave in order to create another firm with new partners, again drawing on social networks. Some would not rest until they obtained the control of a partnership. Therefore, while there was extensive co-operation, there was also competition between entrepreneurs, which acted as an important stimulus to the growth of firms. The competition was not aimed at mutual destruction, and was constrained by established norms and relationships. This does not mean that entrepreneurs operated in a closed economy; on the contrary, local entrepreneurs had to search for buyers beyond the limits of their communities (Bazan 1997).

During the latter half of the second stage, industrial growth in the Sinos Valley continued to accelerate. The share of total national industrial production accounted for by the state of Rio Grande do Sul grew from 12.5% in the 1960s to 19.3% in the 1970s (Costa 1978). And as growth continued, traditional ties - such as kinship, neighbourhood and ethnicity - were no longer the only source of social capital. During this period a new identity was emerging, one we term "local corporatism", which was based on the sense of belonging to an entrepreneurial community shaped not only by common ethnic ties, but also by common economic interests. The industrial growth of the 1960s led entrepreneurs to realise that together they were creating an important manufacturing sector. As was the case of other types of identity held by Brazilian-Germans, this local corporatism extended beyond the town of Dois Irmãos to encompass the whole Sinos Valley. In fact, the new identity was pervaded by a sense of belonging to the "industrial community of the Sinos Valley". While not replacing ethnicity and other related social ties as the basis for establishing co-operation between firms, this new sense of identity was more directly functional to shaping economic outcomes (Bazan 1997).

In this respect we see in the latter half of the second stage the emergence of a number of industrial organisations concerned with promoting or defending the collective interests of shoe producers in the Sinos Valley. While some were created with government support, it was joint action among entrepreneurs that was most important in establishing them. These organisations,
which operated at the level of the Sinos Valley, included the SENAI School for Shoe Design and Manufacturing (1947); FENAC, the shoe fair (1963); the SENAI Tannery School (1965); the Technical School Liberato Salzano Vieira da Cunha, for chemistry and mechanics (1966); and the CTCCA, the Technological Centre for the Leather, Shoe and Related Industries, founded later, in 1972). Although most of these organisations were created in order to provide specific services, such as training, technological support, and marketing, they all sought to promote growth throughout the sector as a whole (Klein 1991).

The new sense of local corporatism did not totally replace ethnic and cultural identity. The early years of FENAC - one of the most important and functional of the entrepreneurial organisations - demonstrates this fact. Although established in 1963, even by the late 1960s it could not be described as a purely professional and economic organisation. According to one of our respondents, it was more like a "party bringing together the whole community" (Bazan 1997). Hence it was from both types of social identity - ethnic and entrepreneurial - that there emerged joint action between firms in this period. However, we can see certain shifts in some of the categories of disaggregated social capital outlined in Section 2. For example, there is a clear change in the institutionalisation of social capital, moving from informal co-operative practices, such as the pooling of resources by entrepreneurs linked by ethnic ties, to the more formal collective organisations represented by the new industrial and entrepreneurial associations. This process was associated with a changing scope of social capital. No longer did social capital purely extend between individual entrepreneurs on a bilateral basis; increasingly it extended throughout the whole entrepreneurial community, in the form of a collective commitment to co-operate in specific ventures - while competing in others.

In sum, during the second stage of economic development of Dois Irmãos there was a remarkable expansion of industry, in which social capital played a significant role by promoting co-operative practices which in turn overcame a range of obstacles to growth. And as growth proceeded, there was a change in the sense of social identity among entrepreneurs, becoming more explicitly functional to the industrial development of both Dois Irmãos and the Sinos Valley as a whole. This was reflected in the development of a number of collective institutions that promoted shoe producers' interests. The period therefore saw the emergence of a virtuous circle between economic growth and social capital. This was to prove quite different in the third stage.

5.2 Rising Exports and Declining Social Capital

The third stage of Dois Irmãos' economic development was one in which the pace of economic growth accelerated rapidly. It was characterised by an export boom which lasted throughout the 1970s and most of the 1980s. By 1984, production for export had exceeded production for the domestic market, and in 1988, 65.3% of total shoe production in the Sinos Valley was destined for export (Reis 1994). This is confirmed by Figure 1 which shows a substantial
expansion of levels of both production and exports over this period. Figure 2 shows that a similar process was occurring in Dois Irmãos, although at a slightly later stage than the Valley as a whole (see also Table 2).

**Figure 1: Shoe Production and Shoe Exports in the Sinos Valley, 1970-1987**

![Figure 1: Shoe Production and Shoe Exports in the Sinos Valley, 1970-1987](image1)

**Source:** Associação Comercial e Industrial de Novo Hamburgo - Censo do Calçado

**Figure 2: Shoe Production and Shoe Exports in Dois Irmãos, 1972-1987**

![Figure 2: Shoe Production and Shoe Exports in Dois Irmãos, 1972-1987](image2)

**Source:** Associação Comercial e Industrial de Novo Hamburgo - Censo do Calçado
The initial growth in the 1970s was due to increases in the size of firms rather than in their number. In the Sinos Valley as a whole, between 1971 and 1974 the number of shoe firms decreased from 455 to 340, while the average number of workers per firm increased from 34 to 93 (Costa 1978). In Dois Irmãos, the number of firms decreased from 12 to 9, while the average number of workers per firm increased from 46 to 95 (ibid.). Later on there was a re-emergence of small firms; the inter-firm division of labour increased as firms strove to reduce production costs, and new small firms emerged that specialised in the production of shoe components which were in turn sold to local assembling firms. This led to both an increase in the number of firms in the shoe industry and an increase in employment. The increase in employment is shown in Table 3. By the early 1990s there were only 5 medium- to large-scale firms in Dois Irmãos, most of which produced directly for export, while there were 138 small firms specialised in particular processes, working for firms within and outside of the town (Bazan 1997). In sum, the third stage of Dois Irmãos' economic development was not only one of rapid economic growth, but also one of rapid change in the organisation of production.

Table 2: Output of Shoe Industry in the Sinos Valley by Town, 1972-1987

<table>
<thead>
<tr>
<th>Town</th>
<th>Year (millions of pairs)</th>
<th>Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novo Hamburgo</td>
<td>18.2</td>
<td>36.6</td>
</tr>
<tr>
<td>Campo Bom</td>
<td>7.7</td>
<td>14.8</td>
</tr>
<tr>
<td>Sapiranga</td>
<td>5.0</td>
<td>23.0</td>
</tr>
<tr>
<td>Dois Irmãos</td>
<td>1.2</td>
<td>3.5</td>
</tr>
<tr>
<td>Sinos Valley, Total</td>
<td>41.5</td>
<td>120.9</td>
</tr>
</tbody>
</table>

Source: Dresch (1989)

Table 3: Employment in the Shoe Industry of the Sinos Valley By Town ('000s), 1976-1987

<table>
<thead>
<tr>
<th>Town</th>
<th>Year</th>
<th>Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novo Hamburgo</td>
<td>15.8</td>
<td>17.4</td>
</tr>
<tr>
<td>Campo Bom</td>
<td>8.4</td>
<td>10.1</td>
</tr>
<tr>
<td>Sapiranga</td>
<td>8.0</td>
<td>14.6</td>
</tr>
<tr>
<td>Dois Irmãos</td>
<td>1.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Sinos Valley, Total</td>
<td>43.9</td>
<td>63.1</td>
</tr>
</tbody>
</table>

Note: a Data relates to 1986
Source: Dresch (1989)
In order to explore the role of social capital in the rapid growth of the third stage we need to distinguish between two distinct periods. During the 1970s, the stock of social capital inherited from former stages - and its influence on economic performance - remained high. Co-operation between firms increased during the entrance into external markets, and helps to explain some of the initial success that firms encountered. For example, in the search for foreign buyers and export orders, shoe producers co-operated in taking their products to trade fairs in the United States and Europe, and in gaining greater exposure there. The shoe fair organisation, FENAC, played a major role in bringing foreign buyers, and foreign journalists, to the Sinos Valley. So while the expansion of production for export was undoubtedly aided by the export incentives introduced by the Brazilian government in 1969 and 1970 (Lücke 1990), it was through joint action that the local producers of the Sinos Valley were among the first to avail themselves of them.

The social capital inherited from former stages mattered not only for facilitating joint action. It also helped local producers overcome other challenges that were posed by production for export. It facilitated the bilateral reciprocity that occurred between firms in order to comply with buyers' stipulations. Entrepreneurs often borrowed and lent machinery, raw materials, components or even labour. To take an example from Dois Irmãos, a local manufacturer revealed that after being delivered to buyers, a large consignment of boots developed problems with the zipper system. When the order was returned to be fixed, and the manufacturer was unable to complete it on time, other entrepreneurs offered their help by lending both workers and inputs (Bazan 1997). A similar situation occurred when a local firm burnt down; other local entrepreneurs helped its owner to rebuild. Entrepreneurs also exchanged information about new technologies and new markets.

During this period there was a strengthening of norms of reciprocity, as many entrepreneurs believed that the failure of any one firm in the external market would represent a threat to the continued success of the whole sector. Thus, for most of the 1970s there was a continuation of the virtuous circle of social capital and economic growth that had begun in the preceding stage; the "inherited" social capital enhanced economic growth which in turn reinforced the local corporatist identity.

However, there came a point during the third stage in which this virtuous circle was broken. From this point on, economic growth had the effect of weakening, rather than enhancing, the social ties and cultural and entrepreneurial identity that had previously formed the bases of social capital in Dois Irmãos. While it is impossible to identify the exact point in time at which this change took place, it was primarily a result of three main factors, all of which were linked to the great speed at which economic growth was proceeding.

First, the local entrepreneurial community had begun to be penetrated by "outsiders" who did not share the same values, were not linked to the same social networks, and who were not aware
of the local rules, such as reciprocity, that regulated economic transactions between local manufacturers (Bazan 1997).

Secondly, export agents were beginning to play a major role, not only as traders, but also in product development, quality inspection and technical assistance. This implied a decreasing interdependence among shoe firms, and an increasing interdependence between manufacturers and export agents. In order to succeed in external markets, it was more important to co-operate with export agents, who were not local, than with other local entrepreneurs. As a result, the old rules of behaviour became less important for regulating economic transactions. Instead, "rational" values and purely economic considerations - notably that of price - became the major rules for mediating business, and the market became increasingly characterised by fierce price competition and conflict. Local producers were pitched against each other through the auction system, used by the export agents in order to decide which manufacturer would win export orders (Schmitz 1995a).

Thirdly, the growth brought about an increasing horizontal differentiation of firms. Some firms grew rapidly, while others were left behind. In the industrial associations, large firms began to lead the decision-making process without taking into account small producers’ interests. It is not by chance that small firms in the Sinos Valley tend to contribute and participate less in local self-help institutions than large firms (Schmitz 1995a).

Another factor behind the disintegration of the sense of local corporatism in the Sinos Valley during this period was the growing vertical division of labour, which brought conflicts between shoe manufacturers and suppliers into the open. For example, as there were export incentives, leather producers often preferred to export leather rather than selling it locally. In a similar way, where possible shoe producers opted to import their machinery and equipment from abroad, thereby neglecting local suppliers.

This also led to the emergence of a new set of industrial organisations, that were created to represent some of the more sub-sectoral interests that had emerged. Until the 1970s all subsectors were active members of the Business Association of Novo Hamburgo (ACI), and sought to resolve their differences within this single organisation. By the end of the 1980s, however, the Sinos Valley had six subsectoral associations: AICSUL, the association of tanning industries; ASSINTECAL, the association of component producers; ABRAMEQ, the association of machinery suppliers for the leather and shoe industry; ABAEX, the association of export agents; and ABICALCADOS, the association of shoe manufacturers. Thus, while at the subsectoral level there was increasing joint action, the new associations neglected problems common to the whole cluster. The overall effect of the new associations was to create disunity in the Valley (Schmitz 1995a).

Thus the latter part of the third stage was one in which the stock of social capital in the community as a whole had depreciated significantly. There was a disintegration of the sense of
community, both socio-cultural and entrepreneurial. *The sheer speed of growth meant that conflicts which arose could not await joint solutions.* But above all, it was a period of opportunity rather than obstacles. There was less need for horizontal co-operation and the export agents had become the key players. As the use of social capital by entrepreneurs declined, there was a further depreciation of its stock. In sum, the virtuous circle between social capital and economic performance had been broken.

This period reveals some important aspects about the link between social capital and economic performance. It suggests that the role of social capital is not as significant when growth is "easy"; in other words, when there are no major problems requiring joint action. It also provides an example where increasing associational activity - in contrast to Putnam's hypothesis - does not necessarily imply an increase in the stock of social capital, notably when the activities of particular groups undermine the interests of the community at large.

But while this period of easy growth seemed to downplay the need for social capital and joint action, the picture was markedly different in the early 1990s when common problems re-emerged. This becomes apparent when we take a closer look at inter-firm relations in the final, and most recent, stage in the town's development.

5.4. From Incidental to Deliberate Social Capital

Since the second half of the 1980s, rapid export growth has come to an end in both Dois Irmãos and the Sinos Valley as a whole, as shoe producers face up to what could be called the "Chinese Shock". Producers are facing increased international competition, especially in the market for low-priced, low quality shoes. Due to lower average wages, exports from many Asian countries - China in particular - have been replacing Brazilian ones in the major international markets. In addition to this threat, shoe producers in the Sinos Valley are having to adjust to important new requirements enforced by American and European buyers. While the overall volume of orders is not being reduced, buyers are stipulating shorter delivery times and placing smaller orders which are then repeated in line with sales.

The combination of these changes in the international marketplace provide shoe producers in Dois Irmãos with new challenges. In particular, they are faced by a need to produce higher quality products and to do so at greater speed. Many producers have realised that these challenges require a change in their relationships with other firms in the supply chain. During the export boom of the previous stage, these relationships could largely be characterised as "arms length contractual obligations" (Sako 1992); the search for quick profits meant that where conflict emerged it resulted in blame and the switching to different suppliers or customers rather than attempts to explore problems jointly. However, many producers in the 1990s have begun to realise that a different type of relationship with their suppliers is required; in particular, one that involves more long-term
commitments, mutual transparency, and learning by interaction; "obligational contracting" in the terminology used by Sako (1992).

These types of inter-firm relations in turn imply a high degree of inter-firm dependence. In such a scenario, trust becomes more critical than ever. However, as we have seen, the traditional bases for social capital in Dois Irmãos deteriorated significantly during the town's export boom. They could no longer be sufficient for the trust required in the early 1990s. Instead, some producers are consciously investing in their relationships with suppliers, in order to engender a level of mutual commitment. This has emerged from ongoing research.

Since the early 1990s in Dois Irmãos a number of instances can be identified in which new types of joint action have emerged between firms and their suppliers: mutual visits, the sharing of technical information, and the organising of forums to discuss problems between shoe manufacturers and their various suppliers. There are attempts to modify patterns of negotiation in order to achieve more realistic targets in prices, quality and delivery times. Some large shoe producers have extended the new policy to small suppliers by discussing time schedules more openly and seeking joint solutions to problems in production scheduling and product quality. Not all enterprises have adopted the new practices, but those who have are beginning to see the benefits.

In this stage therefore, there has been an attempt by members of the entrepreneurial community to rebuild the social capital that deteriorated in the previous period. Rather than being a by-product of existing socio-cultural ties, the new social capital has been created by agents with the specific objective of increasing firm performance in a highly competitive international environment. Rather than being based on traditional social ties, such as kinship, ethnicity, or localness, it is based on conscious investments by individual firms in their relations with suppliers.

This period also sheds light on the important question of the effect of economic difficulties on the stock of social capital in a community. In a different context, Moser (1996) has argued that, up to a certain point, the pressures of economic crisis will enhance the community-wide stock of social capital, by bringing into play more trust, reciprocal arrangements and social networks, and strengthening them through increased use. However, Moser also argues that there is a point beyond which the pressure on communities overwhelms the existing social networks and norms of co-operation, and leads to the breakdown and collapse of social capital. The case of Dois Irmãos seems to provide an example of the former case. Economic crisis has generated pressure for the building up of social capital as entrepreneurs, seeing the need for co-operation, have invested in new relationships with other firms, consciously creating social capital. As a result, the community-wide stock of social capital has increased.

Nevertheless, this period also shows up some of the limits of social capital. These are not discussed here, but it is worth pointing out that there remain social and economic issues that cannot
be solved by joint action purely at the level of the local community. There is a role for government intervention in correcting for market failures that operate at a broader level than the local community.

6. RELATIONS BETWEEN ENTREPRENEURS AND WORKERS

In the previous section we saw that socio-cultural ties, and the traditional forms of social capital associated with them, facilitated cooperation between entrepreneurs in Dois Irmãos, especially during its second phase of economic development. These practices occurred within a symmetrical context; in other words, they took place between community actors who occupied similar economic and social positions. An important question in this section is whether similar practices of cooperation could emerge between entrepreneurs and workers, even though the relation between them, once the industrialisation process had set in, was an asymmetric one.

6.1 Proletarianisation Without Rupture: The Role of Traditional Ties in Shaping Labour Relations

In its initial stages, the industrialisation process in Dois Irmãos did not involve a substantial disruption of the traditional social structure. This was for a number of reasons. First, most new workers came from local rural neighbourhoods, and therefore shared the same cultural and ethnic identity as the entrepreneurs. Furthermore, as most of the new enterprises were small, workers and entrepreneurs worked together closely on the shop floor, and were often linked by family ties. Secondly, the majority of new workers maintained their links with the rural neighbourhoods (Schneider 1994). Work in manufacturing complemented the income of their families. The majority remained peasant farmers, often working in both the growing industries of Dois Irmãos and on their family land. Even those who moved to the town left their families in the rural neighbourhoods. There was in this period therefore a complementarity, rather than a complete rupture, between peasant agriculture and small-scale industry; peasants supplied the growing industries with the labour they required, while proletarianisation was a means for peasant farmers to sustain their livelihoods (Schneider 1994).

Thus, during the early part of the second stage in Dois Irmãos, the relations between entrepreneurs and workers benefited from the stock of social capital accumulated over the previous stage. Even though the industrialisation process implied the beginning of a class division in the community, this period was without significant labour conflicts inside or outside of the shop floor. Reciprocity was a chief element of labour relations. It was based on two main factors, both of which correspond closely to the conditions pointed out by Coleman (1990: 304) as necessary to assure reciprocity in a community. One was the level of trust, which as seen before, was assured by the common socio-cultural identity and the relative closure of the community. The second factor was the high extent to which obligations actually existed between individuals. In Dois Irmãos this
was assured by a constant need for mutual help, due to the non-existence at that time of other sources of aid either for workers or entrepreneurs (Bazan 1997).

Reciprocity and co-operation in intra-firm relations took the form of a dense market of economic and social exchanges between entrepreneurs and workers, in which the payment for an exchange did not have to be made with the same coin in which it had been received. The type of exchange varied according to individuals' particular demands or assets. Workers, for example, felt that they received from entrepreneurs the opportunity to maintain their contact with the land, or at least the opportunity for their families to do so (Schneider 1994). Some workers would try to start their own enterprises and were often helped by their employers; most of the new firms that were emerging in this period were owned by ex-employees of shoe manufacturers. In addition, workers received from entrepreneurs a range of economic and social support, ranging from loans to build up their houses to providing mediation in family conflicts. In return, workers were highly committed to their jobs, and entrepreneurs benefited in a number of ways as a result of workers' loyalty. For example, workers were understanding when there were payment delays; they were prepared to work overtime so that delivery times could be met; and absenteeism was low (Bazan 1997).

However, this structure of reciprocity was based on relations that became increasingly asymmetric in the balance of power, resembling a situation pointed out by Caniello (1990); workers always felt in debt with entrepreneurs, whose reciprocal favours had more social "visibility" than those of the workers (Caniello 1990). In many ways, the structure of the reciprocity between workers and entrepreneurs led to a form of patronage. For example, entrepreneurs of Dois Irmãos believed that they were helping workers by giving them a job and a wage, and in return, they expected to receive not just commitment to the firm but also a submission to their authority.

There are a number of examples in the previous literature of co-operation and reciprocity based on asymmetric power relations (see, for example; Coleman 1990). In such cases, purposive help, used by agents to ensure reciprocity in the future, can be used by powerful agents to reinforce dependence, and repayments that are more valuable than the initial help provided. In Dois Irmãos, the initial co-operation that existed between entrepreneurs and workers began to slide towards coercion. This raises a problem in that in this study we are interested in voluntary co-operation, whereas unequal relations sometimes prevent the possibility for non-co-operation. The more this occurs, the less meaningful the notion of social capital becomes. However, for the case of Dois Irmãos, it appears that both sets of economic agents - entrepreneurs and workers - benefited from the local rules of reciprocity, and voluntary co-operation was at least to some degree a continual feature of labour relations.

In sum, during the second stage of Dois Irmãos' development, workers and entrepreneurs were able to draw on large reserves of social capital in order to facilitate the co-operation that furthered both their interests. However, as was the case with inter-firm relations, rapid economic
growth was to undermine the traditional bases of social capital, so that by the end of the third stage labour relations had moved from co-operation to conflict.

6.2 Delayed Disruption of Traditional Ties: The Conflict in Labour Relations

As described in the previous section, the 1970s and 1980s were a time of rapid growth for the shoe industry of Dois Irmãos and the Sinos Valley in general. During the initial part of this stage of development, old forms of social capital, despite the asymmetry in relations and power, continued to facilitate co-operative labour relations that were in turn functional to the town’s industrial development. For instance, in the expansion of production for export, firms were able to cope with the new demands of international markets because their workers co-operated. Indeed, workers shared the excitement of local products being exported to the US and Europe (Schneider 1994). In sum, during most of the 1970s, social capital remained a feature of intra-firm relations.

However, this situation was not to continue. Rapid economic growth began to transform the social structure of the community and led to a deterioration in the relationships between entrepreneurs and workers. There were two particular aspects of economic growth that were responsible for this deterioration. First, the composition of the workforce changed as it expanded; secondly, the benefits from growth became increasingly uneven between employers and workers.

The local labour market could not provide enough labour for the rapid growth of industry during this phase, and as a result, additional labour was attracted from other parts of Rio Grande do Sul and neighbouring states. Table 4 shows how fast population growth was over the 1970s and 1980s in the towns of the Sinos Valley, and Table 5 shows that by the early 1990s the majority of workers in Dois Irmãos came from outside of the Sinos Valley.5

Table 4 shows that population growth in Dois Irmãos - due to the influx of migrant workers - was most pronounced in the 1980s, as opposed to the 1970s for the rest of the Sinos Valley. Thus during the 1980s, an increasing number of shoe workers in Dois Irmãos had no traditional ties to their fellow workers or entrepreneurs.6 The new "outsider" workers were not part of the norms of reciprocity and trust that characterised the relations between local workers and entrepreneurs; nor were they likely to accept the pressure to oblige in an asymmetric power structure. In spite of their desire to be socially accepted, most migrant workers found it difficult to become integrated into the local community. Socially they were not part of the existing networks of relationships, while geographically they were often confined to restricted zones, which lacked the infrastructure

5 The latter information is based on a sample survey of 135 workers, carried out in two Dois Irmãos enterprises (Bazan 1997).
6 Among the immigrant workers, there were a large number of Brazilian-Germans, as defined by ethnic origin. However, as they came from other German colonies in Rio Grande do Sul, they were not recognised by natives as belonging to the same ethnic community. This point illustrates some of the problems in defining ethnic identity, that cannot be discussed within the confines of this paper. For a further discussion see Bazan (1997).
provided to locals. Migrant workers tended to form their own sense of identity and neighbourhood, and their own networks of social relations.


<table>
<thead>
<tr>
<th>Town</th>
<th>Total Population ('000s)</th>
<th>Growth Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Porto Alegre</td>
<td>885.5</td>
<td>1125.5</td>
</tr>
<tr>
<td>Novo Hamburgo</td>
<td>85.4</td>
<td>136.5</td>
</tr>
<tr>
<td>Campo Bom</td>
<td>16.6</td>
<td>33.8</td>
</tr>
<tr>
<td>Sapiranga</td>
<td>16.4</td>
<td>37.3</td>
</tr>
<tr>
<td>Dois Irmãos</td>
<td>13.8</td>
<td>15.2</td>
</tr>
<tr>
<td>Total, Rio Grande do Sul</td>
<td>6,664.9</td>
<td>7,773.8</td>
</tr>
</tbody>
</table>

Note: a Preliminary data

Source: Dresch (1989); IBGE (1991)

Table 5: Workforce by Origin, Selected Firms, 1992/3

<table>
<thead>
<tr>
<th>Zone of Origin</th>
<th>Enterprise A</th>
<th>Enterprise B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Workers</td>
<td>% of Total</td>
<td>No. of Workers</td>
</tr>
<tr>
<td>Dois Irmãos</td>
<td>42</td>
<td>42.4</td>
<td>17</td>
</tr>
<tr>
<td>Other Sinos Valley</td>
<td>4</td>
<td>4.0</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>53</td>
<td>53.5</td>
<td>75</td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>100.0</td>
<td>96</td>
</tr>
</tbody>
</table>

Source: Primary data: sample survey of workers in two Dois Irmãos enterprises

Furthermore, the mutual trust and reciprocity that existed even between local workers and entrepreneurs began to break down. Over this period, the gains from growth were very uneven. In spite of the rapid growth in output and employment, average wages in the shoe industry of the Sinos Valley stagnated; various sources indicate that average real wages remained constant during the 1970s, and declined during the 1980s (Schmitz 1995a). This contrasted with the rapidly increasing profits of entrepreneurs. Although entrepreneurs of Dois Irmãos did not ostensibly demonstrate their new wealth, there was still a highly visible and increasing internal differentiation of the community along class lines. As a result, during the latter part of the third stage there was a redefinition of social identities and a reforming of groups, based increasingly on class rather than ethnicity or localness. Workers began to fight for better wages and conditions of work, and became
more organised in trade unions. Towards the end of the 1980s, a series of strikes took place in Dois Irmãos that illustrated the growing conflict between workers and entrepreneurs.

Moreover, entrepreneurs were also assuming their own class identity more explicitly, by contrasting it with that of the workers. They began to use their own networks in order to protect themselves against increasingly organised labour. They held meetings and exchanged information in order to control workers behaviour, establish wage ceilings, know workers' previous history, or even to put pressure on workers not to join trade unions (see Bazan 1997).

Increasing division along class lines led to a breakdown of the mutual trust and reciprocity that had previously characterised relations between entrepreneurs and workers; the community-wide stock of social capital declined. This class division should not disguise the fact that there were also significant conflicts within both classes. Counteracting labour demands was a common concern in an entrepreneurial community which was disunited in other respects (see Section 5). There was a similar lack of unity among workers, primarily as a result of conflicts between "native" and "migrant" workers.

It should also be recognised that in Dois Irmãos there were various limits to the forming of social identities along class lines, and there was not a total break from the old forms of social capital that had previously been such an important feature of labour relations. This was for two main reasons. First, it was mainly the migrant workers that became involved in forming groups and social identities along class lines. For the majority of native workers, or those migrant workers that managed to become socially integrated, it took longer to identify with the "new working class". Secondly, as a way of continuing to exploit the old forms of social capital in labour relations, some firms during this period began to construct new factories in the villages surrounding Dois Irmãos. In these rural communities, entrepreneurs hoped to exploit still existing traditional social ties, and associated forms of social capital. In sum, there was not a complete disintegration of social capital, and at the same time some firms were able to continue to exploit social capital by locating new facilities in surrounding areas.

However, there was undoubtedly a large decline in the stock of social capital available for intra-firm relations during this latter part of this period. The key factors in this process were the influx of immigrant workers and the increasing class division of the community; both caused a disruption in the traditional bases of social capital that had facilitated co-operation and reciprocity in labour relations during the industrialisation drive of the previous stage. The question that then arises is whether this decline in traditional forms of social capital in intra-firm relations could be replaced with new forms of social capital. It is to this issue that we now turn.

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7 The increase in trade union activity was not just due to local factors but also a response to political reform in the country as a whole.
6.3 Extending Corporatism to Workers: The Reconstruction of Social Capital in Labour Relations

In the 1990s shoe producers in Dois Irmãos are faced by the need to produce higher quality products at greater speed. At the inter-firm level, this has driven enterprises to invest in improving their relations with suppliers. At the intra-firm level, it has prompted less conflictual and more co-operative labour relations.

Increasingly, labour relations during the third stage of economic development in Dois Irmãos had become characterised by enforced co-operation, and by motivation based on the threat of being sacked. Meeting the new challenges of production for export in the 1990s required a change in labour relations. Management and workers needed to pull together to achieve increasingly tight delivery schedules. To increase product quality, workers could make an essential contribution by suggesting ways of improving production. To achieve lower product default rates, it was essential to raise the sense among workers that they shared the same common goals as entrepreneurs. In general, producing high quality products at great speed required competent and motivated workers who could react quickly to solve problems.

However, co-operation and reciprocity between firms and their workers could no longer be based on the traditional socio-cultural ties. As we have seen, these traditional ties had deteriorated significantly during the town's export boom. The leading enterprises of Dois Irmãos seek to establish new ties with their workers and are consciously investing in labour relations in order to compensate for the previous decline, and to thereby increase the competitiveness of their enterprises in increasingly demanding markets.

Shoe firms have introduced a series of strategies in order to reduce absenteeism and labour turnover, and increase workers' involvement in the firm. This has required replacing old management strategies, based largely on authoritarianism, by more participatory processes of decision making, in which there are channels whereby workers' suggestions can be taken into account. It has also implied convincing everyone in the firm - from management to shop-floor workers - that they are part of one single team working toward the same goals. In turn, workers have begun to see their employment opportunities as depending on the survival and success of the firms for which they work.

These strategies comprise, for example, courses or meetings at which managers discuss a wide range of issues with their workers, from shop floor problems to the changes in the international market and the new challenges this poses to the firm’s survival. For one Dois Irmãos shoe manufacturer, such new practices had over one year resulted in 217 new ideas being brought forward by workers, aimed at improving production processes or conditions of work (Bazan 1997). Workers are rewarded for their participation, suggestions and involvement in the firm through the
explicit recognition of the importance and value of their work by management, or by receiving honorary or monetary prizes. The workers themselves are actively encouraged to realise the importance of their work to the firm, by giving a series of presentations, talks and speeches in management meetings. In order to meet the new challenges of the international market, entrepreneurs were forced to invest in their relationships with workers, thereby regenerating the stock of social capital.

As occurred with inter-firm relations, the sense of economic crisis in the early 1990s contributed to the rebuilding of social capital; workers increasingly see their own fortunes as being tied to those of the firm. This has combined with the new participatory practices to help regenerate workers' willingness to co-operate and reciprocate with entrepreneurs. In this respect, the regeneration of social capital in Dois Irmãos has been based on a new form of social identity: a sense of being part of an industrial community of the Sinos Valley, in which workers are a vital part (Bazan 1997).

However, restoring mutual trust and co-operation in labour relations in Dois Irmãos, and the Sinos Valley as a whole, has not been an easy process. The most significant advances have been made by relatively few firms. Clearly, moving from authoritarianism to participation is not something that can be achieved overnight, as it requires a substantial change in the culture of management. Another problem relates to the constant pressure faced by entrepreneurs to increase productivity. New production methods imply an intensification of work, leading to complaints from workers that they are under increasing strain and are undertaking responsibilities which they are not paid for. In a number of cases, alongside the move to increasing co-operation, more controls over workers have been introduced; one enterprise of Dois Irmãos, for example, exposes daily photographs of workers missing from work. As common goals and working groups are introduced, it tends to be the workers who control each others' behaviour, rather than control coming from the management.

Furthermore, workers have not always gained from increasing co-operation. Increasing worker involvement in enterprise decisions is still made by avoiding workers' legal representation and trade unions. Workers' gains in wages and training have been limited. Supervisors complain to management that greater involvement can only be achieved by raising wages. In sum, new forms of social capital have not yet been totally successful in terms of increasing the level of co-operation and reciprocity between firms and workers.

To conclude, this period has seen some reconstruction of social capital in labour relations, although a lot more remains to be done. Perhaps the most valuable piece of evidence in favour of this reconstruction is the fact the majority of workers in Dois Irmãos describe the enterprises that leads the processes of transformation as the best place to work (Bazan 1997). Furthermore, the new social capital has made an important contribution to the growth of enterprises in the most recent
stage of the town's development; in particular, it has allowed firms to continue to compete in changing international markets.

7. CONCLUSIONS

In this paper we have explored the connection between social capital and economic growth. In order to do so, we investigated a community in Southern Brazil which 50 years ago consisted of a small handicraft and peasant economy and now hosts a number of internationally competitive home-grown shoe manufacturers. We examined whether and how this growth and transformation might be explained by, or at least linked to, social capital.

Our starting point was the thesis that social capital promotes economic performance. The case study confirms a number of important steps by which this can occur. The main mechanism we have identified is that social capital has acted as a resource, facilitating co-operation between entrepreneurs and between entrepreneurs and workers, and in turn enabling shoe manufacturers in Dois Irmãos to overcome a number of barriers to industrial development. For example, during the early industrialisation period in Dois Irmãos, social capital facilitated co-operation between entrepreneurs which was instrumental in both the mobilisation and effective use of resources. Similarly, in the most recent period of the community's development, social capital has again facilitated co-operation, largely between firms and their suppliers and between firms and their workers, which has enabled shoe producers of Dois Irmãos to compete in a demanding international market.

This paper has also shown that there is no simple mechanical causal relationship between social capital and growth. This is highlighted by the experience of Dois Irmãos in the third stage of its development. Initially, industrial growth benefited from the social capital accumulated in previous stages. However, during the 1980s, increasing industrial growth was accompanied by a decreasing stock of social capital. Nevertheless, further growth is unlikely to occur with a low stock of capital. In today's environment, responding to growing international competition requires increasing co-operation between local agents. And, in the industrial community of Dois Irmãos, it is this interdependence that is leading local actors to rebuild the social capital they once had.

Perhaps most importantly, however, by following a historical approach, we have been able to show that the connection between social capital and economic performance is not a unidirectional one. The case study has shown that economic growth substantially affects the underlying social structure of a community, which has both positive and negative implications for the existing stock of social capital. Initially in Dois Irmãos, this effect was a positive one. Industrial growth helped to promote a sense of common economic interest among entrepreneurs. This added to the traditional ties - ethnicity and localness - as a basis for social capital in inter-firm relations. As a result this stock of social capital increased and became more directly functional to shaping
economic outcomes. In the 1960s this was reflected in the setting up of a number of institutions that were instrumental to the future expansion of shoe production for the international market. However, the fast growth during the export boom had a negative effect on social capital. This was explained by the internal differentiation within the community. It occurred not only along class lines, placing workers and entrepreneurs in conflict, but also within classes, as reflected in the tensions between local manufacturers and export agents and between native and migrant workers.

The connections between social capital and economic performance identified in this paper are summarised in Figure 3. Those interested in exploring the relevance of this diagram for other cases should keep in mind that the depicted relationships have emerged from a longitudinal study and should not be expected to show up simultaneously or immediately. They should also keep in mind that the arrows in the diagram do not necessarily lead to positive outcomes. In our case study, voluntary cooperation was growth enhancing but in other cases it may harm economic growth. Specifying the conditions under which the arrows are virtuous rather than vicious is one of the main tasks of further research.

Figure 3: Summary of Key Relationships
In order to analyse the key relationships posited in this diagram, distinguishing different categories of social capital was important. The most crucial distinction was that social capital can be either a by-product of existing social relations or consciously created for specific objectives. The case presented in this paper suggests that social capital is not necessarily an asset which some regions are endowed with and others are not, but that it is an asset which can, under certain circumstances, be created.

Our paper therefore finishes on an optimistic note. It leads us to agree with Evans (1996), for whom the constructability of social capital is a concrete possibility. In the early stages of development in Dois Irmãos, social capital was a by-product of traditional social ties such as ethnicity, kinship, and locality. In the most recent stage, however, it has been consciously generated in order to facilitate the co-operation between manufacturers and their suppliers and between entrepreneurs and workers. The passage from one phase to another was punctuated by a period in which there was a distinct decline in social capital. But while the rapid growth of production during the export boom weakened traditional social ties, in their wake have emerged a new sense of social identity and common interest; that of belonging to the industrial community of the Sinos Valley.

To conclude, this paper set out to examine, by way of a case study, whether and how social capital furthers economic growth. The critical steps in the inquiry were the distinctions between different kinds of social capital and between different stages of economic growth. This also helped to show that there are causal connections both ways and that some of these connections only become apparent by adopting a historical approach. None of this, however, offers a conclusive answer as to whether social capital is a useful concept for understanding economic development. One way of reaching a conclusion would be a control experiment: could one tell the same story and make the same substantive points without using the concept of social capital?
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