The relevance of new industrial policy thinking to Argentina

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THE RELEVANCE OF NEW INDUSTRIAL POLICY THINKING TO ARGENTINA

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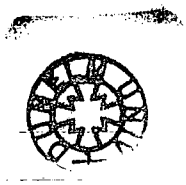

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List of abbreviations

IP	Industrial Policy
NIP	New Industrial Policy
UNIDO	United Nations Industrial Development Organisation
EU	European Union
WEF	World Economic Forum
US	United States
GDP	Gross Domestic Product
R & D	Research and Development
TFP	Total Factor Productivity
SMI	Small- and Medium-size Industrial Enterprise
ILK	Innovation, Learning and Knowledge
SPRU	Science Policy Research Unity
SI	System of Innovation
NSI	National System of Innovation
GNP	Gross National Product
UK	United Kingdom
NAFTA	North America Free Trade Area
APEC	Asia Pacific Economic Co-operation Forum
MERCOSUR	Southern Common Market
WTO	World Trade Organisation
IMF	International Monetary Fund
WB	World Bank
RIS	Regional Innovation System
LR	Learning Region
RTP	Regional Technological Plan
RIS	Regional Innovation strategy
HEI	Higher Education Institution
BA	Business Association
ISI	Import Substitution Industrialisation

MNC	Multi National Corporation
HC	Holding Company
ECLAC	Economic Commission For Latin America and the Caribbean
UN	United Nations
PBA	Province of Buenos Aires
CBA	City of Buenos Aires
LFR	Less Favoured Region
GGP	Gross Geographic Product
UIA	Argentine Industrial Union
MP	Productive *Municipio*
IDEB	*Bonaerense* Institute of Entrepreneurial Development
SOCMA	*Macri*'s Society
UNGS	National University of General Sarmiento
HCD	*Honorable Consejo Deliberante*
CACIT	Chamber of Commerce and Industry of Tigre
CIM	Industrial Timber Centre
ETN5	Technological School No5
UTN	National Technological University
INTA	National Institute of Agrarian Technology
INTI	National Institute of Industrial Technology
CITEMA	Centre for Technological Support in The Wood Industry
FLACSO	Latin America Faculty of Social Sciences
LA	Latin America
CAD	Computer Assisted Design
FAIMA	Argentine Federation of The Timber Industry
CORFO	Corporation of Support For The Furniture Industry
CEMA	Centre of Macroeconomic Studies
ICT	Information and Communication Technologies
RMN	North Metropolitan Region
B & B	Bred and Breakfast
UIPBA	Industrial Union of the Province of Buenos Aires
UNI-*Desarrollo*	Universities For Development

Declaration

No part of this thesis has previously been submitted for a degree at this or any other university.

Abstract

This thesis generates insights into the re-conceptualisation and revaluation of industrial policy (IP) as a legitimate tool of economic policy in the context of developing countries. It draws upon what I call the New Industrial Policy (NIP) thinking, which is based on institutionalist and evolutionary economics concerned with both 'the innovation, learning and knowledge triad' and the spatialisation of IP. The NIP thinking asserts the importance of learning and innovation, the 'power of economies of association' and 'the power of place' as key sources of competitive advantage. These three propositions are evaluated through empirical research which is based on the Argentinean experience in light of the failure of the last neoliberal programme implemented in the country (1991-2001). Specifically, the research focuses on a regional economy in which there exists both a cluster of SMEs and a group of institutions concerned with firm competitiveness.

This thesis makes three main contributions to re-conceptualise the NIP thinking in the context of economies affected by economic decline. First, it identifies key factors that explain why the learning and innovation economy has less relative importance in these economies (if compared with firms in more developed economies), by arguing that the learning and innovation require a minimal threshold of resources and accumulated capabilities that the SMEs in development countries often do not have. Secondly, it explains why the powers of place and the economies of associations are only marginally exploited by firms due to the marked influence of restrictions at micro-, meso- and macro-economic levels. Finally, despite these restrictions, this research reveals that some emerging processes of change in individual firms and institutions have recently occurred which are in line with the assumptions forwarded by the NIP thinking. I conclude that in the interstices of the Argentine economic policy there is a case to consider the new IP ideas.

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Introduction

This research aims to generate both empirical and theoretical insights in order to rethink and revaluate the concept of industrial policy (IP) as a legitimate tool of economic policy. In particular, it evaluates *in practice* the relevance and viability of the 'New Industrial Policy' (NIP) thinking for developing countries, specifically in relation to Argentina, in the context of increasing globalisation and hegemony in the neo-liberal agenda for development.

Overall, industrial policy has been absent from the agenda for development in Latin America since the early 1980s. A widespread 'consensus' emerged around market-led policies (notably, macroeconomic policy) as the unique way for economic growth. Contrary to expectations, the programs of adjustment and structural reforms implemented in Argentina have been far from 'neutral', favouring a marked increase of capital concentration and, as a result, a regressive distribution of wealth. The Argentinean case has demonstrated that the application of an extreme neo-liberal agenda not only has had considerable negative effects on the productive activity. It has resulted in increasing unemployment, social exclusion and, more recently (from the traumatic events of December 2001) social unrest, which are helping to discredit such a 'consensus'. This situation has however not brought about sustained efforts against the dominant economic model.

Interestingly, in the 'fringes' of the Argentine political economy, a critical current of thought inspired by the New Industrial Policy thinking emerged through the 1990s and it is beginning to diffuse as praxis of industrial micro-policy. These micro-policies have primarily been targeted at boosting the competitive performance of SMEs through the provision of the so-called real services to firms (i.e. technological upgrading, consulting services and training programs). Public agencies and intermediate institutions have been established at national, regional and local levels in order to design, deliver and coordinate the supply of such services. However, they have rarely followed criteria to complement each other. In some cases, they have also aimed to promote both partnerships between public and private sectors and territorial mobilisation for local industrial development. This

is the case of the Institute of *Bonaerense* Entrepreneurial Development, in the Province of Buenos Aires.

I use the term New Industrial Policy to refer to those schools of thought which, draw upon institutional and evolutionary economics, -in particular literature on innovation, learning and knowledge, industrial strategy, socio-economies of development, governance and varied approaches in economic geography concerning with local and regional economic development-, are making critical contributions to redefining and reconceptualising the idea of IP. The NIP thinking asserts the end of the old national IP by arguing the relevance of 'learning and innovation' in boosting competitiveness and the case for the 'power of economies of association' and 'the powers of place' as key sources of advantage in the new competitiveness. These three assertions represent the main conceptual research focus of this study. Accordingly, the NIP thinking claims the need for a conceptual and political shift towards more 'decentralised' and 'bottom-up-led' IP agendas and multi-agency schemes of political-economical governance to design, deliver and coordinate IP. It claims that regions and localities, when considered as 'social constructions', may become both platforms for policy design and agents for economic development. The small- and medium-size firms, a varied set of inter-firm arrangements (i.e. groups of firms and industrial clusters) and extra-firm actors and institutions with which firms relate (i.e. agencies of services to firms and technological, training and consulting organisations), are seen here as key agents and targets of IP. In a context where macroeconomic policies have lost the monopoly on the 'valid recipes' for cementing economic growth, the NIP agenda instead advocates the micro- and meso-economic levels of economic policy and the spatialisation of the IP as key elements for a new supply-side economy.

As the reader may note, I have used the adjective 'new' to refer to the set of ideas and assertions outlined above. Therefore, what needs to be elucidated here is in what sense the NIP is new for this study. Certainly, I am aware that the ideas and theories comprised in the NIP literature, notably innovation and learning and new approaches for local and regional development, are informing the policies of a wide range of institutions, including EU, OECD and UNIDO. Mostly operating during the '80s and '90s, this move towards a new IP agenda has largely taken place in industrialised countries (see OECD 1992, 1996, 1999, and 2000). Although institutions like UNIDO (1999) have opportunely given account of the

NIP principles for the developing and transition economies (see Chapter 2), the NIP thinking is far from being mainstream policy in these economies. Having said this, what struck me most was that there is no systematic overview and systematisation, into a coherent theoretical framework, of the diverse schools and traditions of thought that comprise the NIP thinking. This thesis aims to help fill this gap in the literature by putting these ideas together. In so doing, the reader will notice that innovation and learning policy, SME policy, cluster policy, local and regional development policy, and industrial policy itself, will be treated not as 'independent' policies with points in common or overlapping with IP. Instead, they will be treated as constituent parts of a comprehensive and so far non-developed body of ideas to which I call the New Industrial Policy.

Argentina represents an interesting case study due to the importance that the industrial apparatus had, and still has, in its productive structure. Current economic decline in Argentina needs to be discussed not only on the basis of dominant (old) ideas on economic policy but also on the basis of new and innovative ideas that allow us imagine future settings for its industrial competitiveness. Furthermore, this discussion must be realistic in evaluating the context and circumstances in which a new IP agenda, as the one proposed by this research, is going to be implemented. Hence this study assumes a critical view with respect to the conceptual developments forwarded by the NIP literature.

Specifically, I have chosen Tigre's region and the wood furniture sector as the place and industry through which to explore the relevance of the NIP thinking in the context of Argentina. The reasons for selecting Tigre's region was that it represents an economically vibrant case of a regional economy in which three key factors for this research, namely, 'sector' (agglomeration of wood furniture firms), 'size' (notorious presence of SMEs) and 'place' (developed institutional set up) are present and visibly interact in Tigre's development process. As discussed throughout this thesis, these factors need to be fully understood in relation to research inspired by the NIP literature, in particular in the context of local and regional economies in Argentina where these elements often appear asymmetrically represented. In turn, the reasons for selecting the wood furniture industry are directly linked to the reasons stated above. A substantial number of the total figure of firms located in the region belongs to the timber industry. They are SMEs and operate in a low-tech industry as the majority of the SMEs in Argentina do. For their number, geographical proximity and sectoral composition the wood furniture firms of Tigre's region

constitute an 'industrial cluster'. Due to both the nature of the products these firms produce and the processes of production involved, there exists a (theoretical) possibility to develop labour division among the local furniture firms. Finally, the origins of Tigre's wood furniture industry are rooted in the economic and institutional history of the region. Hence the roles played by 'sector' and 'size' of firms in the local economy can be analysed vis-à-vis the role that 'place', that is, the local history and the institutional set up, plays in the current development of the region. Furthermore, Tigre represents a case of local economy which is situated within the City of Buenos Aires. As explained in Chapter 5, the majority of the manufacturing firms in Argentina are located in big cities (notably, Buenos Aires). My point here is that most of the NIP literature relating local and regional economic development is largely based on successful cases of small or intermediate cities (i.e. in the Third Italy). Instead, what I wanted to test here was the relevance of the NIP literature in the context of a large metropolitan area.

I am certainly aware of the limitations of having chosen Tigre and the wood furniture industry as case studies have for the generalisation of research conclusions. Sectoral and geographically limited cases of study in no case permit to obtain a full account of the series of complexities observed in national and cross-sectoral industrial economies. However, I consider it necessary to understand the complexity of the micro-realities if we want to avoid falling into the misconceptions of economic policy that have frequently occurred in Latin America. I mean, misconceptions of economic policy derived from often naive and decontextualised readings in relation to agendas and instruments of IP developed in more industrialised countries. The NIP is considered here as a body of assertions whose applicability requires testing in specific contexts and circumstances and not as a 'paradigm' of economic policy.

Three main propositions forwarded by the NIP literature were tested in this study. Firstly, I examined regional social, cultural, and historical features in relation to economic evolution, factors of productive specialisation and performance. Secondly, I assessed the extent to which learning and innovation matter for firms in shaping their competitive strategies and enhancing their performance. Thirdly, I studied the nature of the relationships between local economic actors. Specifically, I have sought to identify both emergent processes of institution-building and territorial mobilisation aimed towards the establishing of place-based industrial development policies and strategies, and the constraints operating against

such processes. The firms, particularly 'local' small- and medium-sized firms (SMEs), the main local/regional public and private institutions (notably, local government and business associations) and the local/regional system of innovation and governance, are in turn the main empirical research focus.

The main research questions, as pursued in examining the claims of the NIP, were: Are learning and change processes forwarded by the NIP thinking possible for firms in contexts where short term and *wait and see* business strategies seem to be the most rational answer to cope with uncertainty? Are the assumptions of the NIP thinking concerning innovation and learning economies compatible with situations of institutional complexity and failure as well as absence of 'innovation' systems? Is it possible, as well as contextually relevant, to promote local and/or regional IP agendas in Argentina inspired by the NIP thinking in light of the predominant restrictive local conditioning? Does territorial competitiveness matter in the framework of the Argentine economic policy as a platform for policy design? Finally, can the NIP literature adapt to settings characterised by a marked and permanent macro-economic instability often dominant in developing countries like Argentina?

The findings demonstrated the importance of the geographical concentration of firms in the development of external economies, such as the market existing in the region (for some local productions, notably wood furniture) and the importance of its institutional/educational public infrastructure. These external economies became critical factors for the entrepreneurship to develop.

However, other claimed advantages of clustering, notably collective learning and efficiency, have not been observed within the wood furniture cluster studied. The nature of learning and innovation in the great majority of firms studied is incremental, unsystematic and sometimes unintended. Above all, learning and innovation largely occur within the firms. The entrepreneurs' personal network of relationships (or their relational assets), rather than the claimed advantages of geographical and cultural proximity, seems to play a more important role in the firm's learning process. Likewise, the evidence revealed that a small group of firms, located within and outside of the cluster boundaries, displays a higher innovative capacity which is based on dynamic and evolutionary learning. That is, the learning process of these firms mostly relies on interfirm collaboration and also high levels of flexibility, specialisation and, to a lesser extent, vertical disintegration within the

organisation of their production process. As a result, these firms have considerably improved their competitive performance.

While the first group of firms, and the furniture cluster itself, are showing some of the main contextual restrictions of the NIP literature (when it is read in the framework of small firms working in traditional sectors in developing countries), the second group sheds light on where the NIP should be aiming at in order to boost competitiveness in such a context. There is a prime need for IPs aimed at strengthening the productive efficiency at the firm level in areas such as management techniques, training and technological external support. There is also a need for policies aimed at widening and deepening the firms' sources of learning. For instance, IPs aimed at both deepening the relationships with the firms' existing stakeholder network (notably, with their customers and suppliers) and 'exposing' the entrepreneurs to new sources of information and (practical) learning (i.e. through visits to both trade fairs and more advanced firms and/or centres of expertise at national and international levels). Cluster policies aimed at both the dissemination of relevant business information among firms and the organisation of associative activities amongst them, also enhance the firm's learning process.

An underdeveloped institutional set up and the absence of a shared business culture (as regards provision of real services and learning and knowledge economics) was observed despite the visible institutional 'presence' in the region. Firms neither identify a proper local offer of services nor recognise the local institutions as strategic facilitators, even less as partners, in their process of learning and development of innovative capacities. Both the insufficient level of firm-institution and inter-institutional communication and the absent role played by the local institutions as mechanisms of representation and coordination, reflect the lack of institutional thickness existing in the region. Hence the institutional set up observed is unlikely to facilitate the developing of a political network able to promote territorial mobilisation for the setting up of local-led and/or decentralised (top-down) industrial development policies. Whether the NIP literature can accommodate the evidence found depends critically upon the consideration of some emerging processes of institution building observed, regarding institutional change and practices of collective learning. At the level of firm-institution relationships, the evidence reveals that both a direct, more personalised and long-term strategy of networking and a more customised battery of

supplied services were identified as the determinant factors of success for some local policies aimed at firms. Both factors, however, contradict the budgetary and timing restrictions of any IP set up in the framework of the neoliberal Argentina. At the level of institutions, both good governance of public affairs by the local government (based on an efficient, stable and transparent administration) and the 'policy network' shaped by three local institutions linked to the manufacturing industry (a business association, a centre of services and a technical university) constitute the most interesting factors of institutional-building observed in the region regarding firm competitiveness. These processes of institutional building have helped to generate a friendly business environment, on the one hand, and, on the other hand, a set of IP initiatives aimed at the local SMEs (i.e. upgrading and training programs). This is particularly relevant in the context of the endemic institutional failure observed in Argentina at national and local levels. Interestingly, in Tigre both processes operate separately. The local state maintains a non-interventionist conception of economic policy limited to setting up 'the rules of the game'. Consequently, both local public IP and public/private collaboration do not exist in Tigre. I argue that, despite the need for 'strong' local players (as a result of the existence of 'weak' national states), decentralised and bottom-up led schemes of IP in developing countries require a more active role to be played by the local state in IP issues and a more inclusive and participative agenda of political governance at local and regional levels.

Finally, there is a solid conviction within the main public decision-making spheres and policy makers at a national level that the main goal for Argentinean industrial competitiveness should be to solve its 'chronic' macroeconomic instability. It is understood that in the context of a 'normal' macroeconomic performance it would not be necessary to have differentiated IPs, whether it be by firm-size (i.e. SME policies) or firm-location (i.e. regional or local policies). However, the evidence revealed emerging counter tendencies that allow me to debate the argument of the macroeconomic policy as the only possible IP framework for development in Argentina. The findings showed that both the improvement in the microeconomy of firms and a favourable meso-economic setting matter in both enhancing the firms' learning process and boosting their competitive performance, despite the turbulent business environment. Therefore, there is a case for IP frameworks aimed at these areas of economic policy as claimed by the NIP thinking.

This thesis is divided into two sections and nine chapters. Section I critically reviews the industrial policy legacies and the New Industrial Policy literature through chapters 1, 2 and 3. It places the industrial policy debate in a historical perspective and, by focusing on theoretical discussions and evidence of IP practices, it conceptualises the transition towards new conceptual frameworks which I term New Industrial Policy thinking. Section II evaluates the relevance of the NIP thinking to Argentina through a study conducted in both the Tigre region and with the main national institutions concerned with IP issues in Argentina. This section includes chapters 4, 5, 6, 7 and 8.

Chapter 1 discusses the classical IP approach associated with the paradigm Structure-Conduct-Performance and the market failure theory. Then, it examines historical and political events that caused the 'ostracism' of the IP idea during the early 1980s. Finally, this chapter analyses the Asian and Italian experiences of industrial development and paves the way to understand the subsequent re-conceptualisation of the IP idea.

Chapter 2 examines the transition, and/or continuities, of the IP debate under the 'paradigm of competitiveness' and, in doing so, it begins to mould the New Industrial Policy thinking in light of the changes in the international market place.

In Chapter 3, I attempt to systematise and critically discuss the main theoretical approaches that shape the core of the NIP literature. Firstly, it outlines the main philosophical foundations on which this literature is based. Secondly, this chapter analyses the literature concerning innovation, learning and knowledge economics and, finally, those concerning the spatialisation of the NIP thinking.

Chapter 4 analyses both the evolution and recent changes observed in the Argentine industrial economy, particularly in the context of the failure of the last neoliberal economic model implemented in Argentina (1991-2001). This chapter's main aim is to discuss the previous analysis in light of the insights drawn upon from the NIP literature.

Chapter 5 introduces the case study conducted in the Tigre region in Argentina and attempts to tease out from the analysis of the Tigre's productive structure some factors linked to territorial identity, patterns of organisation, and entrepreneurial culture that may be crucial to interpreting the economic geography of the region. This chapter focuses on the study of the timber and wood furniture cluster existing in the region, the local institutional set up and their performance in light of the above social and cultural features.

Chapter 6 evaluates two propositions of the NIP thinking. Firstly, it assesses whether learning and innovation are interactive and collective processes and, secondly, whether

geographical proximity matters in stimulating such processes. In general, it evaluates the importance that the learning and knowledge economy has for firms. Specifically, the chapter examines interfirm relationships, primarily between the furniture firms of the case-study.

Chapter 7 looks at the nature of the institutional set up existing in the Tigre region and attempts to evaluate the impact of local institutional activities in supporting firm competitiveness. Specifically, it analyses the nature of the relationships between local institutions and firms.

Chapter 8 examines the nature of the inter-institutional relationships in the region studied, primarily between the public and private sector. In particular, this chapter evaluates whether local institutions share communal interests concerned with firm competitiveness and whether processes of institution building exist that can result in territorial mobilisation in order to promote such interests.

The concluding chapter discusses the main IP implications derived from the empirical research and attempts to re-conceptualise some theoretical claims of the NIP thinking in light of the evidence from a developing economy like Argentina.

SECTION I

Changing Industrial Policy Paradigms

CHAPTER 1
The Industrial Policy Legacies

1.1. Industrial policy theory

Chapter 1 reviews the literature concerning the changing meanings of the industrial policy (IP) concept. In order to examine how IP concept has evolved and what this has meant in practice I have divided the chapter into four sections. Section 1.2 analyses the classical IP approach, tracing the passage from what I shall call a 'narrow' definition of IP toward a 'broad' one. Section 1.3 briefly examines some historical events, associated with restrictions of political and ideological orders, which as a whole caused what I will term the 'ostracism of the IP idea'. Finally, Section 1.4 analyses the revival of new IP practices which have developed in different capitalist economies and the subsequent transition in the re-conceptualisation of the IP idea. Section 1.5 summarises the concluding remarks of this chapter.

1.2. The classical approach of industrial policy

The classical literature on IP has originally been linked with the Industrial Organisation Theory and its widely known paradigm Structure-Conduct-Performance (S-C-P)[1], whose pioneer works are associated to the so-called 'Harvard Tradition'. In this theoretical tradition, *structure* refers to factors such as the number and size distribution of firms in the market, patterns of vertical and horizontal integration, and industrial relations. *Conduct* in turn refers to attitudes, motivations and the decision-making processes of firms concerning their strategies of investment, price policy and market sharing. Finally, *performance* refers to outcomes of a market or industry as regards levels of efficiency and productivity,

[1] I have decided to exclude from this review the experience of the central planning economies on the IP debate as this has had little direct influence on the Latin American experience. However, the influence of former socialist economies, such as the Soviet Union, on Western policy-makers is well known (Audrestch, 1997).

product diversity and innovation rhythms, profit rates and distribution (Hodgson, Samuels and Tool, 1994; Pitelis, 1996). The internal logic of the S-C-P paradigm relies on a mechanism of successive determining factors between market structures, the conduct of economic agents and subsequent performance, and the normative assumption that oversees the economic action under this paradigm is the conformation of market structures considered as 'optimal' or 'perfect'. Only this type of market structure allows a Pareto-efficient (or optimal) resource allocation in such a way that guarantees social welfare. Thus emerges, according to Pitelis (1991), the first fundamental theorem of the market failure theory or, in a more general sense, welfare economic theory. Namely, it is only in perfect markets where the right signals will be given to economic agents (notably firms) who are endowed with rational elect capacity, leading their behaviour towards 'theoretically' correct decision-making. This is finally reflected in their good performance. As Hodgson *et al* (1994) stress, the market failure theory has thus provided a generic basis for much of the relationship between industrial organisation and economic performance.

How does this relate to IP? According to Justman and Teubal (1986:121),

> "the neoclassical economic approach to justifying public intervention in the market-place uses the concept of "market failure" as its point of departure. Arguing that a disparity between the marginal value of an economic activity for society as a whole and its marginal value for the private sector may lead the free market to a suboptimal allocation of resources. It suggests that in cases such as this government intervention can bring about an improvement in market performance" (emphasis in original).

The (historical) appearance of monopolist markets in the industrial structure became the first case for state intervention, and therefore IP, since they bring about (theoretical) market failures (Scherer, 1980) that yield socially undesirable results. Scherer (ibid) argues that monopoly is seen as a source of inefficiencies, and consequently welfare losses, owing to the excess profits that this type of monopolist economic agents (or this type of market structure) can attain as a result of its market dominant position. Consequently, through IP, the state (selectively) intervenes in the market altering the existing economic structure, by combating actual or potential market distortions arising from uncompetitive market conditions (Tyson and Zysman, 1983; Jacquémin, 1984).

Two key economic actors thus appear in the classical IP approach. First, the larger companies, or 'the IP target', since under the assumption of market failure IP rationale aims at the specific segment of enterprises that have achieved market positions defined as monopoly (and subsequently oligopoly). Second, the state, or the 'IP subject', which intervenes in the market through IP instruments (notably, antimonopoly and antitrust laws[2]) by using its legal and regulatory faculties. Therefore, the role of IP in the market failure framework has above all a regulatory nature.

In considering continuous 'theoretical maladjustments' generated by and in the real economy, the market failure approach has become more permissive of interventions in the market through IP. Market failures derived from the existence of public goods, externalities and transaction costs are only some examples of 'market imperfections' that have served to justify IP (Chang, 1994). As regard public goods, they are defined as goods and services that "are non-excludable (it is difficult or impossible to exclude an individual from consuming the good or service). They are non-rivalries (one person's consumption does not detract from another's consumption)" (Sawyer, 1989:306-7) (brackets in original). National defence, security and provision of lighthouses are often cited as examples of cases where the government intervene regarding the provision of public goods. Externality, in turn, "exists where there are some spill-over effects from an individual's activities to those of others, leading to a discrepancy between the private cost/benefit structure and the social cost/benefit structure" (Chang, 1994:10). The difficulty of tackling the problem of externalities from an economical standpoint (i.e. by defining more precise property rights) lead to the justification of the state provision of goods and services with 'positive' externalities (whether in a direct or indirect way) in socially optimal amounts (i.e. education, health, R&D and facilities). State intervention is also justified by acting against those who create 'negative' externalities (i.e. pollution tax) (Chang, 1994:11). As a result, state interventions, where they are market 'functional' and 'friendly', become increasingly frequent under the market failure approach. The body of ideas developed above is known as the narrow IP approach.

[2] Antitrust policy came into being during the last two decades of the nineteenth century, established within the USA by the Sherman Act of 1890. It attempted respond to a movement that had begun in the 1870s, with the formation of the first trusts.

1.2.1. Critiques to the classical IP approach

As regards the successive 'stretching' of the market failure assumptions, this theoretical approach has received numerous critiques. As Possas (1995: 78) rightly claims, its internal logic "has reached the paradoxical situation from which the relevance of the theoretical model is not dictated by their adherence to the real, and the respective market 'imperfections' and 'failures' are exceedingly more frequent than the situation assumed by the ideal model". Admittedly, Possas concludes: "If the theory always finds 'failures', in general significative, in the application of its ideal model, would it not be the case to reckon that failure is of the model itself?" In accordance, Zysman and Tyson (1983:42) stress that "[u]nfortunately for the elegant application of [market failure] theory to policy, the range of exceptions is wide in practice. When exceptions become the rule, we need a rule for coping with the exceptions, or at least a means to judge the implications of the most difficult cases".

1.2.1.1. Critique to the 'static' nature of the classical IP approach

According to Sawyer, the classical IP approach is of a 'static' nature because it only focuses on "the static allocation of existing resources rather than with dynamic creation of new resources, with perfect information and technical efficiency generally assumed"(1992b:53). Its notion of competition itself is defined in a structural and static way, that is, in terms of the number of firms and ease of market entry. Hence market contestability will arise here only from more firms in the market and/or lower barriers to entry (Sawyer, 1992a). Dietrich comes to a similar conclusion when he points out that the "tension between static and dynamic perspectives mirrors a tension in economic theory about the conceptualisation of competition" (1992:18). In contrast to the Schumpeterian legacy that understands competition as a 'process', in Dietrich's view, "neoclassical theories, and in particular the structure-conduct-performance tradition in industrial economics, stress the nature of competition as a market structure" (ibid). Following Sawyer, a range of concerns such as the level of dynamism of an industry, the creation of new products and the improvement of productive efficiency "just do not arise" under the neoclassical view. "There is clearly no reason to have as the objective of policy the improvement of productive efficiency when such efficiency has been assumed to exist"

(Sawyer, 1992a:7). Therefore, the fact that the analysis of dynamic aspects of industrial development (mostly based on the Schumpeterian legacy, as explained in Chapter 3) are excluded, make the classical IP approach an extremely weak tool considering the aims of this research.

Directly linked with the above critique, the classical IP approach has also undervalued the importance of the conduct of economic actors. As Sawyer argues, "this paradigm has paid relatively little attention to conduct even though it supposedly provides the link between structure and performance" (1992b:55). Indeed, given that, in the S-C-P paradigm, performance is mainly determined by the market structure, the firms' conduct, whether it be attempting to mould the market through more proactive strategies or reacting to changes in market conditions through more reactive strategies, have hardly been examined. As industrial policies inspired by the market failure theory are designed to change market structures only, rather than market conducts, this framework "effectively precludes any discussion of the range of policies which may prove useful in the encouragement of industrial development in part because there is an element of believing that there is an 'optimal' structure" (Sawyer, 1992b:55-56) (emphasis in original). Again, the firms' conduct or, similarly, the analysis of the entrepreneurial attitudes of economic actors (notably, entrepreneurs), are key aspects for an IP approach that seeks to explain dynamic aspects of industrial development.

1.2.1.2. Critique of monopoly as 'object of IP'

The argument of 'welfare losses' and 'inefficiencies' derived from the emergence of monopoly market structures has also been widely questioned. Old and newer conceptual approaches have been used to discuss these assumptions. Drawing on the Schumpeterian school, Pitelis argues that, "it is differences in innovative activity that lead to large size [...], therefore once again gains from innovative activity should be set against any welfare losses" (1996:4). For Williamson, on the other hand, "monopolies may have lower costs, which could offset any welfare losses through cost efficiency gains" (Pitelis, 1996:4). Hence in the 'Williamson's trade off model', as in Chandler's model on 'the Multidivisional firm' (1986), large enterprise can be the most efficient solution to lower 'transaction costs' (derived from market failures) and not the source of such failures.

De Bandt (1994), based on the analysis of the current industrial setting, concludes that monopoly, as the rationale for state intervention, and the traditional anti-trust IPs have become a source of rigidity and conservatism. Arguing against the case for IP derived from the market failure theory, De Bandt asserts that:

> "[d]ue to the crisis [of the 1970s], structural change and the internationalization process, competition has been increasing steadily. [In addition], due to technological progress, the definitions and boundaries of the different industries and of 'relevant markets' are likely to be outdated. [Hence] the configuration and boundaries of firms have also been undergoing big changes, such that in most cases complex sets or networks of actors are involved" (1994:5) (emphasis in original).

Finally, the successful Japanese experience of industrial development constituted a remarkable empirical argument and source of controversy due to the virtuous relationship between 'big size' (individual companies and the so-called *keiretsus*), on the one hand, and productive efficiency and competitive performance, on the other.

All the aforementioned arguments have helped to question the internal logic of the market failure theory. As Sawyer notes: "If there had previously been perfect competition which had dissolved into oligopoly or monopoly, the question is why did that happen?" (1992:54). A response to this question is (paradoxically) given by Friedman, to whom "[m]onopoly frequently, if not generally, arises from government support of collusive agreements among individuals" (1962:26). Notoriously, this statement constitutes an interesting trade off, as within mainstream economic theory the state (in an economic market) exists because of market failure (Pitelis, 1991), while monopoly constitutes the principal cause of market failure!

1.2.1.3. Critique of the state as 'subject of IP'

A further set of critiques aimed at the assumptions of *market failure* theory places into question the 'capacity' of state (governmental) intervention for correcting market failures, despite governmental 'intention' to improve the efficiency of an economy. Risk of rent-seeking conducts and market imperfections derived from asymmetries or lack of

information have led to a debate questioning the state's ability to intervene, what in economics literature is known as 'government failures'. According to Chang, "[i]n many theories of state intervention it is (implicitly) assumed that the state knows everything and can do everything [...] It is assumed that the state has all the relevant information for social-welfare-maximising intervention and is able to achieve what it sets out to do" (1994:25). The assumption of 'perfect information' means that "the state may be able to collect and process all the information relevant for the correction of market failure only at costs that are greater than the benefits from such correction" (ibid). This would suggest, the state has perfect knowledge of every aspect of both the current situation and future trends concerning different markets and industries. As regards the 'rent-seeking' assumption, Chang points out that "state intervention incurs not only traditional deadweight losses but also costs when resources are diverted into unproductive activities by private agents in order to capture rents generated by state intervention" (1994:27). Hence, the costs generated from state intervention could exceed the potential benefits of the intervention, giving rise to inefficiencies which are then identified as government failures.

Inasmuch as the 'intention' of state interventions is concerned, the 'market failure' theory becomes more vulnerable since it assumes that state economic policy represents the general interest of society. Following to Pitelis, this argument relies on the arguable assumption that "economic agents have reached a consensus" (1991:337) in order to find Pareto efficient solutions as the best way to obtain social welfare. This assumption has indeed been criticised by both advocates and opponents to government intervention. Among the former, Pitelis argues, "a consensus on efficiency is unlikely to exist, in the presence of inequitable distribution of income, power [and] resources" (1991:337). In principle, the existence of asymmetries of power and resources at the level of industries and firms render the assumption of 'consensus among economic agents' unrealistic. This is the case with industrial policies such as the antitrust laws which act on a few winners (monopolic or oligopolic enterprises) in theory 'representing' the interests of the remaining economic actors that shape a given market. The debate about 'asymmetries of representation'

affecting the decision making processes of state is not new[3], however, it has received more attention recently.

Drawing on the 'interest-group' approach, Chang (quoting Skopol, 1985:4), summarises very well the problem of asymmetries of representation. In his words, the interest-group approach sees the state as "an arena within which economic interest groups or normative social movements contended or allied with one another to shape the making of public policy decisions" (1994:19-20). Admittedly, the most powerful (economic) vested interests in an economy will be those exerting greater influence on the decision-making process concerning economic policy and, therefore, the real targets of an industrial policy (if IP were the economic policy in question). The state appears thus 'captured' by interest groups. According to Stigler (1975), the pioneer of the 'regulatory-capture' theory of the Chicago School, "regulation is acquired by the industry and is designed and operated primarily for its benefits" (quoted by Chang, 1994:20). Capture is materialised both by claiming more legal guarantees and resources from the state budget and restricting it to the other 'rival' groups. IP instruments such as entry restrictions, property rights, subsidies, and price fixing, may fall in this category. Therefore, taking into account the above arguments, Pitelis's claim that the market failure theory represents an IP approach in a 'negative' sense, takes on greater importance. Indeed, under the analysed logic "it is assumed that firms have a strategy of their own and the state's role is to support them in their efforts up to the point where such efforts clash with consumers' interests" (1996:3).

Whatever the approach utilised to evaluate government failure or, more precisely, government intervention failure, the dominant trends in the economic analysis have been rather unidirectional. Economic analysis has mostly aimed towards both the control of state interventions until a minimal expression ("minimal state" hypothesis), and towards the isolation of state from potential rent seeking or interest groups whether they be internal (state bureaucracy) or external to state (society). The rationale behind the hypothesis of state isolation is that an 'isolated' state within society can take a neutral and technically

[3] Into the Marxist tradition, Marx himself and followers such as Miliband (1968) and O'Connor (1973) have argued that the capitalist state is one that serves the interests of the economically dominant class. This is the capitalist class in the capitalist society.

correct decisions leading towards maximising-efficiency (Friedman, 1962; Buchanan *et al*, 1980; Hayek, 1980; North, 1990).

Finally, Chang stresses that, common to the conceptual approaches that identify government failure derived from asymmetries of information and rent-seeking conducts, is "their inability (or unwillingness?) to suggest how government failures may be remedied other than by non-intervention" (1994:32). Hence Chang rightly asks himself, "[d]oes this mean that we are condemned to accept failing markets in favour of failing governments as the lesser of the two evils?"(Ibid). In the following section I discuss several theoretical and empirical arguments that allow me to question such a conclusion.

1.3. Ostracism of the IP idea

A far-reaching debate concerning the relations between state and economy (specifically state interventions in the economy) took place between the 'market vision' and the 'broad' notion of IP starting from the series of transformations that occurred within the main Western economies and in the international market place since the late 1960s onwards. It is not my objective here to lead the conceptual discussion towards a purely historical ground. However, in order to explain changes operated in the development of the theoretical debate, some historical observations will need to be made.

1.3.1. Setting the scene

The debate on the IP question began to gain public notoriety during the process of erosion of the so-called 'Golden age' of the central capitalist economies (Singh, 1994; Amable and Petit, 1996). In particular, discussions on IP issues were triggered by the controversy generated from the 'crisis' in the dominant model of accumulation (widely known as Fordism[4]) and the alternative ways to overcome such a crisis. With regard to the process of erosion of the 'Golden Age', Singh argues that a set of "[s]erious difficulties arose at the

[4] Drawing on the French regulation school, Jessop points out that Fordism can be analysed on four different levels: "As a distinctive type of labour process (or industrial paradigm) [...] As a stable mode of macroeconomic growth (regime of accumulation) [...] As a mode of social and economic regulation (mode of regulation) [...] And, fourthly, Fordism can be seen as a general pattern of social organisation (socialisation)" (1991:136-7).

levels of both the national and international regulatory regimes; these began to interact with each other in a cumulatively adverse way to the detriment of the system as a whole"(1994:63). The 'productivity slow-down' observed in the leading capitalist economies, the novel balance of payments problem experienced by the US (the largest western economy and engine of the system as a whole), and the subsequent break down of the Bretton Woods monetary system, defined the crisis of both the traditional forms of organisation of production (the so-called 'techno-productive paradigm') and the regulatory system on which this model was until then based. That is, the 'social contract' established by the main constituent actors of the Fordist model, notably, national states, large companies and the larger trade unions.

For a while, the member countries of the OECD (notably the largest European economies) put forwarded programmes of structural reform trying to overcome the difficulties raised, by following expansionary 'demand-side' economic policies aimed to reactivate their competitive performance and to secure full employment (Amable and Petit, 1996). A battery of IP instruments was targeted to the whole of the industrial sector mainly in order to strengthen the competitiveness of the so-called 'national champions' (often the largest public and private national companies). These instruments, known as 'picking winner policies', involved large outgoings of public subsidies, transference of resources, and tax concessions, hence they greatly exceeded the enclosed limits of the traditional regulatory framework of the IPs inspired by the market failure theory. As it is well known, IPs aimed at the promotion of 'national champions' (although simultaneously in support of 'lame ducks') had varying degrees of successes, those targeted at the telecommunications sector being perhaps the most successful ones in the European case. However, they largely failed to promote key manufacturing industries such as breeder reactors, electronics and computers. The case of the Anglo-French 'Concorde' is perhaps the most polemic and controversial example of failure in this respect. Consequently, the unsuccessful attempts carried out by the OECD countries in order to restore economic growth reached during the 'Golden Age' were finally abandoned in 1979 after the paradigmatic 'Volcker shock' in the US. As Singh argues, this drastic adjustment program entailed "the implementation of deeply contractionary monetary policies in the USA which were subsequently widely imitated elsewhere" (1994:63-4). The failure of the promotion policies of 'national champions' thus gave a solid empirical foundation that helped to underpin the strong

current of critical thought against state interventions in the economy initiated during the 1960s and 1970s. That is, when "the relevance and soundness of public intervention was severely questioned" (Amable and Petit, 1996:31).

1.3.2. Political and conceptual antecedents of the criticism against the IP idea

A new hegemonic thinking regarding economic policy materialised in the early 1980s, this series of policies and agendas for development is often referred to as 'The Washington Consensus' (see Williamson, 1990). This 'consensus' follows World Bank (WB) policy which stipulates that state interventions must be exclusively framed within the neoclassical model of growth, IP being excluded from the WB agenda of economic policy for development. The adjustment programs and structural reforms inspired by the Washington Consensus brought about processes of economic liberalisation, widespread deregulation of markets and the privatisation of public assets, among other aspects.

The quintessence of these adjustment policies and structural reforms aimed at causing the market to supersede the state as the main allocater of resources in the economy. The WB theses concerning the role of the state in economic development were reconfirmed in the World Development Report for 1991. In what this Report terms the 'market friendly' approach of development, the critical interaction between government and market is understood as follows:

> "Competitive markets are the best way yet found for efficiently organising the production and distribution of goods and services. Domestic and external competition provides the incentives that unleash entrepreneurship and technological progress. But markets cannot operate in a vacuum – they require a legal and regulatory framework that only governments can provide. And, at many other tasks, markets sometimes prove inadequate or fail altogether. This is why governments must, for example, invest in infrastructure and provide essential services to the poor" (1991:1).

Although this Report challenge some of the neoclassical assumptions, specifically by justifying functional interventions in areas such as infrastructure and services, IPs relating to the manufacturing industry are understood to be of a regulatory character only and, therefore, of a 'negative' and 'static' nature. A slight adjustment in the WB's position

regarding economic policy began to take place when its principles started to be scrutinised in several internal WB Reports in the mid 1990s. A first critical document came from the WB Department of Industry and Energy (1992) written by Frischtak. This document develops a conceptual guide to lead government policy in order to create an institutional 'environment' that encourages an efficient reconversion of industry. Interestingly, a second internal document (by Frischtak, 1993) asserted that once the first stage of the reconversion is overcome (and rising productivity and profitability is achieved) a second stage will require what the document termed '*positive* reconversion' (ibid). It encompasses the adoption of an aggressive 'technological policy' and provides funding for investment, innovation, and the adoption of an organisational culture to support both objectives. What is more, a renowned study led by Page (1993) stressed the important and systematic role played by the state interventions in 'The East Asian Miracle' (through the so-called *fundamentals* and selective policies underpinned by a wide and strong institutional basis) in promoting industrial development. This study gave rise to a heated debate due to the assertive attempts by the WB to attribute such achievements to market fundamentalism rooted in a macroeconomic vision, downsizing the role played by the micro economic fundamentals (notably, sectoral IPs) in these experiences. Interestingly, Joseph Stiglitz, a nobel prizewinner and former chief economist for the WB, played a critical role in revaluating the Asiatic experiences of industrial development by stressing (in an article titled 'Some Lessons from the East Asian Miracle'-1996-), the role played by the governmental interventions in the competitive performance reached by these economies. However, despite the adjustments to the 1980s' WB view, its main principles of economic policy regarding state interventions have not changed. In the WB view, state interventions in the economy are restricted to providing a legal framework and basic infrastructure for the market to operate efficiently within a framework of competitive discipline at the domestic and international levels (Singh, 1994).

As previously mentioned, antecedents of the 'Washington Consensus' can be found within a revisionist current of thought in economic theory, inaugurated by Milton Friedman, to which excessive interventions in and regulation of the economy by the state and government is and was the main cause of inefficiencies and constraints in market economies. In his seminal work titled 'Capitalism and Freedom', Friedman concludes: "the great Depression [...] was produced by government mismanagement rather than by any

inherent instability of the private economy. [...] Similarly today, government measures constitute the major impediments to economic growth in the United States" (1962:38). Subsequently, in 'Free to Choose', Friedman and Friedman assertively argue that "market competition, when it is permitted to work, protects the consumer better than do the alternative government mechanisms that have been increasingly superimposed on the market" (1979:222). Within this revisionist tradition there exists a generalised belief that only market forces give incentives to economic agents to operate efficiently. Hence only the market allows the efficient co-ordination of producers and consumers and therefore the production of profits and efficiency in whole industrial structure. As Coates points out, opponents to IP have placed their "faith in the capacity of markets to act as optimal economic allocators, and in the ability of individuals within those markets to pursue their own self-interest in ways that maximise benefits for all" (1996:6). Friedman's, as well as Buchanan's (1980), view on market economies have had a decisive impact on the critique against state interventions and the IP idea. It indeed reached the whole of the Keynesian legacy on which basis both state intervention and IP were inspired in the main Western economies until the early 1980s [5]. As stated by Sawyer, following this legacy "the modern State has become more closely involved in regulating the operation of the economy. State intervention in this area ranges from facilitating industrial development through subsidies and tax concessions, to direct involvement in the productive process through public ownership of certain industries"(1989:301). Interestingly, the revisionist criticisms also reached the regulatory IP framework based on the market failure theory. In contrast to the arguments used by IP advocaters to characterise the 'crisis' of the 1970s, the anti-interventionist thinking outlined above does not even acknowledge such a crisis. Schultze (1983), *"a dissent of IP"* (a label used by himself), concluded that the American advocaters of IP are wrong as much in their interpretation about the American economy problem as in their proposal to tackle it. He emphatically argued: "America is not de-industrializing [...] Government is not able to devise a 'winning' industrial structure. Finally, it is not possible in the American political system to pick and choose among individual firms and regions in the substantive, efficiency-driven way envisaged by advocates of industrial policy"

[5] Certainly, IPs inspired by the Keynesian legacy can hardly been taken homogenously, since they differed in character, extension and depth depending upon the western economy in question. In this respect Amable and Petit (1996) distinguish between countries where Keynesian policies have been applied with a "restrictive approach" (such as the UK and the US) to others with a "comprehensive approach" (such as France and Italy).

(ibid:30) (emphasis in original). Although Schultze then recognised that the US economy was suffering serious constraints, his critique against the IP idea is conclusive, "industrial policy is a dangerous solution for an imaginary problem" (ibid:37). In concordance with this thesis, the World Bank Report on the State (1997) asserted that IP is *"combustible"* since "implemented badly, activist industrial policy can be a recipe for disaster" (ibid:74). As seen above, the WB's principles had a character of universal mandate whereby its policy 'recipes' substituted any debate about IP. The 'political-ideological' critique comes from the Bretton Woods institutions along (and combined) with the 'conceptual' critique resulting in the emergence of a powerful 'crusade' against the industrial policy idea, to which the only possible rationality leading towards economic development and social welfare is one rooted in the will of institutions and individuals (that as a whole are) metaphorically called the 'market'.

Under the pressure of this 'crusade' the IP idea was finally abandoned by the main western economies and, following them, many regions all over the world did the same. In Latin America, Argentina and Chile in particular constituted extreme cases of dismantling the Keynesian legacy. As Bianchi rightly argues, during "the 1980s the concept of 'industrial policy' was eliminated from economic debates. There was a return to a mythical vision of the market as a single institution sufficient to manage the economy and it was held that the role of the State must be minimal" (1994:16) (emphasis in original). As seen, it did not follow that the basic assumptions of the IP approach based on the market failure theory fell into absolute academic disrepute. I argue that despite the important criticism aimed at its basic assumptions (see in section 1.2.1) the market failure theory acquired a renewed relevance (i.e. in Latin American during the 1980s and 1990s) and the main reason for this is the extreme ideological antagonism as regards state interventions in the economy. As Amable and Petit (1996:32) claim, regarding IP in the 1990s,

> "[t]he ideological environment leads to questioning all kinds of public intervention and has implications in the different programmes of 'structural reform' advocated by international institutions such as the OECD or the European Commission. [...] In such an environment, it is therefore not surprising that motivations of IPs in terms of market failures are called for more frequently".

However, at the beginning of the 1980s, in the interstices of the dominant views on economic policy, the IP idea returned to the arena of debate. Both the internationally celebrated achievements reached by 'unconventional' experiences of industrial development (i.e. Japan and the East Asian NICs) and (the subsequent and parallel) development of schools of critical economic thought, provided renewed empirical and theoretical arguments on the IP question. In bringing about changes in the antagonist ideological climate against the IP idea this constituted a milestone for the IP debate. Notably, the impact of the Japanese experience reached not only academic circles but also institutions such as the OECD and, as shown, the WB (OECD, 1972; Johnson, 1982, 1984; Boltho, 1985). As De Bandt concludes, paradoxically;

> "[a]nd when industrial policies -or the more visible part of those policies- were nearly eliminated from the scene in the 1980s, the mainly intellectual debate was reopened, due to the knowledge which had been accumulating concerning the role 'industrial' policies have been playing in the outstanding industrial performance of Japan and the some of the newly industrialised countries (NICs)" (1994:1-2).

The following section examines diverse experiences of industrial development showing how different IP rationales can be built positively and how a variety of economic actors and institutional agreements, besides and beyond the market, can critically become an integral part of an industrial development process.

1.4. The practices of new forms of industrial policy alternative to neoliberals

A varied group of insightful experiences of industrial development in which state 'interventions' and IP have played critical roles shape the new industrial economic geography. The Scandinavian model of social market economy (or 'negotiated economy'), notably, the cases of Sweden and Denmark; the German case (the 'Rhine state'); and regional experiences such as the Basque Country in Spain are only some noteworthy cases that an exhaustive analysis regarding IP should consider. I have preferred however to draw upon insights from both the Japanese and the East Asian NICs experiences, on the one hand, and the case of the Emilia Romagna in Italy, on the other, in order to illustrate how

substantially different processes of institutional building helped to lay the foundations for industrial development. That is, starting from the setting up of active, planned and sequential 'supply-side' industrial policies mainly based on the establishment of economies of association between the public and private sectors.

There are specific reasons why these cases have been chosen. Japan and the East Asian NICs constitute national-based experiences, as national states, large companies and the biggest economic conglomerates are the main actors of the development process from the IP perspective. I will argue further on in this thesis that 'place-based' IPs in Latin America, particularly in Argentina, critically call for national states to play a proactive and intertwined role. The multifaceted 'developmental' role played by national states in the Asian experiences (see Sections 1.4.1 and 1.4.2) thus becomes a very valuable one to be analysed. Interestingly, due to both historical similarities that the Asian experiences had during their initial stages of development (particularly during the first stages of the ISI model) with some Latin American experiences (notably, Argentina and Brazil), and to the broadly divergent trajectories in their subsequent development patterns, both experiences have been the object of frequent comparisons (Evans, 1987, 1992). Hence the Asian experiences have also been seen as models of best practice for Latin America, particularly in relation to the strategic role played by the national state in promoting development. In the Argentine case though, this influence has not lead to the emergence of an IP framework. The Emilia Romagna region constitutes instead a local- and regional-based experience, the local institutional set up, notably local governments, SMEs and the place itself being the main actors in its development process. In particular, I have taken the Emilia Romagna case since its institution building process was specifically concerned with (and embedded in) a notion of place as a social construction, and a more inclusive, participative and decentralised framework of 'bottom-up' IP. Interestingly, this experience has in effect been taken as a role model in different Latin American countries since the early 1990s, to the design and establishment of IP programs mostly aimed at SMEs at local and regional levels (Schmitz and Nadvi, 1999; Altenburg and Meyer-Stamer, 1999). Argentina indeed is a good example in this sense (see Chapter 4). In particular, some elements of the Argentinean entrepreneurial culture show notable similarities with those observed in small Italian entrepreneurs (besides entrepreneurs from other south European countries like Spain), which can be traced to the fact that a high percent of the Argentinean population are

directly descended from former immigrants coming from Italy and Spain. This is mostly the case for the south and central part of Argentina where my empirical research was conducted. Finally, I have to make clear that it is not my intention here to analyse exhaustively the multifaceted aspects that led both the Asian and the Third Italy experiences to succeed. Rather, I will focus on those specific aspects that allow me to illustrate the theoretical claims that this research raises.

1.4.1. The Japanese case

The process of institution building of the Japanese industrial development experience critically shows the existence and functioning of a public-private partnership that became its main 'policy-making' mechanism. The national state and the largest corporations, best known as '*zaibatsus*', were the main architects of this process. As argued by Johnson, in Japan "the state's role in the economy is shared with the private sector, and both the public and private sector have perfected means to make the market work for development goals" (1982:VIII). The Japanese IP framework arose as a result of public-private networking practices whose 'shared' architecture of governance has developed "multiple formal and informal linkages across the business-government frontier" (Kitshelt, 1991:480). Public-private cooperation was not, however, the result of a smooth and natural process rooted in idiosyncrasy of the Japanese culture. Contrarily, it was the result of a long-term process of learning and trust building through which both state and private sector were able to discuss and define common interests and aims, and to design strategies in order to overcome the numerous conflicts raised[6]. According to Johnson (1982), only after the state recognised the need for the private sector and vice versa in the decision-making process was the cooperation possible. Johnson understands that the 'developmental' policies themselves (established by the Japanese state) were the key tool through which government-enterprise relations were articulated. Hence the first priority of the Japanese agenda for industrial development was a 'developmental' strategy whereby, as Johnson points out, "the government tries to secure Japan's economic livelihood through public policies based on

[6] It is important to mention here that from WWII until the 1970s Japan passed through periods of both 'state dominance' (late 1940s) and 'private dominance' (early 1970s) (Johnson, 1982) in the determinant decision-making processes.

such criteria as long-term dynamic comparative advantage and international competitive ability" (1986:190).

The Japanese IP approach differed in many ways from the classical IP approach analysed in section 1.2. Firstly, it entailed an instrumentalist view of the market in which they can be implicitly and/or explicitly guided. As Best (1990) notes, under the Japanese IP approach, guided by a Schumperian notion of competition rather than by a criterion of 'allocative efficiency' (which presumes that market 'interference' is bad), markets are seen as 'instruments' of growth. Hence IP is understood as "a means of shaping (planning) markets to promote the international competitiveness of Japan's business enterprises"(ibid:168) (brackets in original). The strategic rationale underlying the Japanese IP, leading to the creation of dynamic competitive advantages, illustrates well how this IP framework 'stretched' the rigid limits of the classical IP approach. According to the Hecksher-Ohlin neoclassical theory on international trade, countries specialise in those sectors in which they have relative advantages in terms of factors of production endowment (or 'static' comparative advantages). In the aftermath of WWII Japan's comparative advantages were mainly based on its low labour costs and by no means in more complex production sectors such as in the heavy manufacturing industry. As it is well documented, the Japanese economy, in a few decades, developed 'dynamic' competitive advantages in production sectors where they did not have them previously, for instance in complex industries such as shipbuilding, electronics and automotives. Interestingly, this was achieved through (dynamic) innovations in production processes and developing new 'soft' technologies, specialising its labour force and establishing new patterns of labour relations (Aoki, 1990; Coriat, 1991). Likewise, the traditional IP regulatory framework inspired by the market failure theory (e.g. antimonopoly laws) was here tackled in a much more permissive way. The Japanese 'antimonopoly' policy, established during the allied occupation after WWII, considered the "international competitive ability rather than purely domestic competition [as the American antimonopoly laws do] as its main antimonopoly criterion" (Johnson, 1986:195). What is more, it explicitly promoted different forms of interfirm cooperation (or 'collusion' in the American framework) but preserving at the same time high levels of competition between them. All this resulted in an industrial structure endowed with a high level of dynamism in the domestic market and increasing international competitiveness. As Best rightly asserts, the "United States industrial regulatory policy had presumed the ideal

of perfect markets and defined inter-firm cooperation as collusion against the public interest. Japanese industrial policy, in contrast, has been based on the presupposition that a mix of inter-firm competition and cooperation can promote international competitiveness" (1990:201). The virtuous combination of cooperation and competition (more recently termed 'coopetition'), coordinated by the Ministry of International Trade and Industry (MITI) (Yamamura, 1988), without doubt opened a new chapter in the IP debate.

The establishing of MITI is one of the most salient factors of institutional innovation and a key issue in understanding the roles played by the central government in the Japanese IP framework. According to Johnson (1982), MITI was the key organ of government in formulating and executing IPs, under a scheme of economic policy in which both microeconomic policy (called 'industrial rationalisation policy') and macroeconomic policy (called 'industrial structure policy') were intelligently matched if not harmonised following the same objectives. The quality and efficiency of its bureaucratic staff enabled MITI to conduct industrial 'targeting' through sectoral promotion policies based on two key IP instruments: the preparation of complete sectoral studies (or strategic business information) provided to enterprises as a public good, and the preferential allocation of capital to 'targeted' industries considered as strategic by MITI (Johnson, 1982, 1986). In particular, the procedure known as 'administrative guidance' allowed the strategic information elaborated by MITI to reach the enterprises by means of relational networks established with the private sector. In contrast to the regulatory framework of the classical IP approach, administrative guidance operated through MITI's 'directives', 'requests', 'suggestions' or 'warnings' did not entail a legal obligation as in IPs derived from the "regulate state" (Johnson, 1982:319). A critical factor of political governance which allowed administrative guidance to function, was an effective, rather than formal, division of state duties and powers or between 'reigning' and 'ruling'. This political practice of the 'depoliticization' of decision-making processes allowed MITI's 'economic staff' to take decisions on economic policy (particularly in the long-term) beyond the possible contingencies and restrictions arising from political processes. Finally, despite the fact that the Japanese state played a central role in this experience of accelerated industrial development, the state (contrarily to many Western examples) neither became a direct owner of the main national large companies (Boltho, 1985) (or national champions), nor was its influence exerted through direct and compulsory IP instruments. As Cowling notes, the Japanese state was rather in charge of 'bringing guidance where the market offers little' (1990:18). Hence, unlike other

cases, the IP Japanese case (though active) is a clear example of what is termed 'indirect' industrial policy. Furthermore, the Japanese state did not have a fundamental theorem of IP *ex ante* (as the classical IP approach has) but it was strategically developing it according to particular historical-contextual circumstances and individual cases as required. Once the Japanese meaning of strategy is thus understood, it illustrates that "industrial policy is first of all an attitude, and only then a matter of technique" (Johnson, 1984:7).

Therefore, there exists a broad consensus that the Japanese experience of industrial development relied on a process of institution building that differs in a critical way from those underlying the classical model of state 'interventions' (Best 1990; Coriat, 1991; Johnson, 1982, 1986). As Johnson argues, "the Japanese have put together the political and economic institutions of capitalism in ways that differ from Anglo-American model" (1986:200). As a result, the traditional parameters utilised to think about both the actors and institutions of IP in light of the Japanese experience became more diffuse, tending to blur, as Kitshelt asserts, "the line between the private and the public realm" (1991:480). Consequently, the metaphor of 'intervention' in the economy, both as the traditional term utilised to refer to IP practice (or when the state 'intervenes' in the economy) and as a term which reflects the relationships between 'dichotomies' such as state/market, private/public, and economy/policy, becomes theoretically and empirically questionable.

1.4.2. The East Asian NICs cases

Inspired by the Japanese case, a group of East Asian countries, notably Hong Kong, Singapore, South Korea and Taiwan, undertook comparable processes of industrial development in which state 'interventions' and the industrial policy played key roles (Johnson, 1982, 1986; Wade, 1990; Singh 1998). Due to their celebrated success, this group of countries became known as the 'four Asian tigers' or, in a more general sense, the East Asian New Industrialised Countries (NICs).

The mobilisation and transference of resources in order to build up international competitiveness of their respective domestic industrial apparatus was the main strategic rationale followed by the East Asian NICs (Wade, 1990). Active, planned and coordinated IPs, rather than the free play of market forces, were the basis on which the process of

structural change became possible in these countries (Singh, 1998). Concisely, the East Asian NICs (notably, South Korea and Taiwan) began their development pattern during the 1960s with a planned strategy of primary import substitution based on light industry promotion. It was followed by a stage of 'outward orientation' during the early 1970s in which IP sought export promotion. Subsequently, a second stage of import substitution based on heavy industry promotion took place. Finally, these economies experienced periods of economic liberalisation starting from the early 1980s (Wade, 1990). Liberalisation policies, however, began only to be established once the East Asian NICs' fundamental objectives, notably the promotion of their manufacturing exports, had been reached (Singh, 1992). Previously, as a result of the surprising process of capital accumulation experienced in the ISI initial stages, the public investible resources increased, the role of state bureaucracy being the steering and transferring of these resources towards the 'targeted' industries (called 'promising industries'). The transference of public resources was carried out utilising different public IP instruments managed through the bank system, the government budget and public enterprises, fiscal investment schemes and direct investment controls. Both the capital accumulation and the 'developmental' use of the state-created rents (see Section 1.4.2.1) largely relied on 'market guidance', regarding the long-term investments and socialising risks that such investments entailed, provided by the central government. Although slightly different to the Japanese MITI, powerful public agencies were in charge of most domestic aspects of the IP, such as trade and foreign investment policy. In some cases, notably South Korea, the IP framework was endorsed with a similar degree of strategic importance to that of the macroeconomic policy framework. Chang notes, regarding the Korean case, that "[a]lthough macroeconomic constraints often set severe limits on the conduct of industrial policy, industrial policy has been actively used whenever deemed necessary and practical. When the aim of macroeconomic stability clashed with the aim of upgrading the industrial structure, the latter was usually allowed to dominate" (1994:110). Anti-rent seeking IP devices also became a central piece to the Korean model (ibid).

With respect to the institution building scheme on which these experiences of industrial development were based, the East Asian NICs show notable differences. This reveals the diversity of possible forms that institution building can take in promoting industrial competitiveness. Taiwan found a key engine in the large 'upstream' public enterprises with

which the government established cooperative relationships. Unlike South Korea (and also Japan), the Taiwanese case demonstrates a larger degree of separation between the government and the private sector (Wade, 1990:179). State dirigisme and a looser, informal public-private relation was the core of the public and private scheme of relations in Taiwan (Wade, 1990). Korea on the other hand trusted its model of development to the active promotion of its big national industrial conglomerates (*chaebols*), with which the state established a relationship based on a rigid system of incentives and punishments or "carrots and sticks" (Kim, 1994). Such a system evolved from a more coercive stage towards a more negotiated one, particularly with the increasingly successful *chaebols* (Chang, 1994; Wade, 1990). The East Asian NICs' scheme of political governance largely exceeded the limits of the so-called Japanese 'soft authoritarianism' (Johnson, 1982). Indeed, the authoritarian political systems ruling these countries acted as a guarantee (at a high social cost) of both political 'stability' and the centralisation of the decision-making process needed for the industrialist thinking-led accumulation process to occur. It must be said that unlike some authoritarian regimes observed in Latin America (notably Argentina and Chile during the 1970s and 1980s), the industrialist project of development was the main priority of economic policy put forward by the East Asian NICs' governments. Finally, although the evidence shows that the governments were able to 'govern the market' in the East Asian NICs experiences (Wade, 1990), they did not supplant it (Singh, 1998). With reference to the Korean case, Chang concludes,

> "[t]hat the Korean state has put a restraint on the operations of the market does not mean that it did not believe in the power of the market [...] What differentiates the Korean state's attitude toward the market from that many other states is that it has taken a dynamic view of the market whereby problems of technical change and learning, rather than allocative efficiency, have taken centre stage" (1994:128).

Therefore, the above experiences demonstrate that IP and the market are compatible concepts and that, when well matched, can become a powerful device to industrial development. More importantly, it also demonstrates that the fundamental "institutions of capitalism" can be re-built up and re-organised in many different ways, following strategic rationales embedded in cumulative and path-dependent learning patterns.

1.4.2.1. From the developmental state to the need to develop a state

The 'developmental' state observed in all the Asian experiences of industrial development constituted an important institutional novelty that substantially differs from other 'ideal types' of states such as the corporatist, despotic or liberal. In summarising the nature of the developmental state regarding the IP framework Wade (1990:342) suggests that,

> "the central economic mechanism of the capitalist developmental state is the use of state power to raise the economy's investible surplus; insure that a high portion is invested in productive capacity within the national territory; guide investment into industries that are important for the economy's ability to sustain higher wages in the future; and expose the investment projects to international competitive pressure whether directly or indirectly".

Once both rising productivity and international competitiveness are achieved, there follows a cycle of domestic investments that leads to rises in labour demand, increases in labour incomes, and subsequent improvements in the distribution of benefits of growth.

Two key issues arise from the definition provided above. First, the state has accumulated sufficient influence and power "to shape, pursue and encourage the achievement of explicit developmental objectives" (Leftwich, 1995:401 quoted by Amin, 1995). Second, the state effectively has and pursues a 'strategic rationality', which underlies all of the developmental IP instruments established and 'oversees' the performance of its main political-institutional guidelines. As already seen, this strategic rationality has critical influence on macroeconomic, trade and regulatory policies. As regards the specific political and institutional foundations of the developmental state, Amin (1995) argues that there exist three factors (the last of which has been already discussed) that explain the relation between this particular kind of state and economic success: "strategic state economic leadership; division of labour and reciprocity between the executive and the economic bureaucracy; and state-driven embedded networks of influence and obligation"(1995:31). The first factor is largely explained by the hegemonic control of state power by a modernizing developmental elite (based on an authoritarian political system) and its permanent enhancement and defence of the national development project. The existence of an "efficient and powerful economic bureaucracy" endowed with decision-making policy 'autonomy' with respect to the political elite helps to explain the second factor. As Amin

notes, "the progressive insulation of economic decision making and industrial policy in the hands of a small technocracy of highly qualified professionals gathered together in specialist economic agencies such as MITI in Japan or the Economic and Planning Board in South Korea" (ibid:28) became the key factor to achieving the necessary levels of autonomy required (and reached) by the economic staff. However, it was not an 'accountable' autonomy (with respect to the agenda of the developmental political elite) which mattered for the success of the developmental state, but an embedded' autonomy. This means that the economic decision making process within the state apparatus should also rely on links and networks of inter-dependencies developed with both other public agencies and, critically, private organisations and enterprises. Evans (1992, 1995) coined the term 'embedded autonomy' to refer to this combination of 'autonomy' and 'embedding' in the decision making mechanisms. The 'clientelist relational networks' (Amin, 1995) through which embedding took place in the Asian experiences were mostly developed along with the largest national economic conglomerates (such as the Japanese *zaibatsu* and the Korean *chaebol*), politically privileged large companies' peak business associations and the main banking and financial institutions. Despite critiques received during the second half of the 1990s (see below), this governance scheme of public/private relations was the key tool in the widening of the state 'intelligence' through which these states were able to overcome a series of 'failures' where the market offers no guidance (notably, information failures). That is, by gathering information, knowledge and know how coming from the states' networks of relations (Evans, 1992). The embedded autonomy becomes an efficient mechanism both for maintaining institutional counterweights between the big economies and public powers, whilst also controlling the former, and building up legitimacy and consensus on the developmental policies undertaken.

The crises in the Asian countries in the late 1990s sparked a wave of criticism aimed precisely at the nature of public/private relations in this region. In Argogyaswamy's view (1998), the Asian crisis was the result of institutional and structural weaknesses caused by a 'cronyistic' political-economic structure and a non-transparent (if not corrupt) corporate governance system. Indeed, Krugman (1998) claims that the combination of industrial policy and corruption generated fundamental problems of moral hazard since the scheme of incentives established (in which there operate an effective socialisation of risk warranted by public policy) led to 'unaccountable' investments by large firms. Krugman notes that in a

context of weakened institutional controls the banks were willing accomplices in the firms' investment strategies as they were effectively still under governmental guarantee or control. It is not my intention here to get into details about the causes of the last Asian Crises. I acknowledge that to some extent the emergence of this crisis related to the interplay of some of the factors of political and economic governance mentioned above, notably corruption. However, concerning this debate, I largely agree with a long list of scholars for whom these factors were not the main cause of the crisis (Chang, Park and Yoo, 1998; Haggard and Mo, 2000; Hughes, 2000; Johnson, 1998). In a broad sense, Johnson (1998:653) understands that there are three "main contenders" among explanations for the crisis, all three of which may prove to be true due to their effects on the Asian economies: "the liquidity-crunch explanation; the overcapacity explanation, and the end-of-the-Cold-War-in East-Asia explanation". In particular, Chang *et al* (1998:735), by referring to the Korean case, conclude "that it was the dismantling of the traditional mechanisms of industrial policy and financial regulation [from 1993 to 1997], rather than the perpetuation of the traditional regime, that generated the crisis". Johnson comes to a similar conclusion arguing that "[t]hroughout the (Asian) region, the current crisis was caused much more by under-regulation than by corruption or any other side effects of an overly close relationship between businesses and the government" (1998:654). In all the cases, the package of 'recommendations' to rescue the Asian region from the crisis put forward by multilateral organisations such as IMF (best known as the neoliberal program of adjustment and structural reform) are identified as the key problem in the outbreak and deepening of the crisis. Though Johnson (1998) admits that only Japan fits the 'crony capitalism' argument (becoming "a serious side effect of Japanese-type economies" in Johnson's words) he argues that its economic costs have been rather exaggerated by the critique (ibid:655). What is more important, the wave of criticisms aimed at the Asian experiences of industrial development still has not explained why these countries (in particular the 'Four Asian Tigers'), to a large extent and in a short period of time, overcame their previous condition of 'underdevelopment' countries. It is an issue that in the Latin American countries remains to be seen.

Returning to the Latin America case, as shown in Chapter 4, a process of re-building of the Argentinean state in its different constituent scales is required in order to rethink a new framework of economic policy in which IP plays a key role. A process in this sense should

necessarily be different to those observed in the Asian experiences since it must consider both the rules of the game of the still dominant political-economic setting and the new context of debate inaugurated in the aftermath of the economic collapse of the neoliberal project and the political crisis that occurred in Argentina at the end of 2001. Hence, though the developmental state legacy demonstrates that processes of institution building based on public/private collaboration and public 'guidance' may play key roles in boosting industrial competitiveness, it also shows shortcomings that have limited its development and that in turn challenge some of the main aims of this thesis. Notably, the experiences of industrial development outlined above were based on 'top-down-led' institutional agreements, developed under authoritarian systems of economic and political governance, in which only the largest public and private corporative powers (national-states[7] and large public or private companies) participated. The case of the Third Italy, based on a 'bottom-up-led' industrial development process, will provide me instead with insights to discuss the IP question in a diametrically opposed perspective to the 'top-down-led' experiences above. It is in the 'intersection' of both approaches to IP (regarding conceptual frameworks, practical experience and methodologies) that there will perhaps emerge some of the answers that this research is looking for in the Latin American case.

1.4.3. The Third Italy case

The term 'Third Italy' refers to the celebrated Italian industrial districts of the Emilia Romagna region, in the North Central part of Italy. Unlike the industrialised north and the agricultural south, the Emilia-Romagna economy and its pattern of industrial organisation is based on a system of small entrepreneurial firms (Brusco, 1982). Hence this region is best known as 'Third Italy' in the literature concerned with industrial development. The success stories of the manufacturing SMEs of the Emilia-Romagna region, which upgraded their innovative capabilities and conquered international markets (mostly during the 1970s and 1980s), were largely based on the development of a specialised but flexible scheme of production, on the one hand, and, on the other hand, a place-based collective system of learning and production organisation on which the latter relies (Becattini, 1979; Brusco,

[7] I have used 'national-state' to refer to these experiences even though the Chinese province of Taiwan is not a national-state. However, due to the level of both political and economy autonomy showed during its development process Taiwan's government acted as it were a 'national-state'.

1982; Piore and Sabel, 1984; Best, 1990). Both factors, along with the subsequent exceptional levels of growth reached in this region (Best, 1990), have had a marked impact on the IP debate.

The Third Italy succeeded as a result of an institution building process in which 'the place', understood as a social construction, and the main actors of consequence to industrial development of that place such as firms and public, private and intermediate institutions were, in effect, involved. Two 'relational' factors seem to have been critical in shaping 'collective entrepreneurship' (Cooke and Morgan, 1994). Firstly, the nature of the relations among local small firms, which made interfirm collaboration and varied economies of association possible. Secondly, the active presence of numerous formal institutions (or 'extra-firm' institutions, in Best's words -1990-) along with the network of relationships developed between them and the firms, which underpins competitive performance of local/regional firms. Formal institutions include public, private and intermediate institutions such as local governments and diverse public agencies, R&D institutes, trade unions, community-based civil associations, varied entrepreneurs associations (notably, CGA – General Confederation of Artisans- and CAN –National Confederation of Artisans-) consortiums and, critically, the regional development agency ERVET (Ente Regionale per la Valorizzazione Economica del Territorio), established in 1974, and the diverse sectoral and functional centres of 'real services' provision to firms. As Cooke and Morgan note, the shareholding structure of ERVET (the core of the Emilia's institutional set up) "reflects an ethos of collaborative engagement in the sense that ERVET has tried to integrate the potential of public and private sectors, of credit and financial institutions, entrepreneurial associations, and chambers of commerce, etc. Although ERVET is itself the dominant shareholder it sets a high premium on involving as wide a social constituency as possible" (1994:109). Therefore, a novel architecture of governance in the frame of the IP debate, based on the interplay of local political and economic actors and institutions and in which local governments often play key roles of intermediation and coordination, became the key policy maker in charge of designing and managing the IP instruments established. Hence government 'interventions' and the IP framework in the Third Italy have also aimed to both strengthen and widen different aspects of local/regional institution building.

The Emilian IP framework provided firms with a variety of business-services, generically known as 'real services' (see below), though also with institutionalised financial resources. Furthermore, as Brusco notes, it helped to mobilise "local forces [...] in support of demands directed to the state" (1982:181). Interestingly, the Emilian IP framework often reaches areas of local social policy, for instance social services and urban planning (i.e. control of speculative building development), which both raised the real wages and quality of life of the population and helped to cut the firms' costs. The quasi-public 'service centres' established in different industrial districts of the region (i.e. Emilia Romagna Textile Information Centre –CITER-, in Carpi) are perhaps the most striking vectors of local IP observed in this experience of industrial development. These centres provided the firms with the so-called real services, which enabled them, in particular the smaller ones, to overcome restrictions associated with their size and scale economies such as availability of resources, time and skills. Access to business information, training and technological upgrading programmes whether collectively or individually delivered (Brusco, 1982; Pyke *et al*, 1990), and a proper utilisation and 'assimilation' of these business assets, are examples of real services. Specifically, through the institutionalised service provision, the small firms were able to update in areas such as marketing, new technologies, fashionable product trends, international trade and business opportunities. The availability of collective external economies, such as the industrial atmosphere which arose in Emilia Romagna as a result of the series of institutional innovations which occurred, became a key source for the creation of dynamic competitive advantage in the region (Bianchi and Giordani, 1993). Interestingly, this is true for 'low-tech' industries and labour-intensive manufacturing sectors such as ceramics, furniture and knitwear. Hence, Bianchi and Giordani (1993:33) conclude that "[i]f by industrial policy we mean the set of interventions aimed at inducing structural changes in the productive system, then 'structural services' may well be considered as an instrument of industrial policy".

Unlike the Asian 'developmental' states, the Italian national-state did not have a direct and active involvement in the decision-making process related to the 'bottom-up-led' industrial development experience of the industrial districts of the Emilia Romagna (Brusco, 1982). However, the good competitive performance reached by the small firms of this region cannot be explained without recognising the role played by two key 'national' IP instruments targeted toward the manufacturing firms: the so-called 'Sabatini Law' (1965),

aimed at the subsidised acquisition of 'New Capital Equipment', and the policy of 'Information and Technology Diffusion'. Both 'top-down-led' IP instruments, without becoming 'market guidance' (such as it was observed in the Asian experiences) did however help to steer the system of investment incentives for small and medium-sized firms towards patterns of technological upgrading necessary to underpin learning and innovation. Hence this experience demonstrates how a positive combination of 'bottom-up-led' territorial mobilisation, in order to put forward industrial development agendas, and specific 'top-down' schemes of national IP may become a key 'trigger' device for industrial competitiveness in a locality or region.

Therefore, the nature of the IP framework observed in the Third Italy leads me to revaluate the critical importance, for market guidance and industrial competitiveness, of economic agents and institutional set ups so far undervalued (if not ignored) in both the classical and developmental IP approaches. These can be divided into four distinct areas. First, the sub-national local and/or regional dimension of IP and, linked with these, 'decentralised' schemes of 'top-down' national IP. Second, both geographical proximity and the social foundations of economic life and social capital developed in a given territory. Third, networking activities and the subsequent development of associative economies primarily between small- and medium-sized firms and between firms and 'extra-firm' institutions. Four, the collective entrepreneur or the 'community of producers' operating in the 'local polity' (Best, 1990) which, through social conventions, underlying the economies of association and supplying monitoring and control devices to avoid the risk of opportunistic conducts (Best 1990; Pyke *et al*, 1990). The Third Italy experience thus offers valuable elements in rethinking the diffuse borders between dichotomies such as economy and polity or market and plan (Best, 1990). The interplay of political and economic governance factors, along with social factors underlying the former, were here a key tool in trust- and consensus-building starting from which competition and cooperation between potentially contradictory interests becomes possible. It allowed the region to establish interactive and more 'horizontal' mechanisms of decision-making regarding IP and local industrial competitiveness.

1.5. Concluding remarks

Chapter 1 began by analysing the classical IP approach and the main criticisms that this approach, inspired by the market failure theory, has received. As argued, this is an IP approach of 'negative' and 'static' nature in which IP (which in all cases is a second-best resource) is justified only if it is both regulatory in nature and aimed at reducing inefficiencies identified as market failures. Furthermore, only the largest companies, which have reached monopolist and oligopolist positions in the market, here constitute the direct 'object' (or target) of IP. The national state, through its legal and regulatory system, constitutes in turn the only 'subject' (or policy-maker) of IP. Territorial connotations, apart from those concerning (legally circumscribed) nations, are absent from this approach as (macroeconomic) regulatory policies have an effect on national territories as a whole. Drawing on a brief review of historical events, I have then set the scene starting from which state 'interventions' in the economy, particularly IP, were both abandoned and conceptually stigmatised as a tool of economic policy for development. The 'market view', based on the influential neoliberal legacy, became the hegemonic paradigm of economic policy in the major capitalist Western economies. The adjustment policies and structural reform programs inspired by the so-called 'Washington Consensus' laid the foundations of economic policy 'for development' still 'in force' in Latin America -though recently questioned in countries like Argentina, Brazil and Venezuela. Finally, the practices of new forms of supply-side economies and IP frameworks alternative to neoliberalism paradoxically came to revive 'the IP debate', though this time under original and stimulating supply-side economics frameworks. The experiences of Japan, the East Asian NICs and the Third Italy have demonstrated that IP, if widely but 'strategically' employed, can become a powerful instrument of economic policy for development in the context of market economies. Accordingly, there are four key theoretical claims I would like to raise regarding IP in the following chapters.

Firstly, the nature of IP in the 'heterodox' experiences of industrial development has turned into both a 'positive', in the sense that it critically helps to guide or steer the firms' conduct (in order to become part of the market), and a 'dynamic', in the sense that the definition of competition is framed in a Schumpeterian view in which the innovative capabilities of

economic agents become determinant factors. Both the Schumpeterian and particularly the Neo-Schmpeterian approaches will consequently be specifically discussed in Chapter 3. As Sawyer notes, from a criterion of economic efficiency based on allocative (or static) efficiency there emerges here one IP rationale that seeks "to move the focus to dynamic efficiency" (1992a:2). It will allow me to think about an IP framework substantially different to that inspired by the market failure theory in which firms "have to accept the prevailing market conditions and cannot mould those conditions to their own advantage" (Sawyer, 1992b:66). In Best's (1990) words, under a dynamic IP viewpoint both firms and IP itself perform active roles in 'market-shaping' actions rather than in 'market-reacting' actions. Hence to this scholar "a first element in a successful industrial policy is a creative use of the market" (ibid:20). That is, in the setting of what Best identifies as the 'new competition'.[8]

Secondly, the state is here critically called upon to supply 'guidance' to those enterprises or industries defined as strategic (or 'infant industries', in many cases), by the developmental national states or by the local or regional governments, as seen in the Third Italy case. However, the state (as the main policy-maker of IP) no longer operates 'isolated' within society but performs through networks of relations and institutional agreements established (mostly but not exclusively) with the private sector starting from diverse and differentiated processes of institutional building. As a result, a discussion surfaces as regards the very nature of the relation between state and economy and, more specifically, between IP and market. That is, in light of the analysed heterodox experiences where critically state, economy, IP and market are complementary. In this respect Best (1990), who draws upon the impact generated in Western academic circles by the Asian and the Third Italy experiences, claims: "Industrial policy fails when it overrides or ignores the market and is based upon the presumption that plans and markets are alternative means of economic coordination [Hence] effective policy toward industry depends upon breaking with the traditional plan or market dichotomy that informs conventional economic theory" (ibid:20). Similarly, Sawyer argues that the potential complementarity between market or plan and,

[8] Best coined the term 'New Competition' to report the determinant factors of industrial competitiveness emerging during the 1980s and 1990s in the international market place. In Best's view "the New Competition can be distinguished from the old in four dimensions: organization of the firm, types of coordination across phases in the production chain, organisation of the sector, and patterns of industrial policy" (1990:11). "New competition is about strategic actions within each dimension" (ibid).

more specifically, between firms, government and IP "arises from the government setting the general framework within which firms operate, and seeking to aid firms to fulfil the strategy" (1992b:66). The idea of 'intentional' state guidance is reflected in what Best terms 'strategic industrial policy', whose differential aspect is the primacy of strategy over planning, and where strategic planning "is not to plan industries of the future, but to examine the prerequisites for sustaining competitive success and work to ensure that firms, which provide the real dynamic thrust, can respond quickly as new markets emerge" (1990:268). In the extreme, Cowling and Sudgen (1994a,b) claim that the market is not the starting point of IP but both the production sphere and the challenge concerning the incorporation of the firms into the market.

Third, international 'competitiveness' became both a leading concept for development of domestic industrial apparatus and therefore a guide (and benchmark to reach) for IP. In other words, while the dynamic factors of the new competition are identified as the main source of economic performance in the new competition setting, the international market place (in a context of increasing globalisation) is identified as their main arena of validation. Hence, due to its impact on the supply-side economics approaches, the concept of competitiveness and the relation between this and IP will be analysed in detail in Chapter 2 of this thesis. As seen, competitiveness in the Asian experiences mostly refers to the largest public and private enterprises and economic conglomerates gaining positions in international markets. By contrast, the Third Italy case has demonstrated that the largest firms in an economy are not the only economic agent able to gain international competitiveness as a result of active IPs designed to that end. Small- and medium-sized firms, particularly when they are considered collectively, have also shown to be able to do so. Interestingly, it has proven to be true even for small firms operating in 'low-tech' industries. SMEs thus became, for the first time in the IP debate, the 'direct object' (or target) of IP. The Italian experience of the industrial districts also demonstrated that the national-state is not necessarily the main and only 'subject' (or policy-maker) of IP. Contrarily, both local and regional states and/or the architectures of political and economic governance established in sub-national territories can also become the main policy-maker of an IP framework. In addition, the territory, if defined as a social construction, appears for first time as both 'actor' and target of IP. Consequently, assessing both the 'top-down-led' Asian IP approaches and the 'bottom-up-led' approach observed in the Third Italy, and the

intersection and divergence points between these two groups of experiences, supplies me with valuable insights for reflection on IP in the Argentinean context. I will return to this point in Chapter 4.

Finally, I will finish this chapter by discussing briefly the problem of the definition of industrial policy. The reason why I have chosen to do so at the end and not at the beginning of this chapter lies in the very nature of this subject of study. Defining what constitutes bona fide IP is not an easy question, no least because the wide-ranging objectives that IP has been expected to perform and deliver requires integrating, complementing and/or overlapping over a number of economic policy areas (Coates, 1996; Michie and Ougton, 2001). As Hospers notes, "it is unclear exactly where industrial policy stops and other economic policies such as competition, trade and regional policy begin" (2001:139). Perhaps the most archetypal (and all-encompassing) definition of IP is one still in use in an informative volume titled 'Industrial Policies After 2000', according to which "industrial policy is about government intervention in markets" (Elsner and Groenewegen, 2000:1). Coates (1996), suggests a broad definition such as this is ultimately not very useful as it serves to hide and obscure the nature of industrial policy. In this respect Wren (2001) rightly argues, that the defining problem lies not in the meaning of the 'industry' part of IP (as it can be taken to be any paid production, whether public or private and manufacturing and services, outside the administrative sector) but in the definition of 'policy' and, in particular, its necessary intention and relative subjectivity. The atypical character of industrial policy has been well documented by Audretsch, to whom IP first:

> "reflects more of a subject for investigation than any one particular developed and established academic discipline. Scholarship on the subject is not monopolized within the domain of any single traditional field. [...] The second striking characteristic of the field is a lack of consensus about what actually constitutes bona fide industrial policy. [and] A third characteristic of the literature on industrial policy is that it is fairly specific to the particular countries involved" (1998:9).

The 'contingent' character of IP should also be added to this enumeration. As stated by Hiroya Ueno, one of Japan's leading IP theorists,

> "unlike traditional fiscal and monetary policies, industrial policy demonstrates no clear relationship between its objectives and the means of attaining them. Its conceptions, content, and forms differ, reflecting the stage of development of an economy, its natural and historical circumstances, international conditions, and its political and economic situation, resulting in considerable differences from nation to nation and from era to era"(1983:34) (quoted by Johnson 1984:6).

Consequently, the 'changing' nature of IP will force me to undertake a conceptual search within different theoretical traditions that have conceptualised the IP idea under the new settings. Aware of the risk of falling into theoretical relativism, I will ascribe to an epistemological principle according to which "[a] continuing dialogue between different perspectives is clearly preferable to a continued search for a single, new, all-encompassing paradigm" (Hudson, 2000:21). This is one in which the definition of IP should be in part a research result rather than an ex-ante defined concept upon models of unique rationale.

In the following chapter I will first examine briefly the ways in which the IP debate has reacted in face of the 'heterodox' export-oriented experiences of industrial development discussed above. Then I will examine how the very nature of the IP idea, upon the paradigm of 'competitiveness', has been transformed in light of the changes in the international market place. In doing so I will begin to mould the emerging supply-side economics theories which in Chapter 3 I will term the 'New Industrial Policy'.

CHAPTER 2

Industrial Policy and Competitiveness: Transition or Continuity?

2.1. Introduction

The concept of 'competitiveness' has recently taken enormous analytical importance in academic circles and in the world policy-makers concerned with industrial development issues. As Porter observed more than a decade ago, "competitiveness has become one of the central preoccupations of government and industry in every nation" (1990:1). In developing countries, policy makers every year closely watch indices, ranking international competitiveness performance (Lall, 2001). To a large extent, competitiveness became the general prism through which supply-side economics and IP are currently rethought in the framework of increasingly open market economies. What is more, to many scholars competitiveness came to supersede the old-fashioned idea of industrial policy (Porter, 1990; UNIDO, 1999). Such an interest on the issue of competitiveness is however not new. A number of works concerned with the problem of the international competitiveness of the main Western economies were written during the early 1980s (Johnson, 1984; Magaziner and Reich, 1982; Reich, 1982a, 1982b; Tyson and Zysman, 1983; Turrow, 1985), giving place to what Johnson (1984) termed 'The Industrial Policy Debate'. This debate, largely developed in the Harvard Business Review, evolved around the idea that Western economies, notably the US, were: a) deindustrialising, particularly due to the crisis in their manufacturing industries; b) losing positions in the international market place, at the hands of newcomers (notably, the newly industrializing countries); and, c) that macroeconomic measures were not sufficient for reactivating their competitive performance. Hence, the main conclusion of the IP advocators was that the states should intervene through active IPs aimed to promote and enhance processes of structural adjustment in the (largest) domestic industries in order to boost their 'international competitiveness'. As Amable and Petit (1996:31) stress, "the 1980s thus appear as a transition period where IPs lost ground but

gained new credentials when changes in the forms of competition which characterize the post mid-1970s context are taken into account".

In which sense was this a period of transition? First and foremost, the IP debate reflected on a 'virtuous' relation that was not obvious in the framework of the old IP, that of successful competitive performance critically relating to 'international competitiveness'. This passage from IP towards a concept reflecting on international competitiveness is clearly reflected in the pioneering work of Magaziner and Reich, in which it is argued: "industrial policy must pay careful attention to international market signals, noting pending structural shifts and helping the domestic economy adjust to them" (1982:332). To assume that firms should aim to compete in the international market place or to consider international standards as benchmarks for them, presents significant conceptual limitations for the old IP idea. In Amable and Petit's (1996) view, these limitations are threefold. Firstly, IP *per se* is no longer able to control competitive pressures associated with external markets. Second, the influence of the most restricted aspects of an IP (for instance, those linked with 'national' regulatory policies) is today limited due to the increasing internalisation of firm activities. This means that firms now "have more latitude for escaping the constraints set upon them by IPs" (ibid:32). Third, IP rationale should now strictly observe the issue of its neutrality (with respect to all the firms in a market) and its political legitimacy. As these authors note, "[i]t has become increasingly difficult to implement targeted policies aimed at favouring a particular sector because such a policy usually means favouring one or a few national firms, which leads to an opposition from other countries" (ibid:32). Hence, the IP idea was losing ground as a tool of economic policy in academic and policy maker circles and began to be surpassed by the concept of competitiveness. It is worth considering what is meant by 'competitiveness' within this context. To this end, some definitions and discussions relating to competitiveness are outlined below.

2.2. Discussing competitiveness

Competitiveness is not a formal concept in economics. The concept in fact comes from the business school literature where, according to Lall "it forms the basis for a great deal of

strategic analysis" (2001:1502-3). Debates on competitiveness often start with the question of definition. A much quoted and accepted definition of national competitiveness is "the degree to which [a country] can, under free and fair market conditions, produce goods and services which meet the test of international markets, while simultaneously maintaining and expanding the real incomes of its people over the longer term" (OECD, 1992, quoted by Boltho 1996:3). Variants of this definition can be found in the United States Competitiveness Policy Council's first report (1994) and in EU white papers (1993, 1994). The World Economic Forum (WEF) supplies instead a definition that stresses the nation v/s nation dialectic involved in the problem of competitiveness: "World competitiveness is the ability of a country or company to, proportionally, generate more wealth than its competitors in the world markets" (Geneva, 1994, quoted by Aiginger, 1996:125). Fagerberg (1996) identifies three basic constituents of competitiveness. Firstly, competitiveness is a relative concept since it involves the comparison of performance across economic units. As Lall (2001) informs, both the elaboration of competitiveness indicators and their comparison are however extremely intricate as "the phenomenon is too multifaceted and complex to permit easy measurement" (ibid:1520). Secondly, competitiveness refers to different economic units including firms, industries as well as national (and sub-national) economies as a whole. Thirdly, competitiveness, when applied at the level of countries, can relate either to qualitative features (i.e. the well being of population) or to more quantitative features (i.e. trade performance of domestic industries). Defining the correct unit of analysis to measure competitiveness, how different economic units relate to each other, and which are the rationales for policy, have been and still are sources of greater controversy (Aiginger, 1996; Boltho, 1996; Camagni, 2002; Krugman, 1994, 1996; Lawton, 1999). It is not my intention to provide a detailed account of the debate on the validity of the concept of national competitiveness. Rather, in the review below, I will stress some aspects concerning the complex relationship between competitiveness and IP.

In the industrial competitiveness debate, many studies agree that the 'firm' is the correct unit of analysis (Porter, 1990; UNIDO 1999). Porter, a leading academic in this field, proposes to substitute the concept of national competitiveness with that of competitiveness of "specific industries and industry segments" (1990:9). He understands that the firms and not nations compete in the international market. Hence the key question for Porter to be

answered is "why do firms based in particular nations achieve international success in distinct segments and industries?" (ibid:18). Porter's answer relies on the productivity with which a nation's resources (mainly capital and labour) are utilised (understanding productivity as the value of the output produced by unit of labour or capital). Furthermore, Porter maintains that a country is competitive when a concentration of competitive firms and sectors exists in that given country, since a country cannot be competitive in all industries. Some critics question Porter's argument by claiming that "a country can in principle be [for instance] the technological leader in most industries"; namely, the US in the aftermath of WWII (Aiginger, 1996:123-4).

In my view the debate on the concept of competitiveness became more controversial when competitiveness policies began to be implemented. In fact, during the 1990s competitiveness became the key concept in the policy agenda of powerful and influential international organisations such as the OECD, EU and The World Economic Forum (WEF). The controversy generated by Krugman (1994, 1996, 1998), regarding the validity of the concept of competitiveness is well known. To Krugman the assumption that countries compete with each other for world markets in the same way that corporations do is "a poor metaphor" (1996:17-18). According to Krugman, countries "do not go out of business" as corporations do (1998:6). In his view, the economic success of a country is determined by domestic factors (notably, the US in which exports represents only about 10 per cent of GDP). It primarily depends upon the rate of (domestic) productivity growth, and not on productivity growth relative to other countries. Krugman claims that "[e]ven though world trade is larger than ever before, national living standards are overwhelmingly determined by domestic factors rather than by some competition for world markets" (1994:34). Hence national competitiveness can be used "as a poetic way of saying productivity, without actually implying that international competition has anything to do with it" (1994:35). His critique concludes by claiming that the dangers of the 'obsession with competitiveness' could result not least in the wasteful spending of public resources but most importantly, governments could try to embrace protectionism by following neo-mercantilist strategic trade policies aimed at promoting national firms at the expense of other producer countries (ibid).

Regarding whether countries compete as companies do, Lawton (1999) rightly points out two key issues. Firstly, it is widely accepted that in the global economy arena there are transnational corporations that enjoy high levels of autonomy and compete directly with one another for world market shares. In such a case, it is firms, and not governments (which tend to be either 'marginalized' or 'adopted' as partners by the international players) who compete. However, the great majority of firms (that is, the micro-, small- and medium-size firms) in most countries (notably, in developing countries) cannot be classified as transnational corporations. They have a distinct national identity and largely operate under the regulatory jurisdiction of one national state. Hence these firms' performance is critically linked to the governmental policies aimed at supporting industry. Lawton maintains that when this segment of firms penetrates international markets "it may be argued that both the individual firm and the nation are competing, given the clearly identifiable and strong ties between the firm and its national government and economy" (1999:7-8). Secondly, Lawton argues that because "access to market share globally is unequal" the government-firm equation is becoming increasingly relevant to the competitive success of the smaller firms in the context of what he calls 'the age of co-operation' (ibid). With this expression he refers to the policy framework essentially based on government-business partnerships emerged through the 1990s in the international setting. Consequently, Lawton concludes that raising productivity can be achieved through public policies, and that nations do compete "in that they choose policies to promote higher living standards" (ibid:4). Likewise, Aiginger (1996) maintains that aspirations among countries vary as regards both economic goals (i.e. export and income expectations) and 'preferences' between economic and social goals. Consequently, "an assessment of the competitiveness of a nation can be made only after filling these subjective notions with some content, the content, however, depends on past achievements and current aspirations" (ibid:125-6). Aiginger's contribution to this debate is valuable for this study because he delegates the scope of policy decision-making to individual countries, and their respective strategies for development, giving less importance to 'universal' benchmarking (international 'best practices') endorsed by mainstream institutions regarding competitiveness standards. The insights provided by Lawton (1999) and Aiginger (1996) to the debate on the issue of competitiveness are key arguments for the policy agenda in developing countries. These countries often have scarcely internationalised manufacturing industries, on the one hand, and, on the other hand, they have serious structural deficiencies which make their standards

of (international) competitiveness far from those observed in industrialised countries. The following section presents a model of national competitiveness policy, from which I will start to try to place into context the issue of competitiveness in developing countries.

2.3. 'Models' of competitiveness and critique

Some interesting models of competitiveness were generalised towards the end of the 1990s, along with respective policy recommendations (i.e. UNIDO, 1999; Lawton, 1999). I will focus here on the work by Sercovich *et al* (1999) for the United Nations Industrial Development Organization (UNIDO), due to its particular concerns with the issue of 'manufacturing competitiveness' in developing countries.

Like other approaches already discussed, the UNIDO's model argues that the firm is the right unit of analysis to measure manufacturing competitiveness. It includes three different aggregate levels of firms to the policy design: the competitive firm (firm-centred policies); the competitive subsector (subsector-specific policies); and the competitive manufacturing sector (industry-wide policies). To the UNIDO's model, a 'competitive firm' is one that: 1) Stands at the best practice frontier, in terms of production and management, being cost-efficient, quality-oriented, dependable, flexible and innovative; 2) has accumulated significant human and physical capital endowments, as well as intangibles, with demonstrated productive and technological capabilities; 3) has a superior economic and financial performance. A 'competitive subsector' in turn is one in which "its representative firm is competitive, in the sense that firms, on average, produce a competitive output, as measured by the ability of the subsector competitively to supply domestic and international markets" (ibid:85). If this is the case for both the subsector and manufacturing sector, the model understands that "this constitutes *prima facie* evidence that the country's macroeconomic prices and systemic costs are in balance and that country is endowed with sufficient human, material and institutional resources to be competitive" (ibid:85-6) (emphasis in original). With regard to policy recommendations, this model put forward the

concept of 'capability building', by claiming that 'industrial development policies'[9] aim "at increasing the productivity of resources in the medium- and long-run through capability building" (ibid:9). As observed from the quotation, the concept of 'capability building' becomes a key and wide-reaching one within this model. As the UNIDO model notes, capability building "refers to skill enhancement, scientific and technological progress, capital accumulation, quality upgrading, resource mobilization, environmental sustainability and market, institutional and regional development" (ibid:9). Both the policy areas and the battery of instruments derived from this model are exposed in Table 1 below. It includes an order of priority to the policy areas recommended, regarding the type of economy in question (see left-hand column in Table 1). The world's economies are classified as: a) successful industrialised economies (i.e. East and South-East Asia); b) economies turning towards outward-oriented strategies (i.e. Brazil and India); c) the least developed economies (the world's poorest countries); and d) economies in transition (the former command economies).

[9] 'Industrial development policies' is the concept utilised here since it interprets best the issue of competitiveness and allows the model to surpasses the old IP concept.

Table 2.1. Policies for manufacturing competitiveness

Policies	Countries a	b	c	d
1. Firm-centred policies:				
a. Quality and productivity programmes	+	++	+	++
b. Training and skill acquisition	+	++	++	+
c. Investment incentives	-	+	+	-
d. R&D incentives	++	+	-	-
e. Small-scale and micro-enterprise support	+	+	++	++
2. Subsector-specific policies:				
a. Trade and commercial policies	+	++	+	++
b. Subsector restructuring	+	++	+	++
c. Targeted capacity creation	++	+	-	-
d. Cluster support (with regional focus)	-	+	++	+
e. Government-private sector networking	++	++	++	++
3. Industry-wide policies –reduction of country costs:				
a. Macroeconomic and public finance costs:	+	++	+	+
Exchange rate	++	++	++	++
Real interest rates	++	++	+	++
Tax rates	-	++	+	++
b. Physical infrastructure:	-	++	++	+
Transportation	+	++	++	+
Telecommunications	-	+	++	+
Energy	-	+	++	+
Environment	+	+	+	++
c. Social infrastructure:	-	++	++	+
Education and training	-	+	++	+
Health	-	++	++	++
d. Regulatory and business environment:	+	+	++	++
Judicial system	+	+	++	++
Foreign Direct Investment regulations	-	-	+	++
Competition policies	+	+	-	++

Notes: Country Groups:
A. Newly industrializing economies
B. Newly opened economies
C. Less developed countries
D. Transition economies

Priority degrees of policies:
++ high priority
+ moderate priority
- low priority

Source: UNIDO, 1999

Five critical issues are raised by UNIDO model regarding competitiveness. Firstly, this ideal-type is built up on the basis of 'objective' criteria of measurement, which in theory can apply to manufacturing firms in any context. Likewise, it assumes that the so-called 'best practices' constitute the main benchmarking for industrial competitiveness. The

concept of 'best practice', despite its usefulness as a point of reference, can be problematic. Best practice (i.e. a production or managerial technique or strategy) is 'temporally' and 'spatially' determined. That is, best practice for a firm, at one determined moment and/or in a determined context, may well not represent best practice for another firm in other moment and/or in other context.

Secondly, this model is built on the idea of convergence of practically all areas of economic policy:

> "because of the multiplicity of tasks and market failures it [competitiveness] addresses, industrial development policies need to be finely tuned to the working of the economic and social incentive system and to take full note of the reciprocal influence between macro- and microeconomics, monetary and real variables, short- and longer-term elements and economic and social factors" (ibid:9).

In other words, competitiveness, like some IP approaches, has also become an all-encompassing concept. This fact represents a complex problem for this research. As Chang concludes "[s]uch a practice overloads the concept of industrial policy, rendering the concept meaningless" (1994:59). I would not like to steer this study in that direction. In fact, industrial policy now seems to be essentially micro- and meso-economic in nature. It is important to highlight here, however, that for public and private actors responding to a world-survey on industrial development policy and competitiveness (conducted by UNIDO in 1996) the good connection between industrial development policy and macroeconomic policy stood out 'the most important' factor in the issue of competitiveness (ibid). As seen in Chapter 1, the good fit between IP and macroeconomic policy is identified as one of the key issues in the developing of the successful Asian experiences of industrialisation.

Thirdly, unlike the roles previously played by governments under the old IP framework, UNIDO's model put forward the idea of 'government sponsorship'. Governments in the new framework for industrial development should operate "as inducer and catalyser rather than driving force" (ibid:6). This change of nature regarding the main actors of IP reflects not only "the changed consensus of the role of the government in society" as Wren (2001:857) notes, but also the influence that some components of private sector (notably, the largest companies and international players in a economy) have accumulated in society

regarding policy decision-making issues. In this regard Cowling and Sudgen warn that currently large corporations concentrate power so as to enforce their own corporative interest over any national, regional or collective interest, which is a source of 'systemic inefficiencies' in market economies (1990). The decentralised democratisation at the level of firms and the territories where they are located, is seen here as a key issue for IP (Cowling and Sudgen, 1995). I will come back to this point in Chapter 3. The UNIDO model however assigns important roles to governments to be played in partnership with the private sector. Through their different agencies, governments should work alongside with the private sector in order

> "to open communications channels, establish an effective partnership aimed at spreading best practice, benchmarking, assisting development of subsector export strategies, promoting SMIs [small- and medium-size industrial enterprises] in the context of supply chain development and, ultimately, attempting to address key determinants of competitiveness in partnership and cooperation with industry" (ibid:97).

In particular, UNIDO asserts, "governments provide support for firms to penetrate international markets" (ibid:97).

Fourthly, unlike the old IP legacy, the nature of the policy agenda put forward by UNIDO is (like the WEF model, based on Lawton 1999) 'horizontal' rather than sectoral. Under this model, the policy should necessarily be neutral regarding its conception, design, delivery and aims. In this regard, Lawton concludes, "the emphasis of public intervention in the market has shifted from vertical actions promoting or protecting specific companies or business sectors, towards horizontal measures which encourage trans-sectoral functional development" (1996:226). Critically, horizontal measurements "promote enterprise in the global market place" by facilitating market-driven structural adjustment (ibid:6). The relationship between policy in practice and the metaphor of 'horizontality' (as the policy's main rationale) presents significant problems of applicability for policy-making activities. UNIDO recognise this and note that "the practice of policy implementation has shown that many policies need, perforce, to be either targeted at or configured to specific subsectors" (ibid:92). In this sense, trade and commercial policies, industrial restructuring, and cluster policies are only some examples of policies with an almost necessary (direct or indirect) sectoral content. Even policies that are by definition identified as 'horizontal', such as

cross-sectoral training programs and skill acquisitions, often become sectorally-determined so that they can function. Likewise, public/private partnerships and networking practices commonly are structured around subsector issues. It is worth pointing out that this model has an oversight with respect to the ways in which public/private partnerships are build up under the new settings. This omission is no less important since UNIDO maintains that "[r]edefining policy as vision and the basic implementation mechanisms as shared public-private efforts would, in essence, be the making of a new approach to industrial development policy" (ibid:96). The tension existing between 'horizontality', as contrary to 'verticality' (sectoral or targeted policies), has led some scholars to talk about the existence of a necessary degree of 'obliquity' in both the policy design and its implementation (Vazquez Barquero, 1995). Hence the concept of 'horizontal' policy is, at least, a misleading concept. I argue that the firms both are different in nature (as Nelson claims, firms 'differ' in different aspects –1991-), and therefore they cannot be (realistically) tried as identical, and their proximity to public policy varies. In both cases the degree of 'horizontality' of a policy depends critically upon issues such as firm- size, capabilities and resources, location and network of relationships. Hence the accessibility to 'generic' policy instruments (aimed at firms as a whole) may not fulfil the criterion of neutrality with which they were originally designed. Whether intentionally or not, 'horizontal' policies might well end up picking winners.

Finally, establishing the exact relationship between competitiveness policy and industrial policy is rather problematic. In a seminal work, Johnson (1984), saw competitiveness policy as identical to (the old) IP. To Johnson the former refers to all those government policies "intended to develop/retrench various industries in a national economy in order to maintain global competitiveness" (1984:7). When this definition of IP is restricted to those aspects that affect particular firms and industries, competitiveness policy (which, as the UNIDO's model shows, includes macroeconomic aims) is broader. This would suggest that the policy measures adopted are dependant on the definitions that are used. In this sense, Wren notes that "where industrial policy is focused solely on competitiveness, and competitiveness policy is intended only to change the intersectoral allocation of resources"(2001:851) they are both the same. To the contrary, "where competitiveness policy deals only with the economy as a whole then the policies may have nothing in common" (ibid:851). Wren provides another interesting observation with respect to his

analysis on the Competitiveness White Papers in the UK (notably, the 1998 White Paper). He rightly asserts that that the wide view of competitiveness taken by these papers (which coincide with the UNIDO's model) "potentially broadened the scope of industrial policy, but the coincident shift in the nature of policy from 'sectoral' to 'horizontal' measures has in fact much reduced its content" (ibid:851). Hence, Wren argues that IP may be best seen as a component part of competitiveness policy. In particular, "it is that part of competitiveness policy which is concerned with altering the intersectoral allocation of resources, including that at the firm, industry or sector level" (ibid), and, in which, "there is no substantial redistributive or stability objectives" (ibid:857). From a different perspective, DeMartino (1998) develops a strong critical evaluation of what he terms the 'competitiveness-enhancing perspective'[10]. In DeMartino's view, "competitiveness became a means by which to salvage state intervention in pursuit of socially benevolent outcomes" (ibid:27). That is, during the period of 'ideological transition', operated in the 1980s, in which neoliberalism came to articulate the critique against state interventions. Under the adverse ideological circumstances of the early 1980s in which IP was 'ostracised' (see Chapter 1), the competitiveness advocaters, (which mostly come from ideas closed to the supply-side policy approaches), had to 'adjust' their theoretical-ideological principles to the new circumstances. According to DeMartino (ibid:39), the conceptual/ideological transition from IP to competitiveness policy implicated a substantial shift in the policy framework. Industrial policy previously had "sought the creation of genuine equality, opportunity, full employment, and stability" (1998:26), rather than competitiveness of firms and industries *per se*. To DeMartino the following constitute the main foundations of this transition. Firstly, in the framework of the competitiveness policy "the market is now taken to be the optimal form of economic integration. The liberalised global market sets the context within which firms must prosper or perish" (ibid:39). Secondly, the tripartite systems of government of the IP (including state, private sector and unions) have given way to "bilateral capital-state partnerships"(ibid). As a result, the protection of workers' livelihoods "must occur through the market, in place of industrial policy's emphasis on protecting workers from the market"(ibid). Finally, the market "is taken to be the inevitable and/or most desirable form of economic organization, so that industrial strategies must conform to its dictates"(ibid). Hence the "competitiveness" advocaters, DeMartino

[10] DeMartino includes in this perspective a wide range of approaches such as flexible specialisation, human capital, management theorists (i.e. corporate governance) and institutionalist economists.

concludes, permanently need to show how market success can be tied to socially benevolent outcomes (ibid:39). Though the focus of this thesis is neither the distributive problem nor the associated search for the 'creation of universal equity and opportunities' in an economy, DeMartino's critical contributions remind us that these are aspects worthy of consideration by the IP framework under the paradigm of competitiveness.

2.4. Concluding remarks

The central conclusion of this chapter is that international standards of competitiveness and the so-called 'best practices' should be considered but only as points of reference. This is, beyond any criteria or standard that a given country or territory chooses in assessing its competitive performance. Raising productivity rates at the level of 'residential' firms or industries often entails undertaking ongoing processes of upgrading and 'catching-up', and therefore learning, following international standards regarding 'soft' (i.e. managerial techniques) and 'hard' (i.e. capital goods) technologies. This argument does not maintain that the 'external variable' was not an issue in the old IP framework, but it clearly was not the main one. This was the case for the great majority of manufacturing firms targeted by the IP in developing countries (notably, Latin America) under the ISI model, with the renowned exception of the East Asian countries. As UNIDO claims, the old IP aimed "at changing the sectoral allocation of resources through short-run redistributive measures such as subsidies, import restrictions and credit allocation" (1999:9). The aim of manufacturing competitiveness policies instead "is steering countries towards better focused policies for raising productivity, upgrading skills and technology, promoting innovation, attaining dynamic efficiency gains from learning, specialization and stimulating competition rather than towards protectionist policies, competitive devaluations and the like" (ibid:8).[11] At the same time, it is necessary to insist again that the consequences of a 'do nothing setting' as regard to international competitiveness in increasingly open market economies can be ruinous.

[11] Although to UNIDO there is still room for what they call 'industrial development policies' in the new context since "the convergence towards international policy and best practices does not mean the demise of national policy" (ibid:7).

The second conclusion derives from the context in which the new policy framework (whether IP or competitiveness policy) emerges and is designed and implemented. My specific concern relates to the real 'content' of such a policy framework regarding its influence and capabilities for raising productivity and boosting competitiveness (or at least 'international awareness') in developing countries. In other words, my question is how it could cope with all the expectations discussed above set by UNIDO without enough influence on the main public decision-making spheres and in a context of rigorous budgetary restriction and generalised lack of capabilities. I will return to the discussion about this particular kind of contextual restrictions in the concluding chapter of this thesis.

The following chapter systematises and critically discusses the main theoretical approaches that shape the core of the NIP literature.

CHAPTER 3
The New Industrial Policy Thinking

3.1. Introduction

Chapter 3 attempts to move the argument on from previous discussions concerning IP towards a new rationale which explores IP in light of the emergence of 'paradigms of competitiveness'. Through the examination of different traditions of thought that seek to conceptualise the transition towards new forms of competition, I attempt to synthesise supply-side economics into a cohesive framework which I term 'New Industrial Policy' (NIP).

The chapter is divided into four subsections. Section 3.2 outlines the main philosophical foundations on which the new IP literature is based. That is, those principles of economic theory, particularly those concerning economic policy, derived from the institutionalist and evolutionary economic critique of the neo-liberal tradition.[12] Sections 3.3 and 3.4 present and discuss both of the main schools of thought concerning the new industrial policy literature and their respective policy frameworks on industrial competitiveness and development. In particular, Section 3.3 analyses the literature concerning innovation, learning and knowledge economics, whilst Section 3.4 reviews the available literature concerning regions, localities and local governance. Finally, Section 3.5 summarises and systematises the main theoretical claims of the New Industrial Policy thinking.

3.2. Institutional[13] and evolutionary economics

Institutionalist and evolutionary economics (as well as economic sociology) provide an important part of the theoretical base on which new supply-side economics is recently

[12] By neo-liberalism I mean the school of thought that emerged in the 1970s as a result of an alliance between neoclassical economics, which provided most of the analytical tools, and the Austrian-libertarian tradition, which provided the political and moral philosophy (Chang, 2002).

[13] By 'institutionalist' economics I have in mind the so-called 'Old Institutional Economics', based on the works of Karl Marx, Joseph Schumpeter, Thorstein Veblen and Karl Polanyi, as opposed to the 'New Institutionalist Economics", based on recent works by Oliver Williamson, Mancur Olson and Douglas North.

being built up. Historical antecedents of institutionalist and evolutionary economics can be traced back to the classic works of Karl Marx, Joseph Schumpeter, Thorstein Veblen (Chang, 2002; Hodgson, 1988; Ingham, 1996). Marx (1867), and Schumpeter (1934) later, informed us about the turbulent and protean nature of the capitalism system. Marx initiated a fundamental analysis of economic theory by highlighting the determinant character of technological change on the structure and functioning of the socio-economic system. Likewise, Marx informed us of the social nature of both individuality and the economic system as a whole, in doing so challenging the methodological individualism exhibited in mainstream economics. Schumpeter, in turn, broke the bonds of equilibrium in mainstream economics by asserting the key role played by innovation and entrepreneurship in both economic change and evolution. Schumpeter's critique of mainstream economics gave rise to meaningful theoretical developments regarding the dynamic and evolutionary nature of economic processes. Finally, Veblen, who is regarded as the originator of the institutional school, informed us of the vital importance of institutions and institutional change to economic analysis and theory. Veblen was particularly concerned with both the ways in which actions are moulded by circumstances and the evolutionary character of economic processes.

Currently, institutional economics can be defined in terms of:

> "(a) the rejection of individualistic assumptions of hedonism and exogenous preferences in favour of a more organicist conception of individual agency; (b) the rejection of an exclusive emphasis on equilibrium in favour of the idea of cumulative causation; and c) the adoption of institutions as the main units of analysis, rather than atomistic individuals" (Hodgson, 1994:377).

As regards the debate on point 'c' above, it is vital to point out that the 'Old Institutional Economics' held in this study differs from the 'New Institutionalist Economics' mainly "in seeing institutions not simply as constrains on the behaviours of the pre-formed and unchanging individuals [...] but also as shaping the individuals themselves" (Chang, 2002:551-552). Similarly, economic sociology, or more specifically, the so-called 'New Economic Sociology', has laid its foundations on three main programmatic propositions: "1. economic action is a form of social action; 2. economic action is socially situated; and 3. economic institutions are social institutions" (Grannoveter and Swedberg 1992, quoted

by Ingham, 1996:266). In sum, sociology informs us that the market is socially constructed and that actions of individual economic actors are necessarily embedded in wider networks of relations (Bagnasco, 1988; Granovetter, 1985). These three principles recognise roots in the critical sociological tradition with respect to mainstream economics. According to Ingham, sociology differs from the former in the following three senses:

> "(i) social and economic structures have properties that cannot be reduced to those of individuals taken singly; (ii) social and economic action has 'meaning' that cannot be reduced to the calculus of want satisfaction or utility maximisation [and]; (iii) social and economic life is based upon power (and associated) 'asymmetries' and inherent uncertainty" (1996:252) (emphasis in original).

Finally, evolutionary economics focuses its critique on both the narrow assumption of maximizing rationality, by addressing problems of 'information' and 'knowledge' that economic actors face and by questioning the very nature of their rationality, and the static assumption of time and equilibrium in mainstream economics. That is, by "shifting instead towards a view of economic phenomena as being largely dependent upon the result of learning by economic agents who are moving irreversibly through time" (Hodgson, 1988:4-5). Due to the evolutionary and dynamic nature of economic phenomena, recognition here can be given to the following factors:

> "long-run development rather than short-run marginal adjustments [...] qualitative as well as quantitative change, as evolution means structural development and not parametric change [...] variation and diversity [in the process of selection] [...] non-equilibrium as well as equilibrium situations, as evolution applies to open systems which are often far from equilibrium situations [and] the possibility of error-making and non-optimizing behaviour, as these are part and parcel of both human learning and evolution itself" (Hodgson, 1994:223).

Opinions on IP are more varied, if not divergent. Interestingly, Chang (2002) has recently attempted to systematise the foundations of a new supply-side economics to what he terms an 'Institutionalist Political Economy' (IPE). IPE sensitises three key theoretical claims for this research regarding the relationship between economy, state and politics. Firstly, IPE addresses the 'institutional complexity of the market', in the wider sense of the word, in contrast to the view that 'markets develop naturally' (Stiglitz, 1992), as maintained by neo-

liberals, or the view that 'in the beginning, there were markets' (Williamson, 1975), as argued by the New Institutionalist Economics. Chang argues that,

> "[e]mphasising the institutional nature of the market [...] requires that we have to bring politics explicitly into the analysis of the market [since] markets are in the end political constructs in the sense that they are defined by a range of formal and informal institutions that embody certain rights and obligations, whose legitimacy (and therefore whose contestability) is ultimately determined in the realm of politics" (2002:554).

Secondly, in order to overcome the limitations of the neo-liberal assumption that the agents that make up the state (i.e. politicians and state bureaucracy) have 'pre-formed motivations that are selfish', IPE holds that "human motivations ['preferences' in the neo-liberal discourse] are varied and interact with each other in complex ways [so that] individual motivations are fundamentally formed by institutions that surround the individuals" (ibid). Finally, Chang argues that "the claim that politics inevitably corrupts the market is problematic, not only because markets themselves are political constructs but also because the notion of an 'uncorrupted' market that the neo-liberals have is based on a particular set of political beliefs that cannot claim superiority to other sets of political beliefs" (ibid:556). In this sense, IPE reinstates the place of 'positive' politics in economic policy, by placing emphasis on the role of political factors in determining state policy. Specifically, to Chang politics "is an institutionally structured process, not only because institutions shape people's political actions, given their motivations and perceptions, but because they influence people's perception of their own interests, of the legitimate boundary of politics, and of the appropriate standards of behaviour in politics" (ibid).

The reading we have here is that the economy is an instituted process, socially constructed and dynamic in nature. This means that markets are formed by a variety of institutional fields (ranging from formal institutions, such as laws and organisations to informal ones, such as habits, routines and values). Contrary to the orthodox view on the economy, the emphasis here "falls on processes of institutionalisation as a means of stabilizing and interpreting an economy that is essentially non-equilibrating, imperfect and irrational"(ibid) and in which economic process largely depends upon the result of knowledge and learning by economic actors (Hodgson, 2001:250). Therefore, it is central to the framework proposed here that "economic progress is only possible in what, from an equilibrium

viewpoint, is an inefficient world" (Metcalfe, 1995:28). Furthermore, there is a call here for reinstating the place of politics (understanding 'politics' as an institutionally structured process) in the analysis of the economy and market; the result of the political process in determining state policy and; finally, the 'context-specificity' and 'path-dependency' of the political and economic process in determining patterns of development. As Hodgson concludes, "[t]o understand fully the ways in which human agents are moulded by institutions, we have to look at particular cultures, circumstances and cases" (2003:173).

Two major strands of thought that are discussed throughout this chapter enable us to think of the economy as an instituted process, socially constructed and dynamic in nature as claimed above. Specifically, Section 3.3 discusses the literature in which the processes of learning, knowledge creation and development of innovative capabilities by economic agents, notably firms, is placed at the centre of explanations regarding competitiveness and economic success. Though firms are the key unit of analysis these approaches maintain that learning and innovation are collective processes. Hence the institutional set up surrounding firms can help to enhance (or to constrain) the processes mentioned above. This issue is also addressed in Section 3.3. Finally, this section examines the policy implications of this strand of the NIP literature. Section 3.4 discusses a second strand of the literature focusing on the study of regions and localities, and arguing that geographical proximity is an important component for economic organisation and competitive advantage. Local institutional set ups and communities as a whole, are considered as key actors for economic success. Hence local governance related to socio-economic and political organisation is seen as a key issue for economic policy. All of these issues are also analysed in Section 3.4. Finally, this section examines the main policy implications supplied by this literature as regards competitiveness and economic success. Therefore, these two strands of thought provide conceptual and methodological insights that enable us to think of new IP rationales and agendas of policy that are able to cope with the new competitive settings associated with paradigms of competitiveness.

3.3. Innovation, learning and knowledge economy and the NIP thinking

3.3.1. Introduction

Innovation, learning and knowledge have become central concepts in recent discussions concerning industrial competitiveness and economic growth in advanced economies (OECD, 1992, 2000). It is argued that in a context of increasingly important non-price factors of competition (i.e. quality products, tailored customer production and related services), segmentation of markets (as a result of changing tendencies in consumer demand), shortening of product life-cycles and, therefore, changing business environments, the capacity to learn and innovate is critical for the survival of firms. Innovation, "is said to account for 80 per cent of productivity growth in advanced countries, and productivity growth accounts for some 80 per cent of Gross Domestic Product (GDP) growth overall" (Freeman, 1994b, quoted by Cooke *et al*, 2000:1). This places the importance of innovation in context and demonstrates why it is critical for competitiveness. This is without doubt a major insight over the last few decades deriving largely from neo-Schumpeterian and evolutionary approaches (Dosi *et al*, 1988; Freeman, 1988, 1994; Nelson and Winter 1982; Lundvall, 1992; Johnson, 2002; Johnson and Lundvall, 1994; Edquist *et al*, 2002; Metcalfe, 1995).

The complex set of relations and interdependences between 'the triad' of innovation, learning and knowledge (ILK) cannot be reduced to a single and mechanical description. However, in order to get started, I am (schematically) going to conceive the 'ILK triad' in the following way: to be able to 'innovate' (or develop new knowledge), firms use 'knowledge' (input), which is considered as 'the most fundamental resource' in the modern economy (Lundvall, 1992:1). Though knowledge as an input can be 'existing' knowledge, in order to innovate, firms often 'generate' knowledge (output) and/or 'acquire' it. Knowledge creation is a result of 'interactive' practices between economic agents carried out inside and outside the firm (through the firm's network of relations), all of which essentially involves 'learning'. Learning thus becomes 'the most important process' (Lundvall, 1992:1), which is predominantly interactive and, therefore, socially embedded.

Let me briefly analyse each one of these concepts separately in order to place how they converge in the policy debate of the new industrial policy (NIP) literature.

3.3.2. Innovation

According to Metcalfe, the evolutionary policy maker's central concern "is the innovation process, the operation of the set of institutions within which technological capabilities are accumulated" (1995:31). Innovation can be social, institutional and technological. Literature concerned with innovation mostly (or rather, originally) refers to technological innovation. I am going to claim that often all the above mentioned forms of innovation are necessary for technological innovation to take place. However, there is no single pathway to success. The nature of innovation varies by industry and size of firm, and is clearly influenced by different national and sub-national cultures. In other words, every firm, industry and industrial culture produces and commercialises 'original knowledge' in different ways. Following Nelson and Rosenberg (1993), innovation can be broadly defined as the processes by which firms master and put into practice products and manufacturing processes that are new to the firms, if not also to the markets in which they operate. As outlined in the previous section, interest in innovation is however not new. Schumpeter (1934), who first situated innovation at the heart of economic theory, saw it as the driving force of economic development in capitalism. In his view, capitalism suffers permanent processes of 'creative destruction' as result of the introduction of 'new combinations' in the market, or innovations. The famous Schumpeterian definition of innovation, or 'the carrying out of new combinations', marked a turning point in economic theory. The evolution of critical debates on innovation theory is well documented elsewhere (see Dosi *et al* 1988; Freeman, 1994). My aim here is not to carry out a full review of these debates. Instead, it is to discuss the foundations on which the NIP literature concerning innovation is based and how previous misperceptions of the nature of innovation held by governments, industry and academia were overcome.

Two major theoretical advances, largely based on neo-Schumpeterian thinking, laid the foundations of a new approach to industrial policy. The first relates to the role of incremental innovations, whilst the second relates to the idea of 'non-linear' model of innovation. As regards the first, new research findings follow the:

> "discovery of the major contribution to the economic performance of firms made by incremental innovations not just radical ones [a central issue to incorporate in studies on innovation to the largest part of firms in any economy which do not generate path-breaking innovation, notably the smaller firms]; recognition of the importance to productivity growth of transmission of fundamental scientific findings into firms by new recruits from universities or research institutes; understanding of the centrality to successful innovation of social interaction through networks involving diverse innovation actors; realization of the fundamental role played by innovation users in the development of successful innovation and associated firm performance improvements" (Cooke and Morgan, 1998:196, based on Freeman, 1994).

As regards the second advance, new thinking has sought to move on from an earlier model of innovation in which technological innovation was conceived as a 'linear' and 'sequential' process which went from basic 'upstream' scientific research (such as R&D developed inside laboratories in universities or companies) to applied 'down-stream' activities of production, production organisation and marketing. This linear or 'science-push' model of innovation is seen to suffer from three main weaknesses: "it exaggerates the role of basic science, it invokes an unwarranted hierarchy of knowledge, in which 'pure' scientific knowledge is ranked above 'applied' technical and engineering knowledge, and it fails to appreciate the need for continuous interaction and feedback" (1998:12, based on Kline and Rosemberg, 1986; Aoki and Rosenberg, 1987) (emphasis in original).

Consequently, today there appears to be a broad consensus on the representation of innovation as an interactive and socio-organisational process based on cumulative practices of learning (OECD, 1992), all of which takes place in and out of the firm and requires continued feedback loops between 'upstream down-stream' and 'external-internal' fluxes. Innovation thus is no longer either seen as an act of heroic individualism (as expressed by the Schumpeterian innovator) or as a linear sequence of deliberate 'top-down' (R&D) activities. Although recognition is given now to innovation as a socio-interactive process into which converge a multiplicity of actors, the firm is conceived as the main 'collector', 'repository', 'processor' and 'generator' of productive knowledge and, consequently, the key agent of innovation. The dialectic of 'intra-firm' and 'extra-firm' determinants of innovation, that is, between those determinants in which either 'the firm' or 'systemic factors' become the main unit of analysis, underlie and cut across all of the debates on the

'ILK triad'. This can be understood in the following way. The recognition of both variety among agents (firms for some reason 'differ' from each other) and the uncertainty underlying the economic system led evolutionary scholars to think of the firm. This, in turn, led to the principle of search or selection, that is, a process of trial and error enabling the creation of the new. Finally, it led back from the firm to its core determinants, the innovation process, which, as seen already, has a social nature. In Nooteboom's words, "[t]he question concerning the sources of innovation needs to focus on how firms create and adapt resources and competences, in particular cognitive competence, by themselves and in interaction with each other" (1999:129-130). Hence the firm and the firm's network of relationships become key units of analysis in evolutionary and institutional economic thinking.

My aim here is not summarise advances in the theory of the firm. Instead, I outline below some issues that a policy framework should take into account as regards firms. Indeed, there is not an articulated or unified theory of the firm that fits the needs of the institutional and evolutionary tradition (Nelson, 1994). Valuable advances in this field have been made by approaches based on the study of firms' transactions and boundaries (Coase, 1937; Williamson, 1975) and the evolution of firm's competences (Penrose, 1959) and 'core' competences (Prahalad and Hamel, 1990). Nelson (1994) for example concludes that it is convenient to focus on three different though interconnected features: the firm's 'strategy', 'structure' and 'core capabilities'. Possible questions to ask in relation to the theory of the firm regarding issues of strategy, structure and core capabilities (rather than as a nexus of contracts) are numerous[14], as are the disciplines concerned with it (notably, corporate management and business studies, psychology and sociology of organisations, industrial organisation and industrial economics). More recently, the knowledge-based approach (see Section 3.3.3), in which the firm is considered as a 'processor of knowledge' (Fransman, 1994), has come to supply a valuable perspective in the theory of the firm and innovation studies. The firm here is conceived as "a locus for setting up, selecting, using and

[14] Namely, a) strategy: including the analysis of aspects such as behaviour and culture of both the firm and entrepreneurs themselves (i.e. whether they are risk-takers or adverse to risk-taking; defensive or offensive); b) structure: including the analysis of features such as vertical or horizontal integration; network-firm; family-integrated firm, multidivisional-firm, strategic alliances, etc; and c) competences: including the analysis of those products and/or processes in which the firm both 'does things well' and 'does things better' (core competences) than the other firms or present competitive weaknesses. All these aspects without doubt have an extreme importance in the innovation process.

developing knowledge" (Amin, 2002:2). This approach recognises that competences constitute the main sources of the competitiveness of a firm and, "[i]n doing so, it brings to the fore in the theory of the firm the problem of how such knowledge is generated, maintained, and transmitted" (ibid) in order to maintain economic performance. Learning, 'the main process' in the modern economy, is an essential part of the answer to the problem posed above. How firms learn or how learning occurs and is realised is analysed below.

3.3.3. Learning

The conceptualisation of learning developed alongside the conceptualisation of innovation and like the latter, became part and parcel of policy debates (Johnson and Lundvall, 1992; Metcalfe, 1995). Johnson and Lundvall maintain that a key policy role in a 'learning economy'[15] is "to support learning processes and, sometimes, processes of forgetting" (1992:301). Similarly, Metcalfe argues "the adaptive, evolutionary policy maker is far more concerned to influence process than to impose predetermined outcomes, far more concerned to enhance the adaptive, learning capabilities of firms" (1995:31). Let me start with the problem of definition.

In economics, learning is associated with the process of creation and development of competitive knowledge, or innovation, which takes place in and out of the firm, that is, through the 'institutional set up' (Lundvall, 1992) with which the firm interacts and develops business links. Malerba (1992) identifies a set of attributes regarding learning that should be considered by a policy framework: a) learning is costly, in terms of time, resources, and required capabilities; b) learning occurs in different parts of the firms, since 'competences'[16] often appear distributed among different 'individuals' (a key issue in the case of SMEs), 'divisions and departments' and 'communities' within the firm; c) learning involves interaction between internal and external sources of knowledge (and therefore, it critically involves social relations and interaction among agents); d) learning is cumulative

[15] The notion of a 'learning economy' has been built up from the consideration of the appropriate institutions to sustain learning culture in 'learning institutions' (Johnson and Lundvall, 1992).

[16] Competences involve sets of routines, (differentiated) skill, know-how and abilities which express the efficiency of problem-solving procedures in a firm, they express what a firm 'can do well'.

(it is evolutionary in nature and therefore history 'matters' in the cumulative process); and e) it supports localised and primarily incremental innovation.[17]

A policy framework should also be informed about different types of learning and stages in the learning process. Metcalfe (1995, based on Malerba, 1992) has grouped the different types of learning identified in the literature in three broad categories. Firstly, there is learning which is a product of 'learning-by-doing' (Arrow, 1962) and learning-by-using (Rosenberg, 1982). Learning in this stage "is conceivable as the repetition and improvement, through practice, of a task [and then] this assumes practices are, to some extent, borrowed or copied from elsewhere, implemented and adjusted in the process of use" (Braczyk *et al*, 1998:12); secondly, learning which involves interaction with external sources of knowledge (whether other firms, suppliers, customers, or science and technology agencies) or 'learning-by-interacting' (Lundvall, 1992). This stage may be seen as a closer approximation to a well-developed learning culture (Braczyk *et al*, 1998); and, thirdly, internal or directed learning which is typically organised around formal innovation or R&D activities. Braczyk *et al's* (ibid) distinguish a further type of learning, or stage in a learning culture, when learning by interaction becomes a practice that occurs through established cooperative networks that enhance practices of learning and change. 'Strategic monitoring' and 'continuous improvements' thus are possible due to the fact that cooperative networks "have the capability to be *reflexive* [...] and to apply institutional memory and intelligence to the refinements constantly needed as systems have to adjust to their environment" (1998:13) (emphasis in original): 'learning-by-learning' (Stiglitz, 1987).

Due to the fact that learning and innovation involve a varied and fragmented set of technological, organisational and market knowledge, firms often have a limited capacity to undertake such a range of activities by themselves, thus requiring informal or formal co-operation with other firms (Lawson and Lorenz, 1999). The notion of 'network' has become a very useful tool to conceptualise the social and iterative nature of the learning

[17] In this respect Braczyk et al (1998) note "incremental innovation has become necessary for the survival of firms, requiring many learning interfaces inside and outside firms" (1998:13). A policy framework should then be informed with respect to the learning interfaces that may operate in the innovation process.

process.[18] In particular, inter-firm networks can be either more informal 'soft' networks of firms joining together to solve common problems, share information, or acquire new skills; or more formal 'hard' networks, involving firms joining together to co-produce, co-market, co-purchase, or co-operate in product or market development (Huggins, 2000:112). Likewise, the building up of 'trust' between partners in the networking process is considered to be critical to collective learning activities (Lorenz, 1999). As Lazaric and Lorenz note, "[t]rust is a kind of cement which allows partners to commit resources to collaborative endeavours in contexts where there remains an irreducible element of uncertainty over the outcome" (1998:209). In sum, the creation and development of competitive knowledge is (or should be) the result of the interface between different learning processes inside and outside of the firm, engineered by 'technological-pull' and 'market-push' criterion. However, it is crucial to recognise that such processes can be the result of both cognitive practices (manifest for example in 'conscious' practices of new knowledge acquisition and processing) and/or non-cognitive practices, which have been characterised as 'unconscious learning' (Wenger, 1998). Although the importance of 'unconscious learning' in the innovation process is not the main focus of this thesis, without doubt it leads us to question some important assumptions of the evolutionary and competence-based approaches on the theory of the firm (Amin, 2001; Lee, 2001).[19]

According to Malerba (1992), the nature of each learning structure in question (by-doing, by-using, by-interacting, by-learning, by-networking or learning through communities of practices) will produce and determine different patterns of innovation in the firm. Hence

[18] A rather 'empirical' (as opposed to theoretical) definition of inter-firm networks is that they "consists of two or more firms [and/or individuals] pursuing common objectives or working towards solving common problems through a period of sustained interaction" (Huggins, 2000:112).

[19] In an attempt to systematise a theoretical proposal in this sense, Amin concludes that the everyday sociology of knowledge highlights that a "substantial amount of learning is of a non-cognitive nature, situated in the practices of communities; practices, in turn, that are the source of both radical and incremental innovation" (2001a:24). This would suggest that within informal and self-organising communities of practice in the firm that novelty can be produced, "by mobilizing distributed knowledge and competences and blending varied forms of knowledge" (Lee, 2001:556). Learning in learning communities thus is 'the product of shared expertise, talk, sociability, argument and disagreement' (Amin, 2001a:16). It is this specificity of learning that permits enhanced exploration in order to generate new possibilities for the firm, rather than formal learning devices such as training courses, formal R&D and acquisition of new technologies. As far as the policy debate is concerned, Amin argues "[a]n understanding of inventiveness of communities of practice [...] shifts the debate in a different direction, by appreciating the centrality of 'boring' old things such as socialisation, sociability, work, and the practices of doing, for knowledge creation" (ibid:24) (emphasis in original). Without doubt this valuable contribution opens up a promising and innovative arena for policy debate, one indeed of very recent exploration in economic policy.

both the conditions of 'access to diversity' in sources of learning and innovation, and the incentives to the exploration of new learning structures become other key issues for a policy framework aimed at enhancing diversity and creativity in the discovering of novelty (Metcalfe, 1995). In Maskell's and Lundvall's view, "competitiveness can only be built on heterogeneity: on firms having control over something wanted by others or by firms being able to do something that competitors cannot do as well, as fast, or as cheap" (2002:364). Likewise, the critical importance of 'variety' and 'otherness' for competitiveness, expressed in strategic analysis regarding firms' customers, suppliers, competitors and new entrants in the market, brought Porter to conclude that "[n]ations gain advantage because of differences, not similarities" (1990:623). Having problematised the relationship between innovation, learning and competitiveness, the discussion now turns to the analysis of knowledge, the third component of the "ILK triad' in question.

3.3.4. Knowledge

In the introduction of this section I argued that knowledge has been considered as 'the most fundamental resource' in the innovation process (Lundvall, 1992) and, therefore, as 'the source' of competitive advantage (OECD, 2000). Its importance has led some authors to identify a shift towards a new 'knowledge-based economy' (Burton-Jones, 1999; Dunning, 2000), in which knowledge is conceived as a key form of capital (Burton-Jones, 1999). Whatever the status of this argument, it must be recognised that knowledge in its own right has become a key concept for debates on industrial competitiveness and therefore needs to be discussed from the IP point of view. Qualities attributed to knowledge as a resource are numerous and may be conceptualised in different ways. Burton-Jones conceives knowledge as the main form of capital in the new economy which appears distributed through the all value chain of the firm, as follows:

> "[a] firm's knowledge capital, often referred to as its intellectual capital or intellectual assets, can be identified in its workforce (human capital), its customers' demands and preferences (customer capital), and its systems, products, processes, and capabilities (structural capital). The value of the knowledge assets of a firm may thus significantly exceed the value of its tangible assets" (1999:6).

Hence knowledge is 'the key to economic progress' (ibid). Prahalad and Hamel (1990) in turn maintain that knowledge as an input in the process of production distinguishes itself from other inputs owing to its 'durability'. The use of knowledge never reduces the stock, rather it often creates new knowledge (output) as an integral part of the activities developed in the firm. Similarly, the economic importance of knowledge for Amin and Cohendet (2002) is explained by the fact that knowledge represents 'a unique asset' that appears as 'an output' and, at the same time, as 'an input' of the production process:

> "As an output, the production of new knowledge refers to the endeavours of scientific activity (i.e. publications) or technological effort (i.e. patents, new products, new processes, etc.). Innovation can be regarded as the main outcome of knowledge production. It adds to existing knowledge and expresses its economic value [...] Knowledge as the main input is cumulative and integrative [...] The cumulative characteristic of knowledge implies path-dependence and the progressive creation of barriers, as established participants in given technologies accumulate a differential advantage over potential entrants" (2002:24-25).

Interestingly, the complex nature of knowledge (based on the dialectic of the permanent destruction of 'old forms' and creation of 'new contents') has also been conceptualised from the policy point of view. In Lagendijk's view, "knowledge creation (innovation) and usage (learning) do not only embody important targets of policy-making [...] Knowledge also underpins the business of policy-making itself, as reflected in the constant search for new approaches, the exchange of experiences and the building of networks and partnerships" (Lagendijk, 1999:110). Whatever the nature of knowledge, today it seems to be underlying the frontiers of success and failure in each one of the stages of economic activity, hence its increasing importance for competitiveness (OECD, 2000).

The issue I wish to tackle now is how knowledge and learning interact within the firm. I previously argued that knowledge creation is the product of a varied learning process carried out by the firm, which can be more or less deliberate or structured more or less incrementally or radically.[20] In order to understand how these different forms of learning make knowledge creation possible it is necessary to review some concepts of the

[20] Learning from experience (Arrow, 1962), trial and error (Anderson, 1976), by repetition (Scribner, 1986) can give rise to incremental innovations in firms and markets. At an intra-firm level, knowledge created intentionally can be the result of formal R&D activities developed through public or firm-based activities.

evolutionary theory of the firm. Knowledge creation is a process in which not all the necessary information to allow rational decision-making is available to the firm. Maskell and Malmberg note that "[f]irms seem to handle this basic uncertainty by developing internal procedures and routines when searching for possible solutions [which] are based on the firm's interpretation of its successful behaviour in the past, and they will continue to be reproduced and reinforced as long as they seem reasonably efficacious" (1999:13). Hence some created knowledge bases can be rejected when they are put into practice and others can be accepted, in which case they are gradually integrated into part of the firm's internal routine[21]. Each round of knowledge creation largely depends upon the result of the former rounds (success or failure) and therefore it also determines future possibilities for the firm (Nelson and Winter, 1982; Dosi, 1991). Hence deliberate knowledge creation, and therefore the learning processes that have given rise to this, are strongly 'path-dependent' (ibid). Successful knowledge creation may give place to durable routines and competences[22] that can sustain competitive advantage but, in the long term, can also turn into rigidity. This underlines the importance of the unlearning process, particularly in context of environmental uncertainty that requires quick adaptation of economic agents (Maskell and Malmberg, 1999).

For Metcalfe (1995:34) the central aspect about the modern process of innovation is that it is based on a 'division of labour', which guarantees that economies of variety and specialisation arise. The division of labour "is reflected in the many different kinds and branches of knowledge which are relevant for the process of innovation [...] which are not only produced in specialised institutions [notably, firms]; they are also accumulated by different mechanisms" (ibid:34). Two policy implications arise from this statement. Firstly, a policy framework should not only be informed of the different chains in this 'division of labour' but, fundamentally, it also "requires a framework to connect together the component contributions of different agents" (ibid). As Metcalfe maintains, "as far as knowledge and skills are concerned this aspect of connectivity [...] cannot be effectively co-ordinated by conventional markets" (ibid) due to both the variety in the sources and the

[21] The concept of 'routine' is a key concept in evolutionary economics which refers to an established set of the ways in which firms both do things or determine what to do (Nelson, 1982).

[22] Competences involve sets of routines, (differentiated) skill, know-how and abilities which express the efficiency of problem-solving procedures (Guilon, 1994). Competences express what the firm can do well.

different types of accumulation mechanisms and/or forms of knowledge involved in innovation process. Indeed, Cohendet *et al* maintain that the major problem for a globalised firm "has become a problem of mobilising and integrating fragmented and diversified forms of localised knowledge and competence" (1999:226). Localised and scarcely globalised smaller firms, for example in low- or medium-tech sectors of production, also face the same problem, with perhaps the difference that their only way to decode external 'localised knowledge and competence' is by looking for it in concrete artefacts.

Secondly, the different mechanisms of accumulation and communication of knowledge are relevant to the level of codifiability of knowledge. According to Metcalfe (1995), different classes of knowledge are associated with different costs of 'encoding' and 'decoding'. It is thanks to Polanyi (1967) that the first attempt to distinguish (though not divide) between codifiable and tacit knowledge was made. Codified knowledge is said to comprise of the whole set of transmissible (in formal and systematic language) technological knowledge (i.e. embodied in blueprint, patents and artefacts) and organisational know-how, both of which do not require direct experience to be acquired. Codified knowledge can in theory be obtained through pure market transactions (as a commodity) since it has a 'ubiquitous' nature. In contrast, tacit knowledge is said to "concern direct experience that is not codifiable via artefacts [...] it represents disembodied know-how that is acquired via the informal take-up of learned behaviour and procedures" (Howells, 2002:872). Admittedly, tacit know-how cannot be directly or easily transmitted or communicated through formal language, "as knowledge and task performance are individual and specific and involve the acquirer making changes to existing behaviour" (ibid). For the same reason it cannot be easily acquired via market transactions.

Tacit knowledge can be illustrated by the difference that exists between the perfect photograph on a cake-mix package and the real cake made at home. According to Novick (1998), tacit knowledge makes it possible to form a complex mental picture of the work process. Tacit knowing is likewise associated with both learning that occurs unconsciously and 'scientific intuition' (Howells, 2002). Due to its specificities, tacit knowledge is difficult for firms to assimilate. Hence the learning mechanisms based on both direct experience, by doing, by using and, essentially, by interacting, are seen as critical factors for its acquisition. Accumulation of knowledge that occurs through direct experience and

communication is more likely to be verbal and often relies upon personal contacts, hence some form of 'proximity' between agents, which can be relational, organisational, cultural and geographical, becomes necessary. I will expand upon in this point in Section 3.4 in this chapter.

Antonelli (1999) proposes a four-fold classification between 'tacit' and 'codified' knowledge regarding whether this is 'internal' or 'external' to the firm: a) internal tacit knowledge, which is generated through processes or learning by doing and by using; b) external tacit knowledge, which is acquired through informal exchanges and socialisation; c) internal codified knowledge, which is the result of formal intra-firm activities of R&D and; d) external codified knowledge, which is acquired be means of the recombination of bits of technological information which are reorganised and applied to different contexts than those originally conceived, and often implemented via formal cooperation (including firms, R&D institutes and universities). Likewise, Nonaka and Takeuchi (1995) propose a 'bottom upward' model of knowledge conversion where the key issue is the way in which competitive knowledge is 'socialised' (conversion of tacit knowledge into another form of tacit knowledge), 'externalised' (conversion of tacit knowledge into codified knowledge), 'combined' (combination of codified knowledge) and 'internalised' (conversion of codified knowledge into tacit knowledge). For these authors 'tacit knowledge' can only be acquired through social interaction, including direct observation, imitation and feedback loops based on face-to-face contacts. Hence, what they identify as a 'learning organisation', is one in which creating new knowledge is not a specialised activity, restricted to a small group of specialised individuals within the firm (knowledge workers), but a general form of behaviour or a culture extending to the firm as a whole.

The distinction between codified and tacit forms of knowledge (along with the respective learning processes associated with their acquisition and creation) have had important effects regarding the different theoretical, methodological and policy interests addressed by the NIP literature concerned with the 'ILK triad'. On the one side, the emphasis is placed on the study of 'path-breaking' innovations, 'radical' learning, 'national/global' codified knowledge (often associated with large corporations) and/or tangible technological dimensions of innovation; and with methodologies and measurements tools largely based on (national and/or international) aggregated statistics series, for instance including

'patents' vis-à-vis public/private R&D expenditure. As regards areas of policy concern, the national dimension of innovation policy (vis-à-vis other countries) has been the main focus of policy interest. Some neo-Schumpeterian approaches fall within this category (e.g. National Innovation System studies in the US and the rich research based at SPRU in Sussex University). On the other side, the emphasis is placed on the study of 'incremental' innovation and learning, 'localised-contextual' tacit knowledge (often associated with less innovative small- and medium-size firms) and intangible social, organisational and relational dimension of innovation; and with triangulation of quantitative and qualitative research methodologies (primarily focused on processes and their evolution) and measurement tools. As regard areas of policy concern, the sub-national dimension including regions and localities (vis-à-vis regions and localities nationally and internationally) are the main focus of policy interest. Approaches associated with this tradition of thought include the 'learning economy' approach (Lundvall); some neo-Schumpeterians (Freeman) and varied strands in economic geography concerned with the study of the 'ILK triad' (Camagni, 1991; Cooke and Morgan 1994, 1998; Florida, 1995; Maskell and Malmberg, 1999; Morgan, 1997; Storper, 1994, 1995, 1997). These strands of the NIP literature not only address the regional and local dimension of innovation policy but also debate on 'politics', regarding factors of socio-economic governance relating to industrial competitiveness. This debate on politics and governance and its spatial dimension, which has not been a main concern on the first strand of thought, stems from discussions regarding the foundations of economic development existing within the NIP literature that goes beyond the 'ILK triad'. These require separate analysis which will be considered in Section 3.4 later in this chapter.

Whatever the nature of and the relationship between tacit and codified knowledge, today there appears to be a broad consensus that they are to an extent indivisible and equally important for economic success. As Becattini has recently argued, "[e]ven the most automated [of the codified knowledge] display gaps which require the intervention of practical, contextual knowledge if they are to continue. However, it is certain that there is no concrete artisanal production process –which would appear to be the locus of contextuality - which is not based on routines and devices that embody codified knowledge" (2002:486). Likewise, there appears to be an increasing awareness that knowledge creation is "an iterative process, a continuum of codified and tacit knowledge,

an interactive and relational asset, and distributed within the firm as well as in links with others along the supply chain (Amin, 2002a:4, based on OECD 2000). Competitive advantage thus is a product of the ways in which both are combined or, more precisely, a product of the dialectic between the forms of knowledge vis-à-vis the set of social relations where knowledge resides and is created.

3.3.5. The 'ILK 'Triad and policy implications

The socio-interactive nature of both innovation and learning suggests that, for both to take place and to be effective, firms and networks (whether in localities, regions and countries) should be able to develop institutional structures that promote both access to diversity of sources of knowledge and continuous interaction and feedback. This is crucial for a policy body aiming to tackle the processes through which the firm crafts and builds 'external' links and interfaces in order to mobilise and put together varied and often fragmented sources of new knowledge and learning. This principle has led some strands in the NIP literature (notably, neo-Schumpeterians and the learning economy perspective) to think in terms of 'systems of innovation' (SIs) as a platform for policy.

The concept of SIs is of crucial importance for the policy debate regarding innovation. Metcalfe has argued that SIs "encourage policy makers to think in terms of institutions and their connectivity and thus to address the mechanism by which policy is translated into shifts in the innovation possibility frontiers of firms" (1995:42). National boundaries have defined the domain for policy making in the first instance,[23] which leads us to the concept of 'national systems of innovation' (NSIs) (Nelson, 1993; Lundvall, 1992). NSIs are indeed one of the main innovations in innovation policy. Sub-national levels, notably regions and localities (Boekema et al, 2000; Brazyck *et al*, 1998; Cooke *et al*, 2000; Florida, 1995; Howells, 2000; Morgan, 1997; Morgan and Nauwelears, 1999), and recently cities (Cooke *et al*, 2002), have also gained increasing importance for policy making (initially in the European context). Finally, although national boundaries define the domain for policy making in the first instance, it is increasingly recognised that relations with international circuits of knowledge production are a key element for policy making regarding innovation.

[23] In Lundvall's words: "In the real world the state and the public sector are rooted in national states and their geographical sphere of influence is defined by national borders" (1992:13).

As Metcalfe notes, "[t]he issue for policy making is to be aware of how different technologies are promoted by different accumulation systems, and the extent to which these systems are connected internationally" (1995:42).

Definitions of national systems of innovation (NSIs) vary according to the author and country in question. For Lundvall (1992) a NSI is defined by both the structure of production and the institutional set up of a given country and consists of elements and relationships that interact in the production, diffusion and deployment of new and economically useful knowledge. Lundvall and Edquist (1991) in turn specify that it consists of institutions and economic structures affecting the rate and direction of technological change in society. While for authors like Lundvall (1992) the national public policy plays an important role in enhancing innovation (i.e. it involves direct support of R&D; its regulations and standards influence the rate and direction of innovation; and the state indeed is the main user of innovations developed by the private sector in an economy) for authors like Nelson and Rosenberg (1993) its influence is of a more indirect nature (i.e. through soft institutions like culture and language). For this research, the idea of NSIs helps to reintroduce the role of the national state as a necessary and legitimate agent in economic development (after years of rejection regarding industrial policy issues as we saw in Chapter 1). As Nelson and Rosenberg (1993) highlight, it is the nature of national innovation policies that helps to explain key differences between the East Asian and the Latin American policy frames in the 1980s (see Table 3.1). The substantial contrast between both experiences indeed helped to determine the huge gap currently existing in their industrial competitive performance.[24]

[24] The East Asian countries started from a lower level of industrialisation in the 1950s compared with Latin America; whereas in the 1960s and 1970s the Latin American and East Asian countries were often grouped together as very fast growing NICs. However, a sharp contrast began to emerge in the 1980s (the so-called 'lost decade' for Latin America), the East Asian countries' GNP grew at an average annual rate of about 8%, while in most Latin American countries this fell to less than 2% (Freeman, 1995:13).

Table 3.1. East Asian and the Latin America NSIs in the 1980s

East Asia	Latin America
• Expanding universal education system with high participation in tertiary education and with high proportions of engineering	• Deteriorating education system with proportionately lower output of engineers
• Import of technology typically combined with local initiatives in technical change and at later states rapidly rising levels of R&D	• Much transfer of technology, especially from the US, but weak enterprise-level R&D and little integration with technology transfer
• Industrial R&D rises typically to >50% of all R&D	• Industrial R&D typically remains at <25% of total
• Development of strong science-technology infrastructure and at later stages good linkages with industrial R&D	• Weakening of science-technology infrastructure and poor linkages with industry
• High levels of investment and major inflow of Japanese investment and technology with strong Yen in 1980s. Strong influence of Japanese models of management and networking organisation	• Decline in (mainly US) foreign investment and generally lower levels of investment. Low level of international networking in technology
• Heavy investment in advanced telecommunications infrastructure	• Slow development of modern telecommunications
• Strong and fast-growing electronic industries with high exports and extensive user feedback from international markets	• Weak electronic industries with low exports and little learning by international marketing

Source: Freeman, C. (1995:13)

The national state is now called to promote a learning and innovation economy as a means to economic progress[25]. That is, the 'traditional' state is called to become a 'neo-Schumpeterian state (Jessop, 1993). In the meantime, the main policy concern has changed, evolving from technological innovation to learning (or institutional innovations) and then knowledge creation.[26]

Following the definitions above, an NSI is composed of a varied set of institutional forms including firms; government agencies; public and corporate R&D institutes; the structure of

[25] Metcalfe proposes a policy-oriented concept of NSI by arguing that it is "that set of distinct institutions which jointly and individually contribute to the development and diffusion of new technologies and which provides the framework within which governments form and implement policies to influence the innovation process. As such it is a system of interconnected institutions to create, store and transfer the knowledge, skill and artefacts which define new technologies" (1995:38).

[26] In the last few years, a light shift towards policies aimed at the build up of 'social capital', in order to create 'leverage' for collective learning and systemic innovation has also become a main policy concern (Lundvall and Maskell, 2000; Cooke *et al*, 2000; Morgan and Nauwelaers, 1999).

industry; educational and training systems; information and communication infrastructures; the financial system; and private consultancies and professional societies. Furthermore, it comprises other elements, traditionally considered 'far from' science and technology, such as the general level of education and expertise of population; the labour organisation and; critically, the industrial relationships of firms with clients, suppliers and rival firms, banks and finance institutions, and the institutions above mentioned (Lundvall 1992; Lundvall and Johnson, 1994; Freeman, 1994). In particular, Lundvall (1992) addresses the user-producer relationship as key structural component in an NSI since this (as previously seen) can generate the needed interface through which users can 'express needs' and producers can 'express new possibilities' for innovation.

Two broad categories of innovation policy should be distinguished. Firstly, policies that induce firms 'to shift around their given innovation possibility frontiers', that is, to apply more or less innovative effort in order to generate incremental innovations and, secondly, policies that seek 'to shift the innovation possibility frontiers' (Metcalfe, 1995:37), that is, to seek and generate radical innovations. In Table 3.2, I outline the main policy areas of concern of ISs regarding (technological) innovation policy and productive structure, which consisting of the various direct and indirect ways to support.

Table 3.2. ISs-based innovation policies

Access to variety and heterogeneity of sources
• Improving physical (i.e. information and communication, transport and R&D) and educational and training infrastructure (the less controversial policy)
• The creation of new knowledge in public and private R&D institutes: by providing R&D subsidies to (high-tech) firms and funding universities and public research agencies (development of technology)
• Importation or joint development with international partners of generic knowledge in specific fields where both the country has localised capabilities and spill-over knowledge effects can be absorbed by wide sectors of the productive structure (application of new technology). This encompasses a specific strategy of connectivity with international sources of expertise and knowledge involving the key components of the national institutional set up
• For sector-based technology centres. Besides 'hard' technology research, these centres should conduct studies on sectoral logistics, planning, quality control and marketing. They can also play a key role enhancing inter-firm relations through cluster-based innovation policies
• Innovation services for SMEs. They may be delivered through 'service centres' which can also be integrated in cluster policies
• Public support for innovation financing for firms, including risk capital for high- and medium-tech projects.
Connectivity of sources
• The generation of an integrated institutional-technological infrastructure, encouraging the emergence of interfaces and (formal and informal) networking between educational-training, research and industry. Inter-firm networking here is seen as the key micro-component of a well-integrated institutional-technological infrastructure and public-private partnership as the key macro-component. Need for a 'strategic coalition' between education, industry and government
• The diffusion of new knowledge and technologies to a wider set of users, with differentiated policies for innovative and less innovative firms, through a policy of diffusion and attractiveness for innovating. Inter-institutional mobility of experts, technologists, engineers, skilled workers and entrepreneurs is seen as a critical tool for mobilising and transferring the more tacit aspects of the new knowledge
• The absorptive capacity for new technologies (with choices between generic knowledge, skills and artefacts as the primary target of policy) by firms, organisations and individual users (institutional innovation) by providing incentives, means, and resources to learn, unlearn and relearn
• An entrepreneurial culture through the institutional set up as a whole. It may also include support to 'innovation-led' entrepreneurship.
Market awareness
• The exploitation of new knowledge and technologies through commercialisation
• A demand-awareness innovation policy: national and international market research regarding new market trends in low-, medium- and high-tech industries.

Source: based on Burton-Jones 1999; Cooke *et al*, 2000; Lundvall, 1992; Lundvall and Maskell, 2000; Metcalfe, 1995; Maskell *et al*, 1998.

3.3.6. Concluding remarks

The learning and knowledge-based economy is at the heart of current policy debates on industrial competitiveness and economic progress in developed countries (OECD, 1999; 2000). This shift in the policy debate has re-installed the state as a necessary and legitimate agent for economic development. The NIP literature has provided both a solid battery of conceptual foundations and a promising IP framework. However, the learning and knowledge economy is by no means a guarantee of economic success. Different problems can be singled out with the ISs concept. Firstly, it represents a 'top-down-oriented' to innovation, since the emphasis is placed on 'up-stream' institutions (notably, government agencies, R&D institutes and educational and training systems) to create conditions for 'down-stream' firms to innovate. In turn, it is suggested that innovation depends upon the emergence of systemic interactions, but interactions between institutions and individual actors might well behave unsystemically, motivated by established and path-dependent routines that hinder adaptation, change and innovation. Secondly, its emphasis on technological innovation has also been identified as a limit to innovation as long as technological innovation requires an interconnected set of socio-organisational innovations to take place. Finally, regarding social-spatial equity, the NIP literature indeed assumes, critically albeit, the realm of capitalist relationships of production, which have always been characterised by uneven processes of growth and social inequality. A varied set of asymmetries including those in power, resources and capabilities characterise the process of production, distribution and commercialisation of knowledge and learning (Hudson, 1999), which have effects at the level of the firm and on the relationships at inter-firm, inter-institutions and inter-regions and countries levels.

3.4. The spatialisation of the NIP thinking

3.4.1. Introduction

> "... global capitalism is being constructed through interactions between flow economies and territorial economies [...] That is, globalisation should involve not merely international flows of resources, but economic systems that operate as international flow economies..." (Storper, 1997:181).

Since the 1980s a body of literature has grown highlighting the role of the 'region'[27] as a critical locus of competitive advantage (Cooke and Morgan, 1998; Keating, 1998; Morgan, 1997; Sabel, 1988; Scott, 1988, 1995, Scott and Storper, 1995; Storper, 1994, 1997). Prominent authors associated with the California school of economic geography argue that there are reasons to conceive regions as an 'essential level of coordination' (Storper, 1994:192), as a 'fundamental basis of economic and social life' (Storper, 1997:3), and as 'indispensable motors' (Scott, 1988) to contemporary capitalism. This renewed interest has been associated with the emergence in some regions of novel forms of organisation of production (notably, in industrial districts), different from the mass production systems. Hence for some scholars "there might be something fundamental that linked late 20th century capitalism to regionalism and regionalization" (Storper, 1997:3). Regional systems of production are being described as 'flexible' and 'specialised' (Piore and Sabel, 1984), 'intelligent' (Morgan, 1995) or 'learning regions' (Florida, 1995), responsive to post-fordist geographies of production and governance. This novel set of foundations gave rise to a second strand of the NIP literature.

In my view, three interrelated sets of constituent factors laid the foundations of the claims outlined above. The first relates to the accumulation of a critical mass of evidence

[27] If the region is thought as a 'social construction' and not as a determined geographical space the issue of the definition necessarily becomes a terrain for debate. Following Keating (1998), I am going to understand the region as an 'open system of action' in a constant process of definition in which interests, policies and strategies for development should primarily emerge from and be propriety of the regional actors. Social, economic and political features necessarily overlap (in more or lesser conflictive and/or harmonic ways) in this type of definition. Hence the search for a regional 'interest' should be understood as a complex political process.

regarding successful local and regional economies. The 'paradigmatic' cases elsewhere mentioned in the literature being the Italian industrial districts, some German's *Länder* such as Baden-Württemberg and North Rhine-Westphalia, the Basque Country and Catalonia in Spain (in the European continent); and Silicon Valley, Orange County, and Route 128, in the US. The second relates to new roles played by the 'old' nation-state in the context of a globalising and neo-liberal political economy. The third relates to the emergence of a novel and stimulating body of literature claiming the importance of the region as a potent foundation of competitive advantage. All these experiences are elsewhere examined by the literature (see Camagni, 1991; Braczyk *et al*, 1998; Cooke and Morgan, 1998; Piore and Sabel, 1984; Pyke *et al*, 1990; Saxenian, 1994) and my aim here is not to go back onto those discussions. Furthermore, the case of the Italian industrial districts was already discussed, that is, as an example of heterodox practices of new IP as well as influence of the Italian experience on the policy-making world in Latin America (see in Section 1.4.3 of Chapter 1). Consequently, in the following sections I will focus on the other two sets of factors, starting with the analysis of the role of the nation-state in a globalising political economy.

3.4.2. Nation-state and region

The nation-state as we knew it during the 'Golden-age' of capitalism has been transformed over the last two decades. The hegemony of neo-liberal ideas (primarily in the UK and US in the early 1980s and then elsewhere around the world), along with, and in response to, the various 'state failures' brought about a wave of structural transformations which determined the downsizing and the 'hollowing-out' of the national states (Jessop, 1992; 1994). As a result, they lost part of their former power and capacity as a regulator mechanism and for the setting up of policies for instance at sub-national levels. According to Keating (1998:73), the power, the authority and the legitimacy of the nation-state is currently being eroded by three different vectors, "from above by internationalization; from below by regional and local assertion, and laterally by the advance of the market and civil society" (see also Jessop, 1995; 2000). The intensity and form in which each one of these three vectors affects the national states is determined by the features and circumstances affecting each particular case in question. In the following these three vectors are analysed separately.

'From above', increasingly globalisation and the parallel establishment of supra-national regimens are eroding the capacity of the nation-states for policy decision making. In the case of the EU (European Union), which represents the most advanced case of supranational 'political' and economic integration, the member states delegate and transfer a part of their sovereign power to the supranational authority. This authority is (as a result of this transference) a depositary of a larger capacity of regulation and control on global forces than each national state separately. In contrast, experiences of integration strictly based on commercial agreements, such as NAFTA (North America Free Trade Area) in North America, APEC (Asia Pacific Economic Co-operation Forum) in Asia and MERCOSUR (Southern Common Market) in Latin America, have not advanced towards a process of larger 'political' integration. In these cases the national states in theory conserve sovereign power with respect to their own decisions in economic policy issues. However, it is in reality a restrictive sovereignty, since in smaller and less-developed countries, such as Argentina and Brazil (the core of MERCOSUR), the nation-state has extremely limited power of control and regulation of global forces. The multilateral institutions that govern the international trade represent a second source of loss of sovereign power for the national states. This is the case of the WTO (World Trade Organisation), whose normative framework constrains the decision-making capacity of each member country in relation to their domestic policy regarding, for instance, promotion of export industries.

'From the side', the advance of market powers associated with the increasing mobility of financial global capital and corporate activity of multinational companies, on the one hand, and the hegemony of trade and regulatory policies inspired by the neo-liberal ideas, on the other, are weakening the power of the nation states. Privatisations of former public assets, rigid monetary policy, deregulation of markets and many other 'market-friendly' decisions of economic policy have deteriorated, if not destroyed (like in Argentina), the power of the state as the main mechanism of coordination in the economy. The policy agenda endorsed by the Bretton Wood's institutions, the World Bank (WB) and the International Monetary Found (IMF), starting from 'The Washington Consensus' played a determinant role undermining the manoeuvrable capacity of the national states which affects key policy areas for development including micro- and, above all, macro-economic policy (Stiglitz, 2002). International financial agreements have established compromises and obligations

which limit the policy decision making capacity of signatory countries, particularly of the smaller countries (ibid). In the case of countries which are highly indebted, like Argentina, where there exist a high dependence upon external flows of capital and investments, the problem is even greater due to the high levels of 'sensitivity' and 'volatility' of such capital flows to domestic 'noise' (Gatto, 2001). The fiscal pressure affecting indebted countries operates in the same sense as above, that is, by reducing the availability of resources, for instance, for regional policy (ibid).[28] I must emphasise here, however, that many countries (notably, in Latin America) have made use of the external conditioning mentioned above to carry out severe adjustment processes, which internally had neither political support nor social legitimacy.

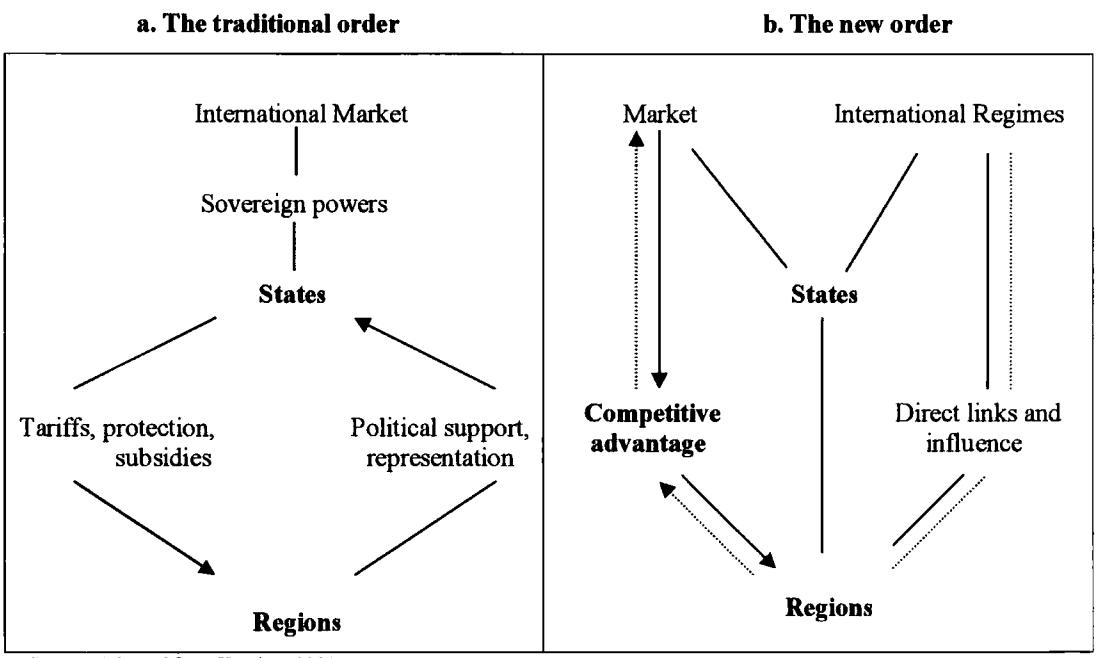
'From below', both political demands coming from successful regionalist (if not nationalist) movements and the institutional challenge that presupposes the establishing of regional political structures and/or governments in the light of increasingly competitive pressures, has also challenged the domestic legitimacy and political manoeuvrability of nation states. This is the case in a number of European countries in which regionally-based economies have experienced important levels of development. In any case, demands direct at the nation states come from, on the one hand, those more developed and organised regions in economic and political terms, which claim for greater levels of decision-making autonomy and capacity, and, on the other hand, from those of lower level of relative development (or less favoured regions), which are often negatively affected by globalisation and therefore demand special public support and/or protection. This has been observed in Latin America, where many regions can be better identified as a locus of distributive problems rather than as a locus of economic order.

Hence, in the new setting, the nation states are no longer able to play the 'mediator' role between global forces and sub-national territories (localities and regions) as they used to do in the past. However, this does not mean that the nation state is no longer the main coordinator and regulator within national boundaries. Indeed, for many regions the central state is the only institution of reference to deal with international competition and globalisation. It can be concluded that the nation state no longer 'monopolises' the external

[28] It is important to recognise that some multilateral organisms such as the WB (1996) have begun to see the local and the regional as important levels for their interventions (Lovering, 1999).

links of regions nor it is able to 'mediate' between all the external forces that affect local and regional economies with the same level of intensity that it did in the past. The relationship between region, nation-state and global forces is well illustrated in Figure 3.1 below. It shows a two 'ideal type' of setting, the new and the traditional order, and describes types of relations.

Figure 3.1. Regions, states and the global order



Source: Adapted from Keating, 1998

In the traditional order (Figure 3.1 a), the interaction between national state and region is characterised by relations of mutual dependence through which the state provides protection and subsidies to the regions in exchange for political support and representation. The national state being the institution that relates to the international scenario. In contrast, the new order (Figure 3.1 b) is characterised by more direct and less centralised relations and/or pressures existing between markets (whether national or international) and the regions. These can either be activated by regions (in which case they constitute 'relationships' with) and/or they can be affecting them (in which case they can be characterised as 'pressures' of). Nation states (due to their own inefficiencies, lack of resources, lack of interest and/or political determination) may or may not intervene in this

new setting through mediating the flow of influence outlined above. The big challenge is that the position of the localities and regions in, and with respect to, the domestic and international market is increasingly being determined by their 'competitive advantage' and their 'political capacity and intelligence' to exploit these advantages inside and outside of national boundaries.

As regards the development of dynamic competitive advantage, I argue below that the strands of the NIP literature concerned with the 'ILK Triad' come together, and to some extent converge with those arguing the case for regional- and local-base industrial development and policy. Likewise, as regards the 'political capacity and intelligence to exploit' competitive advantage, these strands of the NIP thinking have gone deeper in the analysis and conceptualisation relating to issues of socio-economic and political governance of IP than the former.

Two types of setting characterise the role that localities and regions play in the new order, in which they have seen themselves 'pushed' to undertake the search for their own answers in the face of new challenges. At one extreme, some regions have managed to constitute themselves, via a process of creative adaptation, reconversion and institutional innovation, as "new places for the construction of policies [...] and as actors themselves in the global order" (Keating, 1998:78). In these cases the new setting is an 'opportunity', which has been exploited starting from new principles of economic and political organisation and 'offensive' strategies of development (Cooke and Morgan, 1998). This is the case of the 'paradigmatic' experiences previously mentioned. At the other extreme, the large majority of less successful territories have been challenged by the new order and in some cases 'forced' to constitute themselves as actors in the new order (Keating, 1998; Scott, 1998). Most localities and regions around the world have in effect been globalised 'by default', that is, they often only 'enjoy' the negative effects of globalisation. Thus, globalisation, such as we know it, is mostly considered as a 'threat' rather than an opportunity. In the middle of these two extremes it is possible to imagine several combinations of strategic settings and policy frameworks. The second setting includes entire regions around the world, notably in developing countries like Argentina, in which the disappearance of traditional and non-traditional sectors of production exposed to extreme international competition has caused not only the 'non-creative' destruction of accumulated capital

(notably, physical assets, skills, expertise and know-how, which are unrecoverable) but also led to unemployment, poverty and social unrest, repression, and so on (Katz and Kosacoff, 1989). It is important to highlight that the large majority of countries around the world do not possess a supra national 'umbrella' which regulates the global forces operating within and across the country. As Gatto (2001) argues, the absence of a supra-national 'umbrella' *á la* European, along with the difficulties that the developing countries often have in conducting their macroeconomy within 'normal' patterns, imposes limits to any project of regional development in most of the regions in countries of the developing world (i.e. vis-à-vis European regions).

The importance gained by the region as a source of competitive advantage in the globalising political economy has taken place within a context where, on the one hand, globalisation is exerting determinant 'localised' effects on sub-national territories and, on the other, the nation states are no longer able to perform roles as mediators of global forces (Scott, 1998). However, and given the magnitude of problems that less developed regions exposed to the new competition face, elsewhere the national states by themselves or in partnership with regional actors are displaying an increasing 'interest' in the promotion of instruments, actions or programmes (depending upon the country and region in question) for regional economic development ('top-down' vector). Likewise, in many regions, political and economic regional actors attempt, through offensive or defensive strategies, to generate answers in order to face the pressures of the new competitive setting ('bottom-up' vector). Hence, the real practice of the supply-side economy emerging in some localities and regions, in particular in less developed ones, should be understood as a product of the dialectic (though generally highly asymmetric) between the 'top-down' and the 'bottom-up' vectors of development.

To return to the debate on 'competitiveness' addressed in Chapter 2, it is worth discussing whether this concept is theoretically relevant as a rationale for a local or regional policy of economic development. I argue that, as globalisation enhances the competitive climate in which firms operate, the issue of territorial competitiveness is of increasing importance for industrial development at the level of regions and localities. Following Camagni's (2002) recent contributions on this matter, I maintain that territories can play a key role in the

development of competitive advantages and therefore on firm competitiveness. This scholar rightly asserts that,

> "the concept of territorial competitiveness is theoretically sound, considering not only the role that territory plays in providing competitive 'environmental' tools to individual companies, but especially the role that it plays in the processes of knowledge accumulation and in the development of interpretative codes, models of co-operation and decisions on which the innovative progress of local companies is based" (2002:2395-6) (emphasis in original).

It is important to remember that Camagni's contributions respond to recent critical debates about the validity of the issue of competitiveness in regions and localities derived from Krugman's scepticism on the concept of national competitiveness (see in *International Regional Science Review* 1996 and *Urban Studies*, 1999). In Camagni's view,

> "the law of comparative advantage does not hold in the case of confrontation among local economies (inter-regional trade) and, consequently, the conclusion [derived from Krugman's critique] that each region will always be granted some specialisation and a role in the interregional division of labour is not valid. A region can well be pushed 'out of business' if the efficiency and competitiveness of all its sectors are lower than those of other regions" (ibid:2401) (emphasis in original).

Within the developing world there are many cases of regions and localities being pushed 'out of business' and this has been particularly the case in the context of increasingly open market economies. The fate of economies that do not assure a certain rate of growth in competitiveness may be in a state of crisis, depopulation and desertification. Hence Camagni is arguing the case for policies aimed at enhancing both competitiveness (of the local economic-fabric) and attractiveness (with respect to 'real' and 'financial' capital) of sub-national entities (ibid). In particular, to enhance both the internal productivity of a territory, in the first place, (which is associated with the efficiency of supply-side factors), and secondly its external competitiveness (with respect to external firms and territories) as regards exports, are two key aspects (which Krugman rightly keeps separate) that should be closely observed and considered by a policy framework. As seen above, this is particularly the case in the context of developing economies increasingly exposed to global forces and various sets of uncertainties. With respect to policy instruments, preference is given here to

horizontal or non-sectoral policies, like those addressed at improving the quality of production factors (i.e. human capital, regional accessibility, information and communication networks) and the local/regional business environment. Likewise, Camagni makes a particular case for policy instruments related to local governance, such as stimulating local co-operation networks and partnerships and collective learning and local relational capital, as well as construction of territorial 'visions' and strategies based on effective participation of local actors (see section 3.4.4).

To summarise, this section has developed some key arguments to understand why the national states through genuine interest, political need or even obligation[29] have begun to see localities and regions as platforms for policy making and, in some cases, as actors in their own right in the development process. In the following, I will analyse the main theoretical claims that assert the contrary logic of analysis, that is, the 'from-below' view on regional industrial development and policy.

3.4.3. Economic foundations of the new regionalism

The main economic foundation that re-asserts the region as a locus of economic order and as a potent foundation of competitive advantage relates to the importance of 'geographical proximity' among agglomerated and/or clustered economic agents. This is said to have a varied set of positive effects on economic activity, including the generation of externalities and knowledge spillovers (Marshall, 1919); the developing of economies of agglomeration and specialisation (Krugman, 1995; Porter, 1994; Scott, 1988; Storper, 1997); the reduction of transaction costs (Scott, 1995; Krugman, 1995); and the enhancement of the learning process of firms and facilitation of tacit knowledge transfer (Maskell and Malmberg, 1999; Morgan, 1997; Storper, 1997). Thus, a cluster of 'proximity policies' has become a prime concern for regional development policy. Although the theoretical insights outlined above can be associated with particular authors, it must be said that they often overlap when they materialise into policy instruments. However, a clear broad cut division can be made between two conceptual strands that stand out in this field. The first relates to the so-called

[29] This is the case of many state policies aimed at the poorest regions in developing countries. In these cases the regions are seen as a 'locus of redistributive problems' rather than as a 'locus of economic order'.

'new geographical economics'. The second strand relates to varied approaches in 'economic geography', which I associate with the NIP thinking.

The first conceptual strand is associated with the work of Krugman (1995, 1998), Porter (1990; 1994), and other international trade theorists, interested in endogenous growth theory from a mainstream economic perspective. They have given rise to the influential 'new geographical economics'. In order to understand international trade, Krugman (1998) argues that we should first explain why industries tend to concentrate geographically. His answer relies on firms locating in areas with both larger demand, because of the potential for increasing returns generated by potential larger economies of scale, and in areas where the offer of inputs is economically convenient. To Krugman (1995) the agglomeration of economic activity reflects processes of 'cumulative circular causation' through which productive activity tend to agglomerate or cluster where markets are larger and markets become larger there where industries cluster. It follows that local/regional agglomerations of larger demand will draw new firms and this will reinforce that local/region's attractiveness for the location of other firms and so on (Helmsing, 2001). This relates to the old theory of externalities developed by Marshall (1890), according to which advantages arising from the presence of many firms of a similar industry or trade in one area are the provision of varied intermediate inputs, the poling of a local specialised labour markets and the local information flows. Specifically, as Storper (1997:13) explains, Krugman's "scale economies affect both intermediate and final outputs, giving rise to an uneven pattern of market dominance [...] and hence to specialization and trade (especially intra-industry trade)". Economies of specialisation in clustered related industries are also a key issue in Porterian's theory of competitive advantages (1990; 1994), since they represent sources of productivity gain and growth.

The 'new geographical economics' has gained considerable influence in academic circles and policy world. It provides potent economic foundations for geographical agglomeration, including the exploitation of economies of scale and specialisation, the reduction of transaction costs and the development of external economies (Amin, 1999), based on an analytical approach largely led by transactional relations. However, explicit IP implications from Krugman's insights are a matter of speculation. In Martin and Sunley's (1996) critical reading of Krugman's work, the authors ask themselves that if clusters prove to be a source

of positive external economies, then clusters provide evidence and the case to define which industries should be objects of IP. As Martin and Sunley speculate, what "Krugman seems to be suggesting, though he does not use the term explicitly, is that the only justifiable form of industrial (trade) policy is in fact regional industrial development policy" (ibid:282). An IP body aimed at generating positive externalities at the level of agglomeration (i.e. subcontracting policies which aim to link large and small firms) could well be extrapolated to the levels of region and country, that is, due to its potential to foster national competitive advantage *á la* Porter (Helmsing, 2001).

In Porter's view, the strategic capacity of the firms depends not only upon one firm's resources but critically upon external resources (associated with factors such as product design, production, commercialisation and consumption) that the firm needs to gain competitive advantage. Porter coined the politically influential concept *'value chain'* to refer to those vertical and horizontal external linkages that the firm can develop through a varied set of economic agents in order to access these resources and, within which, the firm operates as the unit of strategic coordination. Industrial *'clustering'* is in turn a key concept in the Porterian logic since clustering of related industrial activities facilitates the development of business links and therefore the development of value chains. Subsequently, as Porter argues, "[a] nation's successful industries are usually linked through vertical (buyer/supplier) or horizontal (common customers, technology, channels, etc) relationships" (1990:148-9).

Finally, despite its influence, the new geographical economics nevertheless fails to provide a full explanation of the very source of agglomeration economies (Martin and Sunley, 1996; Storper, 1997). As Storper (1997) informs, Krugman says little about how clustered intermediate-output producers become so specialised, how the long process of concentration of assets that generate the emergence of final outputs takes place (i.e. how firms get 'there'), and how the structure of specialist suppliers and the demand for proximity is created through market transactions. Hence Storper claims, "there is almost nothing in the new geographical economics about the potential geographical foundations of economic performance. Everything reduces rather axiomatically to fully efficient, though imperfectly competitive, clusters of producers who enjoy pecuniary externalities"(ibid:14). In my view, the 'new geographical economics' is informative in relation to our

understanding regarding the development of both pecuniary externalities in industrial agglomerations and subcontracting links between clustered firms. However, it does not address key issues which are relevant in this research such as evolutionary learning and socio-political and institutional factors underpinning economic development.

The second conceptual strand is associated with the work of different economic geographers who, drawing on institutional and evolutionary economics, offer a valuable and promising set of arguments to answer the questions above, by asserting the crucial importance of social, cultural and institutional features which underlie the relationships between economic agents in local/regional industrial agglomerations (Amin and Thrift, 1994; Cooke and Morgan, 1998; Maskell *et al*, 1998; Morgan, 1997; Storper, 1997). A distinctive aspect of this strand of the NIP literature is that greater 'emphasis' is placed on those localised relations among agents that do not necessarily occur through market transactions in the strict sense (or traded input-producer relations). Certainly, both traded and untraded relations are in practice complementary and sometimes interdependent. As seen already, transactional user-producer relations in fact are essential to generate flows of information (Lundvall, 1992). As Lambooy notes, "agglomeration economies have to be connected with the 'socio-economic infrastructure' of a region and with the behavioural options of people in their –sometimes adverse- regional environment"(2000:28) (emphasis in original). It is, according to Lambooy, the way in which advantages associated with social, cultural and institutional features can combine with the central concepts of agglomeration economies previously discussed: scale, differentiation (in connection with) specialization, information, organisation and dynamic external effects (ibid).

There have been a range of attempts to conceptualise the foundations of agglomeration economies beyond traded input-output relations (in successful vis-à-vis less successful regions), including those by the *milieux innovateurs* approach, the flexible specialisation approach, and California schools (see Storper, 1997). However, it was Michael Storper who, based on a fascinating critical reading on the approaches above, systematised a theoretical synthesis that brought significant advances in this field. Storper argues that evolutionary and neo-Schumpeterian economists, despite not being principally interested in territoriality and regions, "permit us to identify [...] the *intangible* aspect of a territorial or regional economy that underlies innovative, flexible, agglomerations, of both the high- and

low-tech variety" (ibid:18) (emphasis of the author). It is precisely this 'intangible' aspect, referred to as the social, cultural and institutional foundations of economic activity, which became a key theoretical turning point owing to it opened the field of the so-called 'untraded interdependencies' or 'relational assets' (ibid). Storper's main proposition is that the main role of the region is as the locus of untraded interdependencies, "which take the form of conventions, informal rules, and habits that coordinate economic actors under conditions of uncertainty" (ibid:5).

Untraded interdependencies are identified here as 'a central form of scarcity in contemporary capitalism', which provides sources of differentiation in production and therefore competitive advantage (Storper, 1997:5). In Amin's words, untraded interdependencies are not easily substitutable, since "they draw on the social properties of networks in which economic agents are implicated" (1999:369). According to Storper, it is a key concept in which analysis was absent in the transaction cost and/or traded input-output relations approach to agglomeration previously discussed, and which cannot be easily accommodated in it due to its methodological individualism (ibid). Thus, the several attempts to marry insights of evolutionary economics with studies of innovation, learning and the role of institutions at the level of regional development (i.e. Amin and Thrift 1994; Camagni, 1991; Cooke and Morgan, 1994; Maskell and Malmberg, 1998; Piore and Sabel, 1984; Pyke *et al*, 1990) have found in Storper's insights one the most sophisticated argumentative 'synthesis'. Consequently, the regions are now said to occupy a central role in the 'supply architecture' of the learning economy (Storper, 1997) and as such, "they are appropriated, indeed necessary objects of public policy" (Scott and Storper, 1995:509). A policy rationale that seeks to integrate the new insights should then turn towards policy bodies critically built upon the idea of 'geographical-relational proximity'. Furthermore, in contrast to the strands of the NIP literature discussed in Section 3.3, 'spatial considerations' should be at the heart of the analysis.

Out of, and beyond these symptomatic readings, two key policy areas have emerged followed by the majority of the international experiences of local- and regional-based industrial development. The first relates to the formation of a regional system or

architecture of socio-economic governance and political mobilisation[30], whilst the second relates to the development of a regional system or supply architecture of innovation and learning-based competitiveness.[31] In the following section I will address the first policy dimension, while in section 3.4.4, I will discuss some elements regarding the regional architecture of socio-economic and political governance.

3.4.3.1. Regional architecture of innovation and learning

In the previous section it was pointed out that the literature on 'geographical proximity' puts a premium on both traded and untraded relations between economic agents and that untraded or relational assets among local agents and institutions add high value to the organisation of productive activity under conditions of uncertainty. A question raised is which are those localised 'assets' that not only have a market value (as the untraded interdependences) but also can be materialised into better, cheaper, different and/or novel products or services? According to several scholars, the answer is 'knowledge assets' and specifically 'tacit' or 'embedded' knowledge. This is indeed the main claim of the advocaters of the 'spatial turn' in studies on the 'ILK triad'. [32]

The region is said to function as a repository of knowledge assets. Specifically, it is said that these knowledge assets are mostly 'tacit', which, because it is sticky, "can be best accessed, learned and finally mastered on the basis of face-to-face interactions and communications at the local or regional scale" (Lee, 2001). In dense industrial agglomerations 'tacit knowledge' is both relationally developed through networks of mutual interdependence (it is context-dependent) and needs long period of time for its exchange (this is also why proximity matters). In this way, tacit knowledge creates not only

[30] Amin and Thrift (eds), 1994; Bianchi, 1994; Cooke and Morgan 1998; Keating, 1998; Scott and Storper, 1995; 2003; Scott, 1998; Storper, 1997.

[31] Camagni, 1991; Cooke *et al* 2000; Braczyk *et al,* 1998; Florida, 1995; Maskell and Malmberg, 1998; Morgan, 1997; Morgan and Nauwelaers, 1999; Storper, 1997.

[32] Different conceptual perspectives converge in this debate, notably those asserting the role of 'regional innovation systems' (Brazyck *et al,* 1998; Cooke *et al,* 2000; Howells, 1999), 'learning regions' (Florida, 1995; Morgan, 1997; Morgan and Nauwelears, 1999), and milieu innovator (Camagni, 1991). Although these approaches present some clear differences, they are based on similar principles and, notably, the policy agenda and policy instruments forwarded often are the same.

firm-specific but also region-specific competencies (Maskell *et al*, 1998). These competencies are difficult, if not impossible, for competitors and/outsiders to imitate and neither are they easily transmissible without direct contact with and participation in those local/regional networks. Therefore, they are responsible for the creation of sustainable competitive advantage (ibid).

Untraded interdependencies are said to constitute a key part of the learning environment of firms (Amin, 1999; Morgan, 1997). They provide 'access' to a set of relevant resources for firms (i.e. business information, technical know-how, ideas for solving problems, among others) which are activated though networks of interdependence among local firms and local institutions. These resources allow "territoriality embedded networks to develop unique, localized capabilities; combinations of institutional endowments, built structures, natural resources and the knowledge and skills in a region from which firms draw competitive advantages" (Boekema *et al*, 2000:11-12, based on Maskell *et al*, 1998). Hence proximity is only one part of the explanation of the impact of geography on learning in embedded networks. Institutional factors are also crucial and not only for providing transactional advantages of proximity but also the formation of localised and networked practices of learning where mutual 'trust', 'understanding' and 'shared values' are essential (Maskell *et al*, 1998; Harrington, 1999). Learning to cooperate by building up trust among economic agents that may be competitors is another key element of the learning environment provided by the local milieu. Other authors note that geographical proximity fosters the possibility of carrying out varied forms of (trial and error) experimentation. For instance, in searching for problem solving methodologies to face similar difficulties, that is, encouraged by incentives and opportunities provided by a 'permanent possibility of monitoring, comparing and selecting strategies' followed by co-located firms (Breshi and Malerba -2001- in Amin and Cohendet, 2002:149). Co-located firms act as role models within agglomerations.

In sum, (learning) industrial agglomerations are, on the one hand, endowed with mechanisms (untraded interdependencies) that permit coordination of actors under conditions of uncertainty. On the other hand, they abound with valuable and accessible assets (notably, codified knowledge) that enhance and support innovation and learning,

promoting and facilitating the process of adaptation to changing business environments. Hence, in Storper's and Scott's words,

> "the spatial proximity of large numbers of firms locked into dense networks of interaction provides the essential conditions for many-sided exchanges of information to occur, and out of which new understandings about process and product possibilities are constantly generated. Specialized regional economies are the locus of intense knowledge spill-overs, thereby helping to raise the rate of innovation, and promote long-term growth" (2003:583).

Two main 'policy metaphors' have sought to conceptually frame regional innovation strategies and policies (developed in the European context since the mid 1990s). One is the 'regional innovation system' (RIS)[33] and the other the 'learning region' (LR)[34]. Although some differences exist between both metaphors, particularly those which refer to the different emphasis placed on 'outputs' (innovation *per se*) or 'processes' (learning) (Landabaso, 2000), at the level of policies these differences appear much less clear. In what follows I will use insights from both perspectives.

Following Boekema *et al* (2000), a regional innovation policy body should primarily be thought of alongside three different axes of analysis. The first level of analysis is that represented by the 'actors'. The second level is that of 'factors', and the third level is represented by the local/regional 'business environment'. Although a policy framework as the one here discussed should understand them as an integral whole.

As regards actors, the firms, the local state and public agencies; local private institutions, research, educational and training institutions; and networks (which are here considered as collective actors) are the main ones mentioned by the literature. Under the 'learning region' paradigm, these actors "possess, acquire, exchange and create knowledge through learning" (Boekema *et al*, 2000:250), in this way they become a key unit of analysis for policy

[33] In a recent work that seeks to systematise concepts and methodologies of the literature on RISs, Evangelista *et al*'s define it as "the localized network of actors and institutions in the public and private sectors whose activities and interactions generate, import, modify and diffuse new technologies" (2002:174).

[34] Based on different official European initiatives (RTP and RIS), Boekema *et al's* point out that the LR approach aims "to develop a regional innovation strategy through a joint effort of all the regional partners [in order to encourage] the exchange of knowledge between firms and between firms and other players in the region. In other words, these strategies promote learning among regional actors –without, of course, ignoring the non-regional relations" (2000:11-12). RTP and RIS stand for Regional Technological Plan and Regional Innovation Strategy, respectively.

making, the local firms being the main one. Unlike the NSI policy framework, in this instance the small- and medium-size firms are the main focus of policy concern. The central role that SME innovation policy plays in the RSI and LR approaches represents another specificity of the 'spatial turn' in studies of innovation. Local innovation policies aimed at SMEs primarily operate on two levels. Firstly, at micro-economic level, encompassing all those areas, such as quality, organisation, management, marketing, training, and technology, on which innovation relies. Secondly, at the meso-economic level, it is by promoting the development of links and networking between firms and other local depositaries and/or intermediaries of knowledge, including firms along with public, private and intermediate institutions. There seems to be an agreement that firms learn best from other firms, their clients and suppliers leading to cluster policies often interacting, encompassing or forming part of local innovation policies. Furthermore, both centres of 'real services', which operate on different aspects of the microeconomy of firms (i.e. relevant business information, marketing, quality control, etc.) and 'brokers', which act as mediators and facilitators between economic agents within and outside the locality or region, represent novel institutional policy devices which are directly linked to innovation activities of firms (see Chapter 1 section 1.4.3) (Landabaso, 2000; Todtling and Kaufmann, 2001). Indeed, recent research confirms that co-operation is the key to innovation for SMEs at the regional level, the main firms' partners being firstly clients, then suppliers, competitors and, finally, support organisations (Landabaso, 2000). These potential partners represent the main institutional channels through which local SMEs can gain 'access' to and get in 'connection with' external sources of information and (mainly) knowledge. Likewise, policy strategies have pushed for large companies (whether nationals or multinationals) to operate 'as the heart of subcontracting networks', through horizontal and/or vertical linkages with SME suppliers (Begg *et al*, 1995). Finally, the main (traditional) local public and private institutions will be analysed in section 3.4.4.

The following table lists the main 'strategic axes' for regional innovation policy. It summarises the main areas of policy concern observed through different official policy frameworks in developed countries.[35] As can be seen in the table, this policy body has a

[35] In particular, it is based on the Regional Technological Plans (RTPs) and the Regional Innovation Strategies (RISs) in the framework of the European Union.

strong SME content and mostly aims to promote technological rather than institutional or organisational innovation.

Table 3.3. Major strategic axes defined in RTPs and similar operations

Strategic Axes for Regional Innovation Policies
Bridge the gap between HEIs and industry
Identify and support clusters of enterprises
Raise demand for innovation in SMEs
Increase demand for skilled people in SMEs
Increase supply of adequate human resources for innovation
Build a permanent Advisory Board for policy
Provide adequate finance for innovation
Raise awareness of innovation
Adapt training and further education to SMEs' needs
Organise co-operation between supply organisations
Foster the attractiveness of the region for high-tech companies
Support external orientation of SMEs
Strengthen the technology transfer offer
Develop support tools for the observation of SMEs needs
Develop non-technological support to innovation

Source: based on Morgan and Nauwelaers (1999:232)

As regards 'factors' (the second level of analysis), they include the availability and quality of the physical infrastructure of the territory (i.e. universities, training centres, research institutes, information, communication and energy); factors of geographical location; level of both education of the labour force and skill of the labour market. As regards the 'business environment', it encompasses not only the formal institutions previously mentioned, but also those informal institutions such as values, conventions, labour relations, business culture, and modes of government interventions observed in the territory (Landabaso, 2000). As Maskell *et al* (1998) note, these patterns of behaviour are often stable over time and therefore are responsible for the fact that regional development is to a substantial degree path-dependent. I will expand upon these issues regarding local/regional governance (of innovation) in section 3.4.4.

The following table addresses some of these issues from a learning and institutional innovation policy point of view. Indeed, Table 3.4 below presents policy programmes,

including policy instruments and actions, which are specifically aimed at encouraging what Bellusi (1999) calls 'collective learning' amongst local economic agents.

Table 3.4. Policies for collective learning

Level 1. Mobilisation of knowledge and the creation of new knowledge	
1. Focusing on various interventions to maintain the elevated level of knowledge acquired in the past (sector-specific accumulated knowledge)	1. Promotion of specific training activity to diffuse 'technological knowledge' accumulated in depository organisations
2. Reinforcement of empirical learning (practical knowledge acquired through direct experience and observation)	2. Promotion of unintentional and unsystematic learning opportunities (i.e. partioipation of firms in fairs, conferences, debates on technology, and on other economic issues)
3. Development of imitative learning through access to second-hand experience	3. Promotion of reverse engineering and benchmarking practices
4. Favouring new connection in the (local) productive context: by pushing acquisition or joint-ventures of external firms of strategic interest, or by attracting to the area innovative enterprises, or highly specialised personnel	4. Establishing institutional channels for imitation practices: using consultants, promoting meetings between technicians
5. Promoting specific research projects (R&D activity) for the implementation of innovative solutions	5. Shortening of learning curves of firms (financing the experimentation of new technologies)
	6. Establishing of centres for providing services to advanced functions of firms
	7. Predisposition of specific initiatives focused on themes relating to the competitiveness of firms to improve working methods, standards, and environmental themes
Level 2. Coordination and distribution of information	
1. Using specific structures and collective actors to intensify the distribution of information	1. Increasing the number of information offices
	2. Wide publicity to the initiatives organised by (local) institutions
	3. Favouring access to international data banks and to the global communication networks
Level 3. Reinforcement of the (local) identities and production of culture and codes and languages to interpret knowledge	
1. Construction of communication channels for inducing more cooperation among collective agents and among leading firms	1. Systematic control of economic and social performance of (local) system
	2. Activation of (local) development projects open to foreign partnerships
	3. Promotion of social dialogue with collective actors
Level 4. Actions to store the accumulated specific knowledge	
1. Reinforcement of progressive coalitions	1. Promotion of social dialogue with collective actors
	2. Financing specific cultural "deposits"
	3. Promoting the setting-up of archives on local history
	4. Promoting research on local development.

Source: Belussi, (1999:740-1)

This scholar identifies four main levels of what she calls 'conceptual interventions', and then specifies 'concepts and processes' and 'policy options', as follows: 1) the process of mobilisation of knowledge and the creation of new knowledge; 2) the process of coordination and distribution of information; 3) the reinforcement of the local institutional setting; 4) the storage of the knowledge in the collective memory.

3.4.3.2. Appraisal

I have sought to identify the main theoretical foundations that have given rise to the strand of the NIP thinking concerned with local and regional development. In particular, I have focused on those debates arguing the case for innovation and learning policies at a territorial level citing that the competitiveness of firms depends on 'localised capabilities' (Maskell *et al*, 1998). Focus on innovation and learning under this perspective has drawn attention to some central points of the process of regional development, particularly in the light of the new competitive settings. I have discussed a number of policy programmes for local economic development based on innovation. I have shown that these programmes assume principles from the 'new regionalism'[36] or the 'new heterodox economic framework' for regional development. These approaches advocate IP bodies as: 'context-sensitive', that is, concerned with the embeddedness of industrial practices in specific contexts; 'production-systems-oriented', rather than focused on individual firms; and promoting the 'ongoing adjustment of the capacities' of regional economies rather than the mere implementation of the so-called 'best practices' (Scott and Storper, 1995:513). I will expand upon this in the following section.

The strands of the NIP literature discussed here also come with some limitations as regards the development of sustainable competitive advantage. An initial set of critiques refers to issues associated with methodological problems. Firstly, tacit forms of knowledge may be spatially 'sticky' but they are also methodologically 'slippery', as untraded interdependencies or relational assets are difficult to identify and measure (Evangelista *et*

[36] Including authors such as Amin and Thrift 1994; Cooke and Morgan, 1998; Keating, 1998; Scott and Storper, 1995; Scott, 1998; Storper, 1997.

al, 2002). Secondly, the theoretical approaches presented seem to display considerable elasticity with respect to the unit of analysis, whether localities, regions or a mix of both (Allen *et al*, 1998). As this research is concerned with IP approaches, which to a critical extent emerge 'from-below', the definition of the unit of analysis (including the 'extension' of the concept of region) will primarily be an expression of the economic and socio-political interests active in a given territory.

A second set of critiques refers to issues of content. Firstly, the validity of the main assumptions of NIP thinking has been questioned because they largely depend upon research findings based on secondary data sources (i.e. official censuses, large-scale surveys). Research relying on aggregated secondary information lacks the necessary depth and specification to grasp and assess methodologically 'slippery' units of analysis that are thought to underpin localised learning and knowledge creation processes (MacKinnon *et al*, 2002; Martin and Sunley, 2001). Secondly, the emphasis placed on the endogenous capacities (as source of competitive advantage) and geographical-relational proximity (as a potent constituent of the firms' learning environment) have led to an underestimation of the importance that external sources of knowledge have on the generation and fostering of 'sustainable' competitive advantage (Amin and Cohendet, 1999, 2002; Oinas, 1999, 2000; Lee, 2001). In effect, the competitive pressures created by the changing business environments under which firms operate (as regards markets and technologies), bring them to a permanent search for new sources of knowledge and opportunities for learning beyond the local/regional boundaries. This is generally the case for larger and more dynamic firms, which can no longer rely upon 'local tacit knowledge' and 'incremental learning' for sustaining their competitive performance (Amin and Cohendet, 1999; Oinas, 1999). Localised effects of globalisation often operate as strong market signals for change or for the need to change, but it consequently does not mean that economic agents act or have the ability to act (in terms of resources and capabilities). In many cases those pressures can result in defensive behaviours which may strengthen dangerous situations of closure or 'lock-in' at the level of firms as well as at the level of the local institutional set up as a whole (Grabher, 1993; Hudson, 1999).

Hence, a modern policy framework should operate as an animateur and facilitator of varied policy actions for opening up sustained and wider extra-territorial connectivity and networking. It may not mean a mere strengthening of traditional local SME policy

instruments associated with enhancing the export conduct of firms (such as through visits to international trade fairs or leading firms and participation in 'rounds of business' along foreign entrepreneurs). It may also not mean a mere policy of attraction of inward investments (mostly large companies and/or subsidiaries of MNCs) within territories in order to promote spill-over effects and upgrading in the local productive system (Trigilia, 1991). This policy framework means that IP should also attempt to promote external connectivity (i.e. based on a concept of development of economies of distance). Accordingly, economic agents can virtually or physically connect through multiple forms of proximities, that is, relational, cultural and cognitive proximities, besides the geographical-based one. Opportunities for connectivity have also increased owing to lower costs of transport and communication (notably, the Internet), allowing firms to exploit different sources and forms of knowledge. A policy in this sense may be carried out through varied forms of social interaction between experts and 'non-experts' at an intra firm level (as the Japanese companies have shown –Nonaka and Takeuchi, 1995-), at an inter-firm level and through wider 'communities of practice' (Amin, 2001b; Amin and Cohendet, 2002; Lee, 2001).

3.4.4. Architecture of socio-economic and political governance

According to Morgan and Nauwelaers (1999), a key policy question is whether there are 'entry points' for public policy in the circular reasoning of those theories that claim that 'innovation occurs because there is favourable milieu, and the milieu develops where there is innovation'. They understand that the 'entry point' is the need to identify "potential network animateurs and use them as stimuli for building cooperative relationships between local actors" (ibid:237), which can operate as both catalysers of synergic potential and engines for the development of economies of association.

Concepts such as 'policy network' (Rhodes, 1990; Cooke and Morgan, 1993, 1998), 'forums and mechanisms of collective action' (Scott, 1998), 'institutional thickness' (Amin and Thrift, 1994), 'developmental coalitions' (Keating, 1998), to mention but a few, have been coined in order to attempt elucidate two crucial policy questions. Firstly, 'who' is the agent or subject of policy at a territorial scale and, secondly, how are they constituted as such. As seen already, the national state, through all its functional and spatial divisions,

faces growing pressure and challenges in the context of open and increasingly globalised market economies. Therefore, states, in particular those that largely are recipients and not agents of globalisation, have been forced to undertake varied processes of internal reorganisation and reconfiguration through which they have ceded, relinquished or delegated former powers (see Jessop 1994, 1997).[37] There has been a movement of the state towards more decentralised, co-participative, interactive and co-operative forms and mechanisms of policy making and, therefore, the shift in the traditional conception of governing. In effect, there has been a shift 'from government to governance'[38], "the complex art of steering multiple agencies, institutions and systems which are both operationally autonomous from one another and structurally coupled through various forms of reciprocal interdependence" (Jessop, 1997:4). Directly associated with this 'passage' from government to governance is the concept of 'policy network' (Rhodes, 1990; Cooke and Morgan, 1993, 1998), as an alternative policy making mechanism to those based on state hierarchic controls and individuals and 'decentralised' (but not necessarily horizontal) market relationships. An interesting definition is offered by Cooke and Morgan (1998), to whom a policy network is:

> "an informal or semi-formal organizational mechanism consisting of public and private individuals, groups, organizations, and associations whose key discriminating factors is that they interact around specific policies and programmes [...] The key is that network participants are 'of consequence' to the policy field in question" (ibid:80) (emphasis in original).

As seen in the definitions above, the new policy making approach refers to logic of collective action (or 'collective subject'), shaped by multiple agencies and institutions (i.e. public, private and intermediate sectors) and where the policy making is a product of cooperative and/or conflictual interactive practices in permanent processes of negotiation.

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[37] It is indeed important to distinguish here between those functions that have traditionally been the exclusive domain of the state (i.e. administration of justice, provision of internal public security, and external defence) of those functions and activities linked to the governing of the economic and socio-political 'game' in which, in principle, these changes are mostly operating.

[38] For a full analysis of the different meanings of governance see Rhodes (1997), "Understanding governance". Buckingham: Open University Press.

It is necessary to emphasise that the build up of local or regional logics of collective action represents a key problem in the literature on 'decentralised industrial policy' (Begg *et al*, 1995; Begg and Mayes, 2000; Capellin, 1997). In theory, the local or regional state (if this is institutionalised) is the main 'receptor' institution and co-ordinator of decentralisation. However, it is also recognised that the less developed regions lack a critical mass of technical capabilities, expertise and skills to become agents of decentralisation. Hence the need for varied processes of institutional up-grading and learning (see in the following section) and the construction of a new logic of intermediation/decentralisation such as regional development agencies observed in some European experiences. In both cases, multi-agency architectures of socio-economic governance are, again, a key aspect of the process.

Furthermore, although key aspects of decentralised IP are held by public national agencies, since they are in charge of the more 'generic' aspects of a regional development policy, the national states are increasingly called upon to 'complement' their main policy initiatives with those operating at regional levels (Cooke *et al*, 2000). Issues of sectoral composition of regional economies, deficits in varied physical infrastructures, specific community needs, or even 'ideas-projects', are some of the factors that help to define local/regional specificities which may be considered by the national policy body (ibid). There seems to be an agreement between recent studies that the national state has a duty to, primarily, create the 'necessary conditions' (Landbaso, 2000) for innovation, that is, by fostering basic conditions for the development of a regional learning environment. Necessary conditions in the first instance refer to physical infrastructure, within the (single or broader) region (i.e. educational and training, R&D, information and communication, energy, etc.) and, secondly, to the development of interfaces and synergies between national and regional authorities in charge of this infrastructure, in order to encourage national-regional research-industry linkages (Cooke *et al*, 2000). A second and more intangible aspect, relates to the definition of an appropriate legal, administrative and fiscal framework for productive activity (Morgan and Nauwelaers, 1999). Furthermore, another responsibility of the national state is the duty to create and foster instances for inter-regional communication and networking between policy makers; consequently, avoiding inefficient overlaps and competition (i.e. for foreign investments and public resources) as well as to generating spaces to share ideas and experiences (i.e. on 'best practices') which may stimulate practical learning (ibid). All these studies coincide in pointing out that the national

government has the duty to allow regions a considerable level of 'empowerment', since it is the only means through which the latter can 'legitimate' the promotion of actions which are fine tuned to the local situation.

Finally, the growth of business networking also calls for the needs of logics of collective action and 'modern logistic intermediaries' (Cappellin, 1997). As discussed already, in complex business environments increasingly complex firms not only depend on their own capacities to cope with this complexity but also they critically draw upon the competitive assets of other firms and on institutional supports. Concepts such as networks of firms, supply chains, labour division among firms (Piore and Sabel, 1984) production systems (Scott and Storper, 1992), clusters (Porter, 1990, Schmitz, 1995) and systems of innovation and knowledge creation and learning (Lundvall, 1992; Lundvall and Maskell, 2000) become key policy issues in the new competitiveness. As Cooke and Morgan (1998) argue, in order to boost competitive advantage, firms and regions need to build up co-ordinated associational capacities (or economies of association) at the level of the firm, at the level of inter-firm relationships and at the level of institutional support systems. However, all the systemic policy instruments cited above pose a number of co-ordination problems for the building up of associational capacity (i.e. asymmetries of power and information, moral hazard and opportunism) and, as a consequence, new forms of governance are required. In a context in which firms "become more dependant on each other, opportunistic behaviour becomes increasingly counter-productive" (Boekema *et al*, 2000:254). Boekema *et al* conclude that trust-based relationships are a central issue in a new approach to governance, since it "is the glue that binds firms and organizations together in networks" (ibid). In turn, trust may be also connected to space, as it can be institutionalised in regionally-based networks (Maskell *et al*, 1998).

In summary, neither the national state nor the local state on their own (and even less so decentralised market mechanisms) can cope with the complexity and detail associated with new governance demands. Consequently, networking practices, interaction, and complementarity among multiple local/regional agencies is required for the design, delivery and control of the IP body as a whole. The IP body should help to generate the necessary conditions for the co-ordination and regulation of the business environment in which firms operate. Setting up conditions for local regulation (referring to informal norms and

conventions regulating the local business activities, sharing values and aspirations, and social capital mediating the relationships between economic agents) indeed becomes both a necessary condition for the governance of inter-firm and firm-institution relations and a determinant factor to provide (micro) certainty for productive activity under conditions of (macro) uncertainty (Camagni, 1991; Scott, 1998; Storper, 1997). In other words, this collective policy agent not only plays a key role in the process of building up a policy body inspired in the NIP thinking, but also in the generation of the environmental conditions in which these bodies can operate. This finally requires political mobilisation, the dynamic-catalyser element in the process of accumulation of synergic potential and positive activation of the local/regional political agenda (Amin and Thrift, 1994; Cooke and Morgan, 1993; 1998; Scott, 1998).

What then remains for the local state to do? It can, firstly, 'lead' and 'conduct' a local IP agenda. Either independently or in partnership with other public, private or intermediate agencies, the state in this case exerts the leadership and control over the decision making process regarding a given IP body and its policy instruments. 'Decentralised' programmes of SME policy, which are managed (though not necessarily delivered) by and through local public agencies, are a typical example in this sense. Hence in this case it may be more accurate to talk about 'governance in the shadow of government' (Jessop, 1997). There is an increasing trend, however, towards sharing the implementation of public IP programmes with (or delegating it) to other local actors, in order to avoid the trap of government failure (Helmsing, 2001).

The state, secondly, can become a 'partner' of a policy agenda which involves diverse local agencies such as universities, business associations, and other groups of local entrepreneurs and professionals. The policy initiative in these cases is a product of discussions which emerged from a 'bottom-up' process and then becomes a proposal aimed towards the local state. Through partnerships or networked relationships the local state can provide strategic guidance, technical support, financial resources and official political support and representation. Cluster policies and the formation of centres of services and innovation critically rely on the participation and support through design, management and control of the sectoral business associations and diverse groups of potential beneficiary firms.

Partnership is indeed a crucial issue if these types of IP instruments and programmes are to be successful.

Finally, the state can have a 'secondary' or more 'passive' role in the policy agenda. In this case the IP instruments are led and conduced by and through private or intermediate actors (such as business associations, professional associations, universities or R&D institutes) and the role of the state is, or should be, facilitating (i.e. providing information, contacts and infrastructure) the setting up and performance of these initiatives. Examples of this third level of political action could be found in the formation of an export or R&D consortia, the developing of small chains of subcontracting, and the formation of selling or buying groups of firms. These types of actions can be characterised as being closer to forms of governance of private interest (Streek and Schmitter, 1985, quoted in Helmsing, 2001).

3.4.4.1. The process of building up of a 'collective subjective'

The concept of 'institutional thickness', introduced by Amin and Thrift (1994), becomes a useful analytical tool to 'isolate' some key socio-institutional determinants of collective action and political mobilisation. According to Amin and Thrift, there are three main factors that contribute towards the construction of institutional thickness.

> Firstly, a strong 'presence' of formal institutions (notably firms and the local institutional set up as a whole). Secondly, "high levels of interaction amongst the institutions" are also required and then, as a result of sustained interactive and cooperative processes based on shared values, conventions, and knowledge, "the development of [...] sharply defined structures of domination and/or patterns of coalition resulting in the collective representation". Finally, the development amongst participant actors of "a mutual awareness that they are involved in a common enterprise" (ibid:14). In the authors' view, "[t]his will almost certainly mean that there is a commonly held industrial agenda which the collection of institutions both depends upon and develops" (ibid:14-5).

Old institutions have new roles. As regards local government, there appears to be a consensus that the role in promoting local or regional development has changed from that of traditional rule-maker to 'animateur' (Boekema *et al*, 2000; Landabaso, 2000; Morgan and Nauwelaers, 1999). Local governments manage two important assets: regulatory

economic power and political legitimacy and authority (in cases that they have been democratically elected). Through regulatory instruments and public procurement policies the government may make use of 'carrot and stick' policies of incentives. Most importantly, as Morgan and Nauwelaers argue, it may activate the regional actors "by animating communities of meaning, by building capacities for action and by crafting networks through which agents are able to collaborate for mutually beneficial ends" (1999:14). As the authors conclude, it is not only government *per se* that is important, "but *competent* regional government which appreciates the significance of enabling and orchestration"(ibid) (emphasis in original). Therefore, both permanent interaction between local actors and search for shared solutions to common problems are at the heart of the animation capacity of a local or regional government and, at the same time, become a first stage in the developing of coalition patterns. Furthermore, a number of other pre-requisites are often mentioned as necessary for the regional state to be able to play a progressive role in regional development, including institutional innovation towards: more flexible, less bureaucratic and more efficient state functional structures; quality and transparency of the local legislation (notably, efficient business legislation); disposition towards consensus-building (which implies dialogue- and negotiation-oriented vocation of the public leaders and servants); inclusiveness in the political process and; political stability, at least in respect to the policy agenda for development (Amin, 1999; Boekema *et al*, 2000; Cooke and Morgan, 1998; Keating, 1998; Landabaso, 2000; Morgan and Nauwelaers, 1999).

Another key role for the state to play is to facilitate the development of opportunities for collective representation and the involvement of economic agents in common enterprise. This could be achieved by primarily opening up 'bilateral' structures of power observed in 'traditional' localities and regions that include only the local government and local business elites. Indeed, the experience of the Italian industrial districts has shown that this is possible through public 'pressures' from the local state to include and involve other economic agents of consequence in local industrial development such as smaller firms and informal manufacturing-related sector (Bagnasco, 1977; Becattini, 1978; Brusco, 1982; Piore and Sabel, 1984).

As regards the local/regional business elites, and the business associations (BAs) that they normally control, they play new roles in a local IP agenda. Firstly, whether or not the main

BAs represent the interests of the local firms, they are a power base within the territory since they have the ability to gather and build up political consensus among firms. BAs by action or by omission may affect positively or negatively the policy-building process or the IP itself. Secondly, BAs may become focal players in articulating concerns and demands of local firms, pooling resources and proving 'club' goods to firms through, for instance, centres of services (Best, 1990; Keating, 1998; Helmsing, 2001; Maskell *et al*, 1998). In particular, BAs may help to foster conditions for 'collective learning' by generating spaces of interaction between local firms, but also due to the fact that they can function as channels through which local firms search for and acquire information and knowledge inside and outside of the territory whether nationally or internationally (Cooke and Morgan, 1998; Maskell *et al*, 1998; Helmsing, 2001). For all these reasons, BAs are both a key partner for the local state in a local IP agenda and a central constituent of any architecture of socio-economic governance concerned with industrial development issues.

However, the business elites and/or BAs in addition to the local or regional state, can also contribute to situations of 'lock-in' and therefore become a key source of economic failure (Amin and Thrift, 1994; Cooke and Morgan, 1998; Grabher, 1993). This is especially the case in less developed and institutionally thin regions. Evidence of institutional sclerosis is often observed with respect to embedded forms of policy making and other institutional routines and practices that generate resistance to change, "by acting as a block on innovation and the wider distribution of resources and opportunity" (Amin, 1999:373). This is especially the case where the dominant elites enjoy substantial benefits from the existing status quo (Keating, 1998; Helmsing, 2001). Consequently, following Amin (1999), though business elites and BAs can provide strategic leadership, they, like the different public agencies (but mostly the local government), would need to ask "whether their decision-making processes constitute an obstacle to institutional renewal, away from a culture of hierarchy and rule-following, towards one that focuses on informational transparency, consultative and inclusive decision-making, and strategic-building on the basis of reflexive monitoring of goals" (1999:373). In my opinion, the widening of the institutional basis of participation, and the representation of the collective subject of the local policy and its opening up to external influences, may encourage such reflexivity. The openness of local actors (individuals and institutions) towards varied sources of external influences in terms of information, new knowledge, expertise, best practices, failures and so forth is without

doubt a central element in a consultative learning process. As Amin concludes, "the critical factor for economic success is not the presence of local relations of association and institutional advancement but the ability of places to anticipate and respond to changing external circumstances. Thus it is the management of the region's wider connectivity that is of prime importance, rather than its intrinsic supply-side qualities" (1999:375).

Finally, it must be emphasised that institutional learning within both public and private sectors (that is, the time needed to facilitate re-training and up-grading of institutional leaders and public servants) requires a minimal threshold of co-ordination. Such co-ordination is crucial since 'cumulative causation', required for the good performance of a local or regional IP, must affect all actors involved in the architecture of socio-economic governance that has generated such an IP. The eventual existence of 'progressive' leaders (which can act as the main animateurs of the local IP agenda) may help to ameliorate the negative effects derived from an asymmetric co-evolution of the institutional learning process (i.e. within or between private and public sector and other agencies). However, due to the fact that the strategic view (which is a key asset for a forward looking policy) is often both a scarce good and in general is asymmetrically distributed in less developed regions, there is a need for more inclusive practices of institutional learning and unlearning. Only in this way will it be possible to create the conditions to exploit the incremental improvements or innovations generated by the different 'scaffolding' of the value chain that shapes the local IP body (i.e. public, private and intermediate sectors). Thus, by developing regional 'intelligence' (Morgan, 1995), it will also be possible to avoid or at least contain tensions and resistances to change that the new policy agenda raises. The dual concern of maximising opportunities for negotiation and consensus-building and rationalising the administration of dissent become key axioms for any local or regional industrial development agenda inspired by the NIP thinking.

3.4.4.2. Appraisal

In this section I have analysed some theoretical principles arguing for the need to build up logics of collective action, which, through political mobilisation of the local or regional economic agents, promote the development of local IP agendas. In particular, I have examined the new role that the state can play as a 'network builder' and animateur of the

regional economic development in the new competitive setting. In effect, the state, as well as the institutions of the private sector, can develop institutional 'intelligence' in the decision making process through their associations with each other and with the other regional economic actors. The development of associational powers at a territorial level can even be thought of as a form of re-building state power 'from-below'. This is evident particularly in localities and regions in which the national state has simply 'vanished'. This is indeed a key policy challenge for many localities and regions throughout the developing world, notably, in Argentina. Furthermore, I have argued that the systemic nature of the IP instruments forwarded by the strands of the NIP thinking discussed here, pose different levels of co-ordination problems, which, could be best managed by new forms of multi-agency governance.

However, as Jessop (1995) argues, governance mechanisms are not always a solution to market or state failures. It follows that the policy maker must carefully evaluate the potential sources of governance failure associated with the risks of governing complexity of economic or political coordination. In Jessop's view, 'cooperation v/s competition', 'openness v/s closure', 'governability v/s flexibility', and 'accountability v/s efficiency' are some of the main strategic dilemmas that may contribute towards governance failure (ibid). In this section I have discussed the problems linked with situations of 'political lock-in', which may result in an important source of economic failure (Grabher, 1993). I have addressed the need for openness towards varied sources of external influence, via extensive connectivity. This is required not only at the level of firms (either individually or collectively) but also at the level of the main institutions involved in a regional economic development agenda. Finally, following Hudson (1999) and MacLeod (2000), there are a number of contextual variables regarding industrial cultures embedded in particular schemes of social relations of production and consumption (i.e. in old industrial areas) which impose major cultural barriers to the 'entrepreneurial' socio-economic and political transformations discussed above. It follows the importance of, again, 'context-sensitive' *ex-ante* evaluations as a strategic input for policy decision making, on the one hand, and, on the other, the conviction that the agenda for industrial development discussed here is far from being a proposal for any locality or region.

The scarce influence that a regional economic policy has on macro-economic variables (i.e. rates of interest, import duties, competition policy, etc.) without doubt represents a second source of constraints for a regional IP body. Two different types of problem arise regarding the macro-economic issue in relation to IP. Firstly, the level of certainty that an institutionally thick local milieu can provide to the local productive activity does not necessarily compensate for the negative regional effects of an instable macroeconomy. Certainly, competitive pressures in the current globalising political economy have intensified. Hence, nowadays, in the absence of a favourable macro-economic setting, "it seems irresponsible to ask the regions to embark upon a long-term and comprehensive overhaul in pursuit of an endogenous pathway to prosperity" (Amin, 1999:376). This issue becomes a key variable to the regional industrial development in countries like Argentina, which present 'endemic' macro-economic troubles. Secondly, the NIP thinking as a whole has not developed a coherent macro-economic framework alternative to that provided by mainstream economics, observed at the level of the EU by the 'coexistence' of neo-Schumpeterian-led IP bodies operating under the framework of a neoliberal macroeconomy. Furthermore, whether the macro-economic policy should be part of an IP framework is matter of debate (see Chang, 1994).

In the following chapters (Section II of this thesis) I evaluate the relevance of the main theoretical claims forwarded by the NIP thinking to Argentina. This assessment is carried out through a two-fold empirical study conducted in Argentina. It included the study of both a 'regional-based' economy (the Tigre region in the Province of Buenos Aires) and the main 'national' institutions concerned with IP issues. Specifically, Chapter 4 attempts to read the NIP thinking in light of the changes recently observed in the Argentine industrial economy, particularly in the context of the failure of the last neoliberal economic model (1991-2001).

SECTION II

The New Industrial Policy versus Practice: An Argentinean case study

CHAPTER 4

Argentina: Industrial Competitiveness and Policy

4.1. Introduction

Argentina entered into the new millennium in a very traumatic way. Politically, it ended with thousands of people demonstrating and/or looting on the main cities' streets; with a declared stage of siege that resulted in 12 murders; with the fall of the democratically elected government (which however did not result in a military coup); and with the subsequent designation of five nominal heads of state in only ten days! Socially, it ended with 53 per cent of the population (37 million) falling under the 'official' poverty line, 20 per cent (7.5 million) no longer, in a food export country, affording food; with unemployment and under-employment figures affecting around 50 per cent of the workforce; and with the public services and institutions of the (former) 'welfare state' disintegrating. Economically, it ended with an economy 20 per cent smaller after four years' economic recession (1998-2002); with GDP falling by a historical record 16.3 per cent in the first quarter of 2002 and manufacturing output by almost 20 per cent; with a highly indebted state; with a collapsed bank system and a new wave of 'capital flight'; with the system of private contracts entirely paralysed; and finally, with the declaration of the largest default registered in modern world economic history (U$132 billion) (Rock, 2002). Though some economic indicators (but not the social ones) have suggested slight symptoms of 'recovering' since mid-2003 (Clarin, 2003; INDEC, 2003) the situation is still critical.

I want to start this chapter with the following reflection. In 1989 there was a political and economic alternative to 'hyperinflation'[39], to the wave of lootings and subsequent institutional crisis: the neoliberal model. Indeed, 1989's lootings were politically utilised in order to both 'bury' the remaining parts of the welfare state and impose once and for all the Washington Consensus's agenda in Argentina. The lootings of 2001 and the associated

[39] Inflation reached 3,000 per cent and 2,300 per cent in 1989 and 1990 respectively, so that this period was labelled 'hyperinflation' crisis.

institutional crisis helped instead to 'bury' the hegemony of the neoliberal speech. Although this time there is not a 'handy' alternative economic model, it seems that the 2001 events outlined above have opened political and economic perspectives most linked with the world of work and production. This chapter analyses the evolution and recent changes in the Argentine industrial economy, particularly in the context of the spectacular failure of the last neoliberal economic model. The chapter attempts to place into historical context the nature of Argentina's industrial competitiveness problems (in section 4.2 and section 4.3), by focusing on the changing nature of both the Argentine IP framework and its pattern of industrial specialisation. Finally, it attempts to critically evaluate (in section 4.4) these problems in light of the insights stemming from the NIP thinking discussed in Chapter 3.

4.2. Industrial development and competitiveness. Import substitution and the first wave of liberal reforms

Argentine modern history is populated with political and economic projects and counter projects and political-institutional crisis.[40] Nevertheless, two main periods stand out, the industrialisation model based on import substitution (1930s to mid-1970s) and the new (neo)liberal project (mid-1970s to the present date). The Argentine industrialisation process had its upturn during the import substitution period (ISI), which extended between the 1930 crisis[41] and the late 1970s. In contrast to the previous agro-industrial goods' export model, the ISI took place under a framework of a semi-closed economy. It was based on manufacturing production largely aimed at the growing domestic market. Highly favoured by both new regulatory frameworks and the predominant conditions in the international political context, the substitutive industrialisation progressively evolved through two stages. From the manufacturing of basic consumer goods (i.e. textiles, clothes and others for domestic consumers) towards durable goods of higher valued added (i.e. metal and

[40] Democratically elected, military and transitional governments alternated through a large part of the last century. Argentine institutional instability is best illustrated by the fact that there was only one 'normal' transition between two different democratically elected presidents in the last sixty years. The 21st century, unfortunately, started in the same way.

[41] The 1930 crisis refers to the collapse of the 'agro-export model' dominant in Argentina since the 1880s. It was the result of a series of factors, including the end of the expansion of the so-called Argentine 'agricultural frontier', the 1929 crisis (and its negative effects on the international trade) and the conflictive three-sided political relationship between Argentina, the US and the UK (Argentine's main commercial partners at that time) (Kosacoff and Katz, 1989).

chemical products, machineries and automobiles). During the ISI second stage (1958 to mid-1970s), the manufacturing industry had turned into "the country's engine of economic growth and job creation, as well as its base for capital accumulation" (Kosacoff, 2000:36) (see GDP figures in Table 4.1 below).

Table 4.1. Manufacturing industry's share of GDP (at factor cost)

Decade	Share (%)
1900-09	15.35
1910-19	16.54
1920-29	18.65
1930-39	21.06
1940-49	24.22
1950-59	24.80
1960-69	28.18
1970-79	27.23
1980-90	23.60

Source: Kosacoff (2000), based on Argentine Central Bank databases

The import substitution strategy of industrialisation brought about vast social, political and cultural transformations. They were largely promoted by or channelled through, the Peronist movement which ruled Argentina during most of the 1940s and part of the 1950s and 1970s. As a result, the urban proletariat, the trade unions and the small- and medium-sized entrepreneurs (associated with the –at the time- rising middle class) became major political actors for first time in Argentine history.[42] In turn, the state, or more precisely the new socio-political and economic alliance in power, became the main animateur of the transformations in process. Indeed, the state played a crucial role in the ISI model's performance (Katz and Kosacoff, 1989). As Kosacoff (2000) argues, an explicit policy goal of raising the level of national economic self-sufficiency was pursued. The ISI's IP framework included, firstly, the establishment of a regulatory framework of a closed-economy (during the 1930s), then, the manufacturing of basic inputs by new large state-owned companies (from the 1940s ahead), the utilisation of the state purchasing power and, finally, its massive projects of public investments in infrastructure and services (notably, public education and R&D). The IP framework also included the financing and promotion

[42] This in part explains the fact that the wage' share in the overall national wealth reached a historic record during the 1940s climbing by almost 50 per cent. At present it represents less than 20 per cent.

of manufacturing activity through specialised institutional devices (notably, the Industrial Bank).

Three main economic agents shaped the ISI manufacturing industry: state-owned companies, subsidiaries of transnational corporations (MNCs) and the 'national industry', often identified as small- and medium-sized enterprises (SMEs). The state-owned companies formed a small group of large-scale companies (at a domestic-market scale) which operated in monopolistic markets (i.e. public facilities and oil and military industry), under conditions of economic and financial stability and were endowed with enough resources, thanks to which they established formal R&D teams and laboratories. The subsidiaries of MNCs also formed a small group of leading companies in the domestic market (though marginal in the international market) which operated on the basis of large-scale production and generally in oligopolist markets. They were technologically articulated with their respective mother companies by utilising 'mature' (and already depreciated) equipments and capital goods. Finally, the SMEs, though their size varied according to sectors and type of firms, were often family firms which operated in markets dominated by larger enterprises. As explained below, they had to develop continuous 'adaptive' learning processes in order to utilise the often outdated import technology in the domestic market.

In effect, although the ISI pattern of productive specialisation functioned on the basis of technologies largely developed in the US and Europe, the local manufacturing industry had to develop considerable and permanent 'engineering adaptive efforts' to make them operable in shorter-scale production (Kosacoff and Katz, 1989; Bisang and Lugones, 2002). Consequently, the 'national industry', and in particular the bigger firms in this group, was crafting and shaping an idiosyncratic path of learning and knowledge creation, based on the development of local 'adaptive' capabilities (focused in product technology) and under conditions of a semi-closed market and institutional-instability. As Bisang and Lugones (2002) note, although far from being close to international best practice, this pattern of productive specialisation laid the foundations of a significant local techno-productive capacity.

However, the ISI model simultaneously generated numerous micro- and macro-economic constraints that affected not only industrial competitiveness (in the short and long-term) but the model's viability itself. In short, the transference of income toward the manufacturing industry, largely drawn upon from resources (foreign currency) generated by the primary sector exports, was permanently conditioned to macroeconomic restrictions. Indeed, the cycles of industrial growth generated a permanent need for importing both technology and crucially intermediate goods that were not produced in the domestic market. This caused regular trade deficits as the manufacturing industry did not generate enough foreign currency via exports. This trade-off undermined the possibility to finance the necessary technological upgrading over any sustained period without causing a balance-of-payment crisis (Kosacoff, 2002) and the subsequent 'stop and go' cycles. Within the ISI model, two IP bodies were set up in order to cope with these structural deficiencies. The first one sought to promote the export of manufacturing goods. It had in fact a considerable level of success.[43] The second, and more important policy, was the 'industrial promotion' programme. It aimed to reduce the dependence on imported industrial inputs (i.e. steel, aluminium, cellulose and paper and petrochemical products) through the promotion of new large private undertakings. Industrial promotion was set up in the mid-1970s under a scheme of 'infant industry' policy. It had strong public support (see below) and was conceived as a first stage of a decentralising policy that sought to promote the location of companies in less favoured regions. The concept of 'region'[44] appeared thus for first time associated with IP issues within the ISI model. It in fact had its epicentre in a few large metropolitan cities (Buenos Aires, Rosario, Cordoba), being characterised by a high level of industrial (and therefore population) concentration, which generated enormous pressures on the large urban centres. Industrial promotion enabled the new group of large modern companies to set up and restructure when they otherwise would not have done. However, this promotion system has been criticised for its deficient level of selectivity in picking firms, the absence of a coherent industrialisation pattern to follow in guiding such choices, and the absence of monitoring and evaluation of firms' performance (Kosacoff and Katz, 1989). As regards the regional issue, these firms operated as 'enclaves' of production since

[43] In fact, while in 1960 exports of manufacturing goods were statistically insignificant, in 1975 they reached a quarter of the country's exports. They mostly (though not only) were aimed at neighbouring countries.

[44] It more precisely refers to 'provinces' in which the Argentine Republic is politically and administratively divided.

they did not develop 'upstream' or 'downstream' links with other local (but also non local) manufacturing industries. As I show below, they nevertheless became key players during the 1980s and beyond.

A mixture of factors determined the end of the ISI model and the dramatic transition towards a new pattern of accumulation. It included the structural deficiencies previously outlined, the changes in the ideological international climate, globalisation and, most importantly, the internal social and political turmoil which resulted in a new military coup.[45] Backed by the conservative military dictatorship (1976-1983), US-trained liberal policy makers established a programme of market liberalisation (notably, financial reform), which was followed by an aggressive policy of external openness.[46] Ironically, the technocrats leading the restructuring labelled the period *'sinceramiento'* of the economy (which in English roughly means 'making the economy sincere'). According to Kosacoff, it "aimed to eliminate the entire set of regulations, subsidies and privileges established in the past in an attempt to modernize and increase the efficiency of the economy" (2000). In short, the new stage was characterised by the massive and unregulated influx of both imported goods and short-term financial capital.[47] This brought about a phenomenal accumulation of public and corporate foreign indebtedness, which 'blew up' in 1982 when the American Treasury raised interest rates determining the outbreak of the Latin America foreign-debt crisis. The effects of this crisis on the fragile Argentina economy were (and still are) overwhelming. In principle, it deepened the structural external disequilibrium of the Argentine economy, resulting in fiscal crisis in the public sector, inflation, macro-economic uncertainty and so on. Hence, between 1982 and the early 1990s the control of the macroeconomic issue became the crucial factor of economic policy for the reinstalled democratic governments and 'stabilisation' its main goal (ibid). However, the failure of three consecutive programmes of macro-economic stabilisation, the resulting outbreak of the 'hyperinflation' phenomenon (1989-1990), looting, and institutional crisis (that ended

[45] The new military dictatorship (1976-1983) promoted, through the so-called 'Process of National Reorganisation', the entire re-foundation of the social, political and economic basis of the Argentine Republic. Some of the devastating effects of the 'process of restructuring' were the destruction of the democratic institutions as a whole, the repression on the working movement and its more progressive institutions, and the resulting 30,000 missing or murdered people and other thousands of exiled.

[46] Import tariffs fell overnight from 90 per cent to 50 per cent.

[47] An overvalued local currency and high local interest rates favoured both processes.

in the presidential resignation), helped to amalgamate a considerable level of political consensus[48] regarding the need to undertake once and for all deep structural reforms.

Let me go back to the industrial economy field. As a result of the changes outlined above, through the 1980s the manufacturing industry lost its hegemonic role as the main engine of economic growth (see GDP figures in Table 4.1), job creation and upward social mobility (Kosacoff and Katz, 1989). Simultaneously, these changes seemed to bring about the emergence of a new path of productive specialisation. Industrial production based on the intensive use of natural resources or capital and service industries tended to supersede the manufacturing industry as main generator of economic dynamism (Bisang and Lugones, 2002). Firstly, as far the stagnation of manufacturing activity is concerned, the restructuring process led to a three-fold destruction of accumulated capital. It included the massive closure of firms, downsizing and a sharp fall in investments (Kosacoff, 2000).[49] Within this vast segment of firms, the local complex of metal products and machinery, electronic industries[50] and industrial productions associated with construction and consumer goods (i.e. textiles and clothing, the wood and furniture industry) (most of which were SMEs) was the most affected activities by the restructuring programme. In particular, these activities were not only labour-intensive, but also intensive in the use of qualified staff and development of local engineering adaptive efforts or incremental innovations. According to Kosacoff, what he terms 'regressive restructuring' implied the failure of the new economic rules "to base the restructuring of the industry on the positive aspects that had been built up in four decades of import substitutions – during which knowledge, abilities, engineering and entrepreneurial skills, equipment, human resources, and so on, had all been accumulated" (2000:49). Directly linked with the point above, the hollowing out of the welfare state institutions (notably, education, health, housing and the physical and technological infrastructure) had (and still has) an extremely negative effect on the fundamentals of the Argentine' structural or systemic competitiveness.

[48] This consensus was not however the result of a wide consultation processes.

[49] In the 1980-1990 period GDP went down by 9.4 per cent, industrial output by 24 per cent, consumption by 15.8 per cent and investments by 58.9 per cent. In particular, investments fell below the level of capital depreciation, producing thus decapitalisation of the still operating manufacturing industries (Kosacoff, 2000).

[50] Interestingly, the 'dismantling' of the electronic complex occurred in the middle of a process of transition in the international context from electromechanical to electronic-based industries (Kosacoff, 2000).

Secondly, the fast-growing industrial activities associated with the intensive use of natural resources and/or capital present some novel characteristics. They constituted a small but modern group of companies focused on activities such as natural gas extraction, production of food products (notably, vegetable-oils processing) and some industrial commodities (i.e. paper and cellulose, petrochemicals and steel). They grew as the result of an exceptional and rapid process of capital formation and concentration that gave rise to a new and different political and economic agent, namely, the national holding companies (HCs) (Azpiazu, Basualdo and Khavisse, 1986).[51] Some subsidiaries of MNCs also were favoured through the industrial promotion. Paradoxically, the state played a key role in such a process. Though the new political-ideological alliance in power promoted a subsidiary role for the state, while the market was seen as main resource-allocation mechanism, the state promoted, permitted and intermediated the massive income transference that went to subside the new players' emergence (Azpiazu *et al*, 1986).[52] According to Bisang (2000:147-8), the close 'business links' between the national HCs and the state, materialised through different support devices which included: market protection (even in a context of economic openness); industrial promotion regimes (through which the state subsided the purchase of capital goods); tax exceptions; and permissible regulatory schemes (which facilitated the exploitation of natural resources and market concentration). Critically, through its nationalisation the state socialised 'private' foreign debts (but also those taken from state-owned banks) acquired by the national HCs and MNCs subsidiaries in order to finance the start up and/or restructuring of their new companies. Hence, it can be said that the HCs' policy decision making in reality became state policies or, more precisely, the state's policy decision making in effect was privatised.

Regardless of both the high social cost of the restructuring process and its negative effects on almost every indicator of economic performance (hence the 1980-1990 period is better known as 'lost decade'), exports showed positive signs with 78 per cent growth within this period. Part of this is explained by the HCs' performance (Kosacoff, 2000). In fact, some of these companies technologically operated very close to international best practice (Bisang,

[51] With the exception of a few companies of foreign capital, the national HCs emerged either during the development of the agro-export model or during the ISI.

[52] Between 1976 and 1990 the industrial promotion policies subsided the generation of around 50 projects involving large capital-intensive companies established to produce intermediate goods (Kosacoff, 2000).

1998). However, despite the positive aspects associated with the new companies' competitiveness (notably, their export capacity), they did not advance in the development of dynamic competitive advantage. As Kosacoff notes, "forward linkages into the manufacture of differentiated, higher-value-added goods were not pursued" (2000:53). Furthermore, they did not develop a local innovative capacity, which is reflected in the fact that they exclusively depended (and still depend) upon import technologies (Bisang, 2000). Consequently, although the evidence shows many cases of successful microeconomic performance (notably, those related to the HCs and some MNCs subsidiaries) the total sum of cases, as Kosacoff claims, did not bring about enough "macroeconomic strength to establish a new path for economic growth in Argentina" (2000:50). Likewise, the microeconomic efficiency observed in some successful SMEs was not enough to compensate the macroeconomic constraints that affected firms' competitiveness (Yoguel, 2000).

Therefore, Argentine industrial competitiveness at the beginning of the 1990s was characterised by a range of constraints, including structural deficiencies, inflation and uncertainty at a macro-economic level and a hollowing out of the national innovation system that sustained its structural competitiveness during the ISI model. The situation was not much better from a micro-economic standpoint, despite the group of firms belonging to the national HCs and MNCs subsidiaries accumulating considerable productivity gains through the period. In effect, the large majority of firms that survived the restructuring policies undertook 'defensive' business strategies to improve their competitive performance. As a whole, however, they show the following constraints:

Table 4.2. Micro-economy of manufacturing industry before 1990s structural reforms

- Sub-optimal scales of production. It was the result of both the smaller-size market in which local firms operated and the manufacturing profile exclusively oriented towards the domestic market
- High levels of vertical integration. It was the result of, firstly, a weak local presence of specialised suppliers and subcontractors (despite the empty cells of the input-output matrix that the subsidiaries of MNCs were filling) and, secondly, the high transaction costs generated by the business environment in which firms operated. Integration was the way in which the firms tried to neutralise such costs
- A highly diversified mix of production and low level of specialisation
- Innovation efforts based on incremental improvements of a very informal or *ad hoc* kind. They were mostly focused on product technology.
- In contrast to the largest firms, only a marginal per cent of SMEs had access to credit to acquire imported capital goods. Hence they commonly operated on the basis of outdated technology
- Low level of exports. SMEs' exports for instance accounted only by 6 per cent of their total output
- The SMEs displayed in turn a centralised managerial style centred on the owner-manager and/or other family member. As result, they relied on their 'self-diagnostic' capacity for strategic decision making, which was focused almost exclusively on 'manufacturing' issues. Hence the majority of SMEs were technologically and managerially out of date when trade openness was introduced.

Source: based on Gatto and Yoguel (1993; Kosacoff and Katz (1989); Kosacoff (2000)

Finally, both the negative effects of the 'lost-decade' (1980-1990) and the trauma generated by the hyperinflation chaos and successive institutional crises accelerated (socio-politically and economically speaking) the outbreak of the structural reforms that took place in the early 1990s. The manufacturing industry that once occupied a high status position as an engine of economic growth and job creation became the focus of 'blame' for all of Argentina's economic problems during the transition towards the new model of accumulation (Schvarzer, 2001). Similar social stigma affected the state-owned service enterprises (i.e. telephone, gas and power). This deeply weakened the social dignity and morale of entrepreneurs as 'historical subjects' as well as the political conviction and compromise of those public and private institutions that backed the Argentine industrialisation project. Both low-quality and high price products, despite the costly public subsidies received for decades, became key political slogans utilised to convince society that the so-called 'national industry' did not deserve support and that it should be 'punished' for its failures (ibid). The new hegemonic speech was very well managed by the consolidated anti-industrialist crusade (or also labelled 'historical revenge') conducted by the traditional dominant elites, associated with land-ownership and the old agro-export

model, now in partnership with the new economic orthodoxy (ibid). Schvarzer (2000) quite rightly reminds us of Hirschman's assertion that the Argentine industry is not criticised for what it did but for having gone too far.

4.3. Stabilisation, structural reforms and industrial competitiveness

A programme of stabilisation and far-reaching structural reform was launched in 1991 by the government under the Convertibility Plan. Convertibility pegged the value of the peso to the dollar and established a currency board to both increase the credibility of the peg and to constrain monetary (and therefore fiscal) policy[53] (Bird, 2002; Financial Times, 2001). As a result the state lost key tools of economic policy. Argentina's currency-convertibility system was not, strictly speaking, an element of the Washington Consensus. However, the Plan's foundations were strongly aligned with the World Bank and IMF agenda for Latin America (Stiglitz, 2002). Thus, the structural reform programme included the extreme financial and commercial liberalisation, deregulating of markets, extensive privatisation of the old state-owned companies (oil, communications, power and utilities), flexibilisation of the labour market and cutbacks on social-welfare provision. In addition, it included the increase of commercial integration into MERCOSUR initiated in 1985. It is hardly accurate to refer to IP during this period but if something existed in this sense it was presided over by the guidelines above. It is critical to emphasise that structural reforms were also possible due to the fact that Menem's *Peronist* government (1989-1995/1995-1999), under which the former came into force, redrew the Argentine political map.[54] The review below

[53] As Kosacoff explains, the Convertibility Plan "was based on fixing the nominal rate of exchange by law and only allowing it to be modified by the same method, while the Central Bank was obligated to guarantee the monetary base with sufficient reserves [Simultaneously] the plan required the government to desist from using inflationary taxation. It did this by restricting monetary creation by the government to the positive sums available from the balance of payments" (2002:59).

[54] Menem instituted both strong presidential political leadership and bribed political support within the country and obedient 'carnal relations' (as Menem's Foreign Minister called it) with the US, which extended to the WB and IMF. Both strategies became central to carry out the structural reforms internationally supported and/or promoted in the way that they were done. An illustrative example of Menem's political style is that his government "used the emergence law to institute privatization by decree, and then exploited his powers of appointment to the Supreme Court [the so-called 'automatic majority'] to impede investigations of malfeasance" (Rock, 2002:69). Likewise, the union leaders (and unions themselves) who endorsed privatisations received generous rewards by political support.

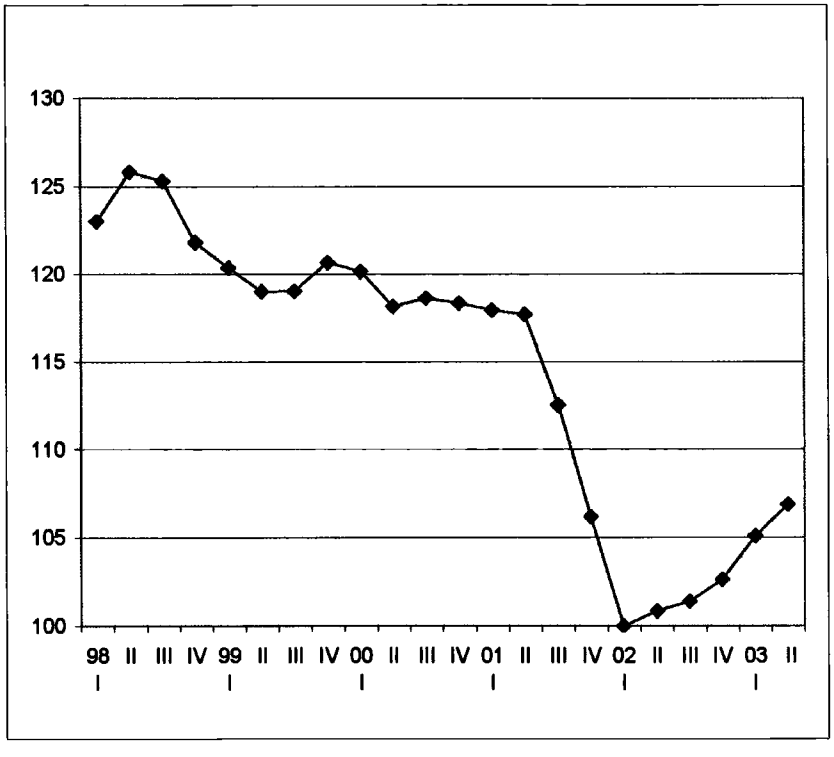
focuses, firstly, on aspects linked with macro-economic performance and, then, on those relate to industrial economy under the new pattern of accumulation.

As regards the macro-economy, both price stabilisation and accelerated reactivation of economic activity constituted the Convertibility's expression of success during its 'golden age' (1991-1994). Economic growth was underpinned by an important influx of external financial capital, direct foreign investments, and the 'repatriation' of Argentine capital deposited in foreign banks (Kosacoff, 2000; Albornoz, 2002). Both the refinancing of the country's foreign debt (i.e. via privatisations) and the lower international interest rates, brought about funds' flight towards the 'emerging markets', and were thus central elements in the above process.[55] The change in the expectations of economic agents was reflected in the positive performance of key economic indicators, notably inflation, which fell from 1343,9 per cent in 1990 to almost 'zero inflation' in 1996. In the same period GDP rose by 40 per cent, consumption by 15 per cent and investment by 61 per cent (Chudnovsky *et al*, 1996). The consensus generated by the peso-dollar convertibility became far bigger than the downside effects generated by the structural reforms (see below). Powerful vested interests (represented by national HCs, subsidiaries of MNCs and the financial sector) made huge and lucrative businesses starting from privatisations, an easy access to external financing, and permissive local 'regulatory' frameworks. Middle-class sectors kept their savings in local banks and/or acquired medium- and long-term debts in dollars (i.e. to buy real state and automobiles). As Rock addresses, "[e]ven the poor entered into small-scale hire-purchase deals" (2002:74) (i.e. to buy white goods and electronic products). As credit and indebtedness expanded, "no one wanted to end peso-dollar convertibility: it would mean slashing savings and increasing debts" (ibid). It is no surprise that this broad-based support endured even into the Convertibility collapse in 2001. Hence, the simultaneous problems of unemployment (and under-employment), a regression in wealth distribution and, as an expression of both, the rise of poverty and social exclusion, were still not enough to change the peso-dollar convertibility. All these indicators worsened from 1998 onwards until the popular uprisings of December 2001 and, still today (beginning 2004), they remain the biggest Argentine 'social debt'.

[55] Argentina became the world's fourth largest recipient of foreign funds in the early 1990s (Rock, 2002).

The peso-dollar convertibility generated its own contradictions which brought it to its chaotic end. A first 'tremor' was caused by the 'Tequila effect' (1994-1995). A sharp rise in US interest rates resulted in the devaluation of the Mexican resulting in default and subsequent capital flight from Latin America. Runs on banks, strong deposits lost and significant GDP fall were some of the Mexican crisis's effects on the Argentine economy. Although Convertibility was kept 'intact' it revealed the fragility of its 'external front'. The appreciation of the Brazilian currency (Real) came, however, "to the rescue of the Argentine economy" by creating a big pull for Argentine exports via MERCOSUR (Rock, 2002:79). In January 1999 this trend changed. The Real came under a strong speculative attack and the Brazilian government was obligated to devalue.

Figure 4.1. GDP by quarters 1998 to 2003 (base first quarter 2002 = 100)



Source: Ministry of Economy, 2003.

By then, Argentina had already fallen into recession as a result of changes operating in the international context.[56] The Brazilian devaluation turned into an economic 'earthquake'. The consecutive drop in economic activity (recession) assumed historical proportions. It lasted almost five years (from the fourth trimester in 1998 to the second trimester in 2003) during which the Argentine economy shrunk by 20 per cent (INDEC, 2003). Revenues from privatisation were exhausted, foreign investments stagnated and soon after the access to external credit froze (whilst Argentina needed both to finance its increasing fiscal deficit and afford the heavy foreign-debt interests' payments). The main aim forwarded by the short-lived *Alianza's* government (1999-2001) was to attract more foreign capital and investments in order to firmly service the foreign-debt requirement. Under the circumstances above outlined, the government turned back to the IMF for emergency assistance (or financial relief) to be able to govern. With no consideration of the explosive social and political situation, the IMF demanded a 'zero fiscal deficit' policy. It brought about a new wave of adjustments (in public wages, pensions, social security and budgets of lagging regions and so on) along with a draconian new flexibilisation in the labour market (another demand from the IMF). To summarise, popular uprisings were only a matter of time. In the meanwhile, the fiscal deficit continued growing while the economic activity continued falling. The default and the subsequent 'hard landing' of the Argentine economy became a matter of fact.

4.3.1. Industrial structure and competitiveness

A new Argentina was born as a result of the long and deep process of reforms that began in 1976. Their effects were and are a determinant for the future of Argentine industrial competitiveness. However, the changes of the micro-economic nature analysed below were not sufficient to give place to a new industrialisation model sustainable in the long term (Kosacoff, 2000). In effect, the relative importance of manufacturing activities continued declining and simultaneously it showed, once again, its heavy dependency on external financial cycles. Hence, it is necessary to critically evaluate the new Argentine industrial economy. According to the last Economic Census conducted in Argentina (1994), in 1993

[56] The dollar appreciation in 1996, the rise in US interest rates, the subsequent foreign-debt payment crisis in the 'emerging countries' and Southeast Asia's collapse in 1997, and Russian default in 1998, had in fact a deep impact on the fragile 'external front' of Convertibility.

there was a total of 90,756 manufacturing firms, including: 64,355 micro-enterprises (< 6 employees), 24,911 SMEs (6 to 100 employees) and 1,490 large enterprises (> 100 employees) (see Table 4.3).

Table 4.3. The Argentine manufacturing industry in 1994

	Number	Employment	Output*
Micro-enterprises	64,355	139,657	4,617
	70.9%	13.9%	5,1%
SMEs	24,911	448,930	32,126
	27.4%	44.6%	35,9%
Large enterprises	1,490	417,889	52,857
	1.7%	41.5%	59.0%
Total	90,756	1,006,476	89,601
	100.0%	100.0%	100,0%

Source: Gatto and Ferraro (1997) * Millions of pesos

Table 4.4. Inter-census evolution of the manufacturing industry (Censuses 1974, 1985, 1994)

	1974	1985	1993
Number of firms[57]	126,388	109,376 (**-13.5%**)	93,156 (**-14,8%**)
Employment	1,525,221	1,381,805 (**-9.4%**)	1,061,528 (**-23.2%**)

Source: INDEC, Statistical synopsis, 1998

Despite the lack of up-to-date census information, industrial researchers agree that the number of manufacturing firms (and production lines) diminished after 1994 and that the industrial activity has, in net terms, shed employment, contributing to increased unequal wealth distribution. It is accepted that the process of deindustrialisation that began in the

[57] The Census unit of analysis was 'establishment' in 1974 and 1985 and 'local units' in 1994. It often generates differences in the total number of firms regarding the different statistical criterion utilised to analyse the 1994 census.

late 1970s continued deepening at least until 2002. An inter-census comparison, which shows the evolution of this process, can be seen in Table 4.4.

The evidence also reveals a marked process of concentration and *'re-primarisation'* (a return to production based on the intensive use of natural resources) of the economic activity, along with an increasing primacy of foreign ownership (*extranjerización*) in the main local industrial activities (including those activities dominated by the national HCs during the 1980s), while the state-owned firms have virtually disappeared. The process of capital concentration benefited both national HCs and MNCs, which together represent the 'Argentine new economic power' (Azpiazu *et al,* 1986). [58] As in the 1980s, during the 1990s both investments and credit predominantly went into large firms dominated by these conglomerates. The rises in productivity accumulated through the 1990s are largely explained by the performance of these firms. However, productivity gains must be analysed in light of their monopolistic/oligopolistic basis of accumulation. Indeed, their size and cross-capital structure enable these firms to occupy dominant positions in almost all the markets in which they operate (i.e. energy, food, transport and communications and, to lesser extent, motor automobiles, iron and steel). National HCs are often concentrated in markets characterised by a limited exposure to foreign competition or where there are 'industrial promotion' policies, or which involve an intensive use of abundant local natural resources in which Argentina has comparative advantage (Bisang, 2000). Agro-industrial productions such as food production have been the most dynamic sector in export markets. In contrast, the manufacturing industry as a whole had a poor performance in export markets, with the exception of only a few industries (notably, the motor vehicle industry) focused on the Brazilian market (via MERCOSUR).

Interestingly, apart from the industrial promotion policies that continued in force in some inland regions, the 'automobile regime', which regulated the motor vehicle industry, was the main and perhaps the unique industrial policy (in a strict sense) established in Argentina under the Convertibility. This regime was two fold. Firstly, it regulated domestic protection from import competition, reduced tariff duty to imported parts and components, and promoted exports, resulting in a spectacular increase in both production and intra-industry

[58] HCs' and subsidiaries of MNCs' sales together represented between 25 and 30 per cent of gross industrial product in the mid-1990s, although they account for only 18 per cent of industrial employment.

trade. Between 1991 and 1994 it became the most dynamic manufacturing industry. In just a few years it tripled its output compared to the 1990 level. The 'automobile regime' along with the growth of domestic consumption observed in that period was the key to this performance. Secondly, the preferential agreements signed with MERCOSUR resulted in turn in the opening up of a market for a small and specialised number of vehicle parts. However, the growing domestic demand generated a notable trade deficit (due to the need to import intermediate goods), which, in a short time, was covered by growing exports to Brazil. Despite the problems caused by the high levels of import content that the local vehicle production utilises (that is, trade deficit and lower local added-value), which needed correction, there was here a relatively successful case of 'active' IP for policy makers to take into account. A synthesis of the main micro-economic characteristics of the most recent Argentine industrial economy is provided in Table 4.5, while the specific effects on SMEs are summarised in Table 4.6.

Table 4.5. Micro-economy of firms after 1990s' structural reforms

- Lower levels of vertical integration, although mainly due to the replacement of domestic value-added by both greater levels of import content and, secondly, by weak local subcontracting practices. It is mostly observed in the largest firms
- Firms have significantly streamlined their product mix while they have also filled out their product mix with finished imports
- Growing trend towards the outsourcing of (auxiliary) services, which were previously carried out by the firms' own staff
- Poor performance in export market. MERCOSUR being the main (although instable) market for manufacturing exports
- Increased external trade openness, although more focused on the import side (until 2001) than on the export side. It meant that the value-added coefficient in production declined abruptly. Furthermore, an increased import component had a negative effect by disarticulating value chains of local suppliers (SMEs). There is an increased trend to the assembly of imported inputs and parts.
- Manufacturing *industries* became more competitive internationally starting from the 2001 peso devaluation, while import fell abruptly. There is now a current-account surplus. Likewise, evidence shows the recovery of some manufacturing activities (i.e. basic and durable consumption goods for the domestic market) via import substitution (i.e. textiles, metal products and machinery)
- However, due to both the macro-economic uncertainty generated by the events of 2001 and the uncertainty with respect to the future (or the transition from the 2001 'chaotic' adjustment and the current 'instable' equilibrium), manufacturing exports still remain lower than expected. The lack of credit in the domestic market is the third key factor affecting the export market
- A new phenomenon emerged in the late 1990s, it referred to the incipient relocation of some local firms within MERCOSUR countries (mainly Brazil)
- Increased trend towards the incorporating of import technology (in some cases close to international best practice). It was favoured during the Convertibility by both the over appreciation of the peso and some policy instruments that promoted capital goods imports. It had extremely negative effects on the generation of endogenous technological capacities
- Widespread and increased use of less labour-intensive production functions within firms (via incorporated technology, out offs in firms' staff and flexibilisation of labour)
- Increased, though heterogeneous, gains in labour- and equipment-productivity. Soft innovations, which occurred in technology *of processes*, production organisation and management (apart from the incorporated hard technology), explain this performance. Growing structural heterogeneity observed at *inter-* and *intra-industry* level is the result of the marked differential productivity growth between firms. It has led to the differentiation between firms that carried out an 'offensive' restructuring (mostly large firms) and those that carried out a 'defensive' restructuring (mostly SMEs) during the Convertibility
- During the 1990s output prices went down appreciably in relation to both the costs of inputs and services required in production and in relation to the wages. It resulted in a decline in the real gross profit margin of manufacturing activities and therefore in their competitiveness. The change in the relative prices since 2002 opened new business opportunities particularly in the tradable sectors (as shown above in relation to the new import substitution)
- For this business opportunity to be taken, it depends upon three factors: the rising of investments (and, therefore), the greater access to credit (which nowadays is extremely reduced), and the positive expectations that economic agents have about the medium-term future so that investments can be made.

Source: based on Bisang and Lugones (2002); Bonvecchi and Porta (2003); INDEC (2002, 2003); Kosacoff (2000; 2002)

Table 4.6. SMEs after 1990s' structural reforms

- SME number diminished by around 25 per cent between the 1984 and 1994 censuses. A broad agreement exists among researchers that the SME closure numbers continued growing at least until 2002 (although statistics are not available)
- Evidence shows those SMEs which manufacture both 'labour-intensive' and 'knowledge-intensive' types of goods were the most affected throughout the 1990s. Apart from the negative effect on the labour market, the loss in accumulated innovative endogenous capacity resulting from this process will have an enormous negative effect on the SME capacity to generate higher value-added products in the future
- Throughout 1990s SMEs operated under several systemic deficiencies derived from the new regulatory frameworks and market structure. As in the past, they operate in markets dominated by large companies; SMEs have less control (than the largest firms have) on regulatory frameworks that affect their business activities and; they have become dependant on new 'intermediary' agents (distribution chains, contractors, larger-sized firms)
- MERCOSUR was largely seen as a threat by local SMEs. This is due to the competitive advantage that Brazilian competition (notably, SMEs) has on the local firms in terms of production scales, technology and state support
- SMEs have been particularly 'discriminated' against by the bank system, which is expressed in both the difficulties that they find in obtaining finance from banks and in the conditions demanded by banks. Financial gaps existing between large- and small-sized firms in accessing credit continued deepening in a context of an increasingly concentred bank system
- Evidence reveals that only an extremely small number of firms showed a good performance in terms of production and managerial capabilities during the 1990s. They have conduced a process of 'offensive' restructuring
- About two-thirds of manufacturing SMEs have faced, and still face, a 're-foundational challenge' with respect to their business altogether. Thus, the majority of firms undertook 'defensive' strategies, including: first and foremost, cutting back on costs of administrative and production staff and, to lesser extent, by restructuring production organisation or other incremental improvements as well as acquisition of capital goods
- A considerable number of these firms have indeed swapped from being manufacturers to being importers and/or traders of import goods
- A final group of firms (estimated in one-third of the SMEs before 2001) presented a 'little chance to survival' in the market place, at least until the devaluation. They observed extremely defensive behaviours, short-term management style and in many cases their only goal was 'to survive'.

Source: Gatto (2000); Yoguel (2000); Yoguel and Moori-Koening (eds) (1999); Yoguel and Rabetino (2002)

4.3.2. Regional development and industrial policy[59]

As in the past, the regional issue has been absent from the state policy agenda as a policy concern in its own right. No national IP was established in order to support local strategies of industrial regeneration. As already shown, 'industrial promotion' (still in force in a few inland Provinces) generated 'enclaves of production' which had no major impact on either the whole regional economy or the developing 'down-stream' linkages. In contrast, through the 1990s, Provinces and municipalities (*municipios*) were pushed into the adjustment and structural reform process by the national state, resulting in the outbreak of the so-labelled 'crisis of regional economies'.[60] Paradoxically, during the same period, through the system known as *'coparticipación'*, the national state effected considerable financial transfers towards the Provinces. Two major issues need to be elucidated in order to understand this apparent 'paradox'.

Firstly, regions, or more precisely 'regional economies', have historically been associated with economic activities based on natural resources and agro-industrial production (i.e. forests, mines, gas and oil, cereals, cattle and vegetable oil) rather than with manufacturing activities. Manufacturing activities become concentrated around capital cities of the richer Provinces such as Province of Buenos Aires (PBA), Córdoba, Santa Fe and Entre Ríos (see Map 4.1). In 2000 Buenos Aires City (or Federal Capital) and Buenos Aires Province (PBA) together accounted for 60 per cent of the national Gross Geographic Product (GGP) (and represented 47.19 per cent of population in 1995). PBA, along with Buenos Aires City and the Provinces of Córdoba, Santa Fe and Neuquén, accounted for 78 per cent of national GGP.

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[59] Argentina politically is divided into 23 Provinces and one Federal Capital (the Autonomous City of Buenos Aires). 'The region' as such does not account for a constitutional status within the administrative division of the Argentine state. The region has however been either used to identify primary or agro-industrial productions located in particular geographical areas or to make 'geographical' distinctions between Provinces situated in different cardinal poles. Within Provinces, *Municipios* (Counties or Boroughs -depending upon the Province in question-), which sum 1,900 in total, are the only constitutional administrative sub-division of the national state. Furthermore, the bigger *municipios* often politically govern groups of *municipios* which are called *Departamentos* or *Partidos*.

[60] Regional economies' crisis not only refers to falls in economic activity or employment figures as occurred at a national level. It also refers to the disintegration of entire public and/or private economic activities in some regions which constituted the main or only source of wealth and/or employment (apart from the public sector).

Table 4.7. National Gross Geographic Product by Province (percentages from 1970, 1993, 2000)

	Province	1970	1993	2000
1.	Buenos Aires	33.61	33.59	32.85
2.	Ciudad de Buenos Aires	29.03	24.26	25.12
3.	Catamarca	0.29	0.54	0.62
4.	Chaco	1.02	1.28	1.27
5.	Chubut	1.15	1.35	1.43
6.	Córdoba	6.70	8.07	8.03
7.	Corrientes	1.39	1.26	1.16
8.	Entre Ríos	2.59	2.20	2.20
9.	Formosa	0.45	0.59	0.56
10.	Jujuy	0.77	0.88	0.86
11.	La Pampa	0.76	0.86	0.86
12.	La Rioja	0.23	0.54	0.54
13.	Mendoza	4.21	3.78	3.73
14.	Misiones	0.80	1.38	1.34
15.	Neuquén	0.70	1.73	2.24
16.	Río Negro	1.02	1.45	1.48
17.	Salta	1.28	1.48	1.51
18.	San Juan	0.86	1.11	1.03
19.	San Luis	0.56	1.04	0.99
20.	Santa Cruz	0.57	0.97	1.10
21.	Santa Fe	8.86	8.02	7.55
22.	Santiago del Estero	0.87	0.92	0.90
23.	Tierra del Fuego	0.08	0.67	0.70
24.	Tucumán	2.19	2.03	1.93
Total		**100.00**	**100.00**	**100.00**

Source: Gatto, F. (2003)

Map 4.1. Argentina and its Provinces

Furthermore, the dependency of regional economies on a few economic activities, often dominated by a few large companies (i.e. oil, gas, mines, forests) or influential traditional local elites (i.e. agro-industrial productions), resulted in Provincial governments not having their own regional strategy for economic development (Gatto, 2001, 2003). *Coparticipación* funds transferred to Provinces were mostly allocated to the payment of wages, then social security and Municipalities, and only marginally to productive investments (Figueroa, 1998). Municipalities, whether from urban or rural areas, neither have resources nor technical capabilities to 'animate' actions aimed at local economic development, and neither have they found a partner in provincial government to act in this sense. Traditional and *'paternalist'* structures of relationships between the state and the private sector resulted in situations of institutional lock-in and sclerosis determining the lack of a progressive view on development issues (Gatto, 2001). Furthermore, influxes of private investments in lagging regions were rare and, in all cases, their reinvestment coefficients within the holder regions were low. They were also centred on few competitive products that in none of the cases laid the foundations for the regeneration of regional economies.

Secondly, Argentina never had, strictly speaking, a regional policy for development. Neither did it account for preparatory or compensatory policies for less developed regions (LDRs) facing emergency situations, as those generated by the 1990s structural reforms (Figueroa, 1998). The country never undertook, as Brazil and Chile did, policies aimed toward decentralisation of the national state. In confirmation of this Argentina has not developed institutional, technical and bureaucratic mechanisms to generate and coordinate systemic policies between national government, provinces and municipalities (Gatto, 2001, 2003). This situation is reflected in the fact that, historically, different national public agencies have run diverse and atomised policy programmes through different public regional spheres. However, due to their small scale, problems of setting up and a lack of coordination among them (resulting in overlap, institutional complexity and confusion among their potential beneficiaries), they have had a low synergy and a very poor performance in terms of their cost-effectiveness (ibid). In none of the cases did this plethora of policy programmes provide an efficient answer to the problems that undermined regional

economies. Neither did they generate 'genuine' employment.[61] I claim that the fact that these policies sought neither to develop 'regional innovation systems' nor to involve the whole regional industry helps us to understand this failure. The national state's reform process bought decentralisation of major public services in Provincial governments, such as health and education. Decentralisation attracted little criticism in the early 1990s, as Provinces had plentiful access to *coparticipación* funds. These funds, as Provinces claim, were not enough to undertake strategies of productive regeneration. However, due to the 'crisis of regional economies', the growing staff of Provincial public servants (to face the growing unemployment ratios) and the lack of strategies for economic regeneration, Provinces in the short term funded themselves in struggling economic and financial situations. Provinces, then, neither had the local nor regional strategies to face the challenging new setting nor the national state help to foster conditions for those strategies to develop. As Gatto (2001) claims, these strategies, beside large firms and/or dominant regional economic activities, should have involved all the economic agents that shape local economies (notably, the SMEs). Although the provincial distribution of SMEs varies, in 1993 the manufacturing SMEs amounted to about 60 per cent and 41 per cent of manufacturing employment and output respectively (see Table 4.3).

However, some 'punctual' provincial as well as local initiatives of SME industrial policy (IP) developed through the latter part of the 1990s. These IP initiatives neither formed part of a national strategy nor were linked with national agencies concerned with SMEs, such as the National SME Secretariat established in 1997.[62] Like the SME Secretariat, they emerged in light of some 'interstitial' changes observed in the general framework of the 1990s Argentine political economy. This included a part of the public sector and key representative institutions of the manufacturing industry (notably, Argentine Industrial Union –UIA-). The cases of Buenos Aires Province (PBA), the Santa Fe Province and, within this, the locality of Rafaela, are the more renowned experiences of what I will term

[61] That is in contrast to those programmes aimed to generate 'covered' unemployment through, for instance, public self-employment policies.

[62] SME Secretariat was set up by the national government in order to put together and articulate the different and uncoordinated SME programmes established by different public agencies. Both scarce political support from the main economic authorities and therefore low budget have affected the possibilities of good performance of this Secretariat.

here the new praxis of *'micro IP actions'*. Interestingly, they were inspired by the NIP thinking.

In 1996, the Ministry of Production of Santa Fe Province established a local policy programme called 'Productive *Municipios'* (MPs). Coordinated by the provincial Production Ministry, MPs aim to support decentralisation processes and the SMEs of the urban localities (forty-eight in total) in which they were set up. In short, MPs implied the creation of Secretariats of Production within local government in order to mediate between local SMEs and policy instruments provided through the provincial Production Ministry. By organising and mobilising both local SMEs and private institutions, MPs seek to transform local states to become facilitators and animateurs for the joint generation of local SME development strategies. Areas of policy concern addressed by MPs have been managerial training, subcontracting, business opportunities and international trade. A study conducted by ECLAC (1999b) in twelve *municipios* (Reconquista, Villa Ocampo, Ceres, Sunchales, Frontera, Esperanza, Galvez, Carcaraña, San Lorenzo, Firmat, Totoras and Rufino), which are 'representative' of the patterns of productive specialisation observed in the Province, revealed interesting results. First and foremost, it demonstrated that, starting from the establishment of MPs, the local economic agents (including firms and business associations) began to see for first time a reference point and a potential partner 'within the local public sector' concerned with the production sphere. Local economic agents highlighted personal contacts, participation and 'inclusive' policy strategies as key issues for networking at a local level. MP' establishment was based on an insightful experience of industrial competitiveness and institutional building which had been successfully developed by the locality of Rafaela.

Rafaela is a medium-sized city located in the Province of Santa Fe which, due to its industrial performance and institutional dynamism built up on the basis of local competitive advantage, is considered as a 'quasi-industrial district' (Gatto *et al*, 1993). Rafaela has experienced a very favourable development recently with a 20 per cent increase in employment between 1984 and 1994 while, during the same period, employment declined both in the Province of Santa Fe and in Argentina at large (Costamagna and Ferraro, 2000; Ascua, Kantis and Johannison, 2000).

Table 4.8. A synopsis of Rafaela

Characteristics	Rafaela
Origin of local industry	Italian and Swiss immigrants in the 1880s
Location (distance for metropolitan area)	Central Argentina (100 km.)
Population	80,000
Manufacturing-firms	418 (6,139 employees)
Commercial establishments	1,697 (8,573 ")
Agricultural sector	84 (135 ")
Dominant manufacturing sectors	Metal engineering and food industry
Major institutions	Local business associations Centre for Entrepreneurial Development Public agencies Local government

Source: Secretaría de Programación Económica de Rafaela

Three factors can be identified as contributing to our understanding of Rafalela's outstanding competitive performance. Firstly, the existence of a dynamic and forward looking SME entrepreneurial sector linked with the manufacturing industry. Secondly, a proactive, specialised and relatively homogenous private institutional structure associated with local entrepreneurial activities. Finally, the existence of state leadership and a public 'task force' strongly committed to the organisation and support of activities aimed at the local SMEs. Collectively, these factors enabled the mobilisation of diverse local economic interests during the early 1990s (notably, SMEs and public and private sectors) which gave rise to an effective public/private partnership, which itself became a platform for the design, coordination and management of a local IP framework. Through the establishment of both the public 'Secretariat for Economic Planning', which is in charge of the *animation* and political organisation of the local economic agents, and the semi-private 'Centre for Entrepreneurial Development', which is in charge of the provision of real services to firms, Rafaela laid the operative basis of its local strategy for development. The main IP areas targeted were the provision of specialised (sectoral) business information to firms, training (in areas such as management, product and process quality, marketing, commercialisation

and ICTs) and technological upgrading. Both institutions promoted and conducted a policy of networking towards different technological, political and economic institutions at a national as well as at an international level (i.e. Porto Alegre in Brazil, the Piemonte and Emilia Romagna regions in Italy and Baden-Württemberg in Germany). Notably, Rafaela's 'process of internationalisation' embraced not only entrepreneurial activities but also political, techno-educational and R&D activities associated with different areas concerning local development (ECLAC, 1999). In summary, through the 1990s Rafaela became a paradigmatic case of local development in the Argentine and Latin American contexts. Although the levels of division of labour and subcontracting between local firms are considerably lower than those observed in the Italian industrial districts, Rafaela with its process of institutional building is seen as a role model and 'tangible' source of inspiration for many researchers, practitioners and policy makers both committed to local and regional industrial development issues and inspired by the NIP thinking.

The *'Bonaerense* Institute of Entrepreneurial Development' (IDEB) is the most important experiment in terms of the scale and resources involved. Established in 1996 in the Province of Buenos Aires (the richest Argentine Province representing a third of the GDP), IDEB's main aim is to promote the development of Provincial productive activities as a whole, particularly those concerned with the micro-, small- and medium-sized firms. IDEB headquarter is located in La Plata (PBA's capital) but its operative structure is decentralised through five regional IDEB-Centres and thirty-five local IDEB-Institutes. Through the latter IP instruments and programmes are delivered. Thirteen IDEB-Institutes were established within urban localities of Greater Buenos Aires. Although IDEB is under the political command of the Production Ministry of PBA, and depends upon this financially, the private sector is a constituent part of the IDEB's political structure. Public and private partnership and local multi-agency governance were founding parts of IDEB's political guidelines. Based on a concept of real services to firms, the main policy areas tackled by IDEB are product and processes quality, managerial training, technological updating, international trade, inter-firm cooperation, subcontracting, retailer trade, assessment of business plans, and some sectoral programmes such as tourism management. As explained in Chapter 5, the empirical research proposed by this research evaluates, among other aspects, the performance of the first local IDEB experience established in the locality of Tigre.

Map 4.2. Province of Buenos Aires

4.4. Argentina and the NIP thinking

To consider Argentine industrial competitiveness in light of the NIP thinking raises issues regarding macro-, meso- and micro-economic features that determine firm competitiveness. Firstly, the Argentine policy regime has exclusively focused in recent years on the macro-economy. While it is true that this is a product of chronic problems affecting the whole Argentine economy, it is also the product of the belief that only a healthy macroeconomic performance in the framework of an open and unregulated market economy would release the necessary micro-economic adjustments leading to economic growth. In this framework IP was seen as a second best policy option to deal selectively with market failures, remaining strictly subordinate to macroeconomic fundamentals. As seen in Chapter 3, the NIP thinking not only has a strong emphasis on meso- and micro-economic levels generating learning processes, but it also to a certain extent presumes a stable and 'normal' macro-economy setting. The situation has changed since the events of 2001. The state recovered key tools of economic policy management (notably, monetary policy), the new government that came into power in mid-2003 is more sensitive to the problems of 'real economy', and society is again beginning to see 'national industry' as a factor of economic growth. However, once again, a prime need is perceived to be to stabilise the extremely fragile macroeconomic 'equilibrium' achieved throughout 2003, 'before debating' medium- and long-term IP considerations. The current *wait and see* behaviour assumed by most economic agents, on which any project aimed at underpinning industrial competitiveness depends, will only change once the existing wide range of social, political and economic uncertainties are turned into medium-term certainties (Bonvecchi and Porta, 2003). It is also important to take into account that the continuous process of deindustrialisation in Argentina, coupled with capital concentration, contradict the NIP assumption regarding industrial economies based on a plethora of firms and economic agents.

Second, the Argentine institutional set up 'underpinning' firm competitiveness presents a series of systemic deficiencies often resulting in economic failure. Argentina, in contrast to Brazil and Chile, has failed to build up institutions specialised in industrial development which had been able to 'transcend' political contingencies and become truly state policies. Therefore, the Argentine IP framework can be characterised as a 'collection' of instruments

and programmes that were scarcely co-ordinated; run by different public agencies (mostly by Ministries of Economy and Employment); and an expression of projects that different administrations established whilst they were in power. Institutional complexity and failure are not problems exclusive to Argentine nor a restriction to the success of IP (as observed during the ISI), but, institutional efficiency is a prerequisite within the NIP thinking in order to set the conditions for systemic competitiveness. Institutional failure also characterises the framework of relationships between public and private sectors. During the Convertibility these relationships were mostly restricted to the distribution of power and shares in businesses associated primarily with the privatisation of public assets, but not necessarily to criteria of accountability and efficiency in public and private institutional spheres.[63] This institutional culture contradicts assumptions of the NIP literature in which the framework of public/private agreement should constitute the main body promoting systemic efficiency. The recent political changes in Argentina suggest a transition to more transparent and participative schemes of policy making, but it remains to be seen whether this shift is sufficient to lay the foundations for public and private partnerships as conceived in the NIP literature. Furthermore, regions and localities have yet to appear as active agents in the development of local strategies supporting industrial competitiveness. There has been little help from the national state, which has not established the conditions necessary to mobilise local or regional actors. As seen, some interstitial changes have occurred in this respect through the 1990s. However, the Argentine case does not resemble the more proactive regions addressed by the NIP literature.

Finally, the microeconomy of local firms does not resemble the dynamic, innovative, flexible, specialised and internationally competitive firms addressed by the NIP literature. While SMEs are less proactive economic agents, systems of firms acting as networks of subcontracting and specialised divisions of labour are rare. Although the micro-economy of firms has considerably changed throughout the 1990s, it is a case of individual success stories rather than a qualitative change in Argentine industrial competitiveness. What is

[63] The case of the Argentine Industrial Union (UIA), which historically 'represented' the manufacturing industry, turns out to be paradigmatic due to the controversial role it played during the Convertibility. Besides internal differences, the economic sectors that directed UIA backed the structural reforms and market liberalisation. These sectors indeed were favoured either by their participation in the privatisation process and/or by the regulatory frameworks in force. When UIA wanted to react in the face of the deepening economic crises in the late 1990s (which also affected those vested interests), UIA no longer has the power that it use to have to undertakes different courses of action. The financial sector along with national and multinational conglomerates was already the main political variables in state policy decision making.

more, the most competitive local firms built up their basis of accumulation on monopolist or oligopolist market positions, mainly gained through a protective regulatory framework, and not necessarily on the basis of neo-Schumpeterian competition.

Some questions arise regarding the relevance of the NIP thinking in the light of the setting above, which will be used as the basis for the empirical study introduced in the next chapter:

Are learning and change processes forwarded by the NIP thinking possible and desirable for firms in contexts where short term and *wait and see* business strategies seem to be the most rational answer to cope with uncertainty?

Are the assumptions of the NIP thinking concerning innovation and learning economies compatible with situations of institutional complexity and failure as well as an absence of 'innovation' systems?

Is it possible, as well as contextually relevant, to promote local and/or regional IP agendas in Argentina inspired by the NIP thinking in light of the predominant restrictive local conditioning? Does territorial competitiveness matter in the framework of the Argentine economic policy as a platform for policy design?

Finally, can the NIP literature adapt to settings characterised by a marked and permanent macro-economic instability often dominant in developing countries like Argentina?

CHAPTER 5
The Tigre Region

5.1. Introduction

The case study which follows focuses on the Tigre region. Tigre[64] is situated 32 km to the north of Buenos Aires centre and harbour (both can be reached in half and hour by car), in a straight line between the City of Buenos Aires (CBA) and the remaining biggest cities in Argentina, Córdoba, Rosario and Santa Fe (situated towards the northwest of the country). The north Panamericana, which crosses Tigre and has an important access point within the Partido, is the main motorway from/to the centre-north of Argentina and to Brazil, Chile, Paraguay, and Uruguay (MERCOSUR) (see map 5.1).

I have chosen the Partido (County) de Tigre as the region for the case study based on a set of criteria that enable me to conduct an empirical study of the characteristics required for this research. In Tigre's region:

- There is a critical mass of manufacturing firms which account for an important part of the local GDP. Most of these firms are micro-, small-, and medium-sized firms.
- An important number of the firms belong to the timber and wood furniture industries. For their number, geographical proximity, and sectoral composition these firms constitute, in a broad sense, an industrial agglomeration or cluster.
- Owing to the timber industry encompassing a series of fragmented processes of transformation of raw material into intermediate and then final goods, a theoretical possibility exists for production specialisation and division of labour among firms.
- Likewise, the Partido de Tigre had a vibrant economic performance during an important part of the 1990s particularly in comparison to most of regions in Greater Buenos Aires.

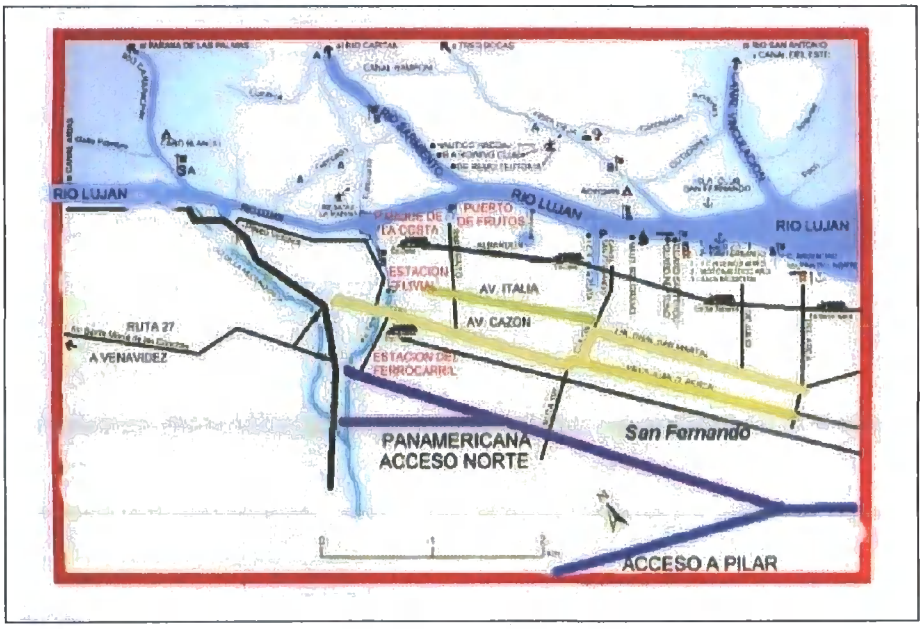
[64] The Partido de Tigre has a total surface of 386 km² from which 147 km² correspond to the Tigre's continental surface, in which the commercial and manufacturing activities are located. In turn, 221 km² correspond to the wooded islands, located within the Parana River Delta (see map 5.1).

- Tigre's institutional set up is shaped by a considerable variety of public, intermediate and private institutions, which, in one way or another, are concerned with the competitive performance of firms.
- Finally, the urban Tigre is situated within Greater Buenos Aires. Hence Tigre is a locality within a larger urban metropolis. As already explained, the majority of firms in Argentina are located in big cities. Specifically, Tigre politically belongs to Buenos Aires Province where around 50 per cent of total number of firms are located (see map 5.1).

All the reasons above make the Partido de Tigre an interesting candidate for testing the relevance of the propositions of the NIP thinking previously discussed. The study focuses on SMEs in this region for the following reasons:

- In Argentina, like elsewhere, micro-, small and medium-sized firms are the most numerous enterprises and represent a very important part of the economy in terms of employment and GDP.
- According to SOCMA (1998, based on Census 1994), if all economic activity is considered, in 1994 there were around 900,000 micro-, small- and medium-sized firms (1 to 150 employees). It means that 99 per cent of firms fell within this segment of enterprises. The largest part of these firms being micro-sized firms (1 to 5 employees) and around 80,000 SMEs.
- They generated 2,5 million jobs (which represented at that time around 22 per cent of total employment and nearly 80 per cent of manufacturing employment) and 60 per cent of output (approximately U$ 94,000,000 millions). As a whole they contributed 41 per cent of GDP.
- Finally, the SMEs represented both the basis of Argentine industrialisation and a central vector of the development of the associated social economy. In contrast, the national and multinational conglomerates have neither laid the foundations for a sustainable model of accumulation nor have they become influential in job creation and wealth distribution. Although the conglomerates may become key players in boosting international competitiveness, the events of 2001 have shown that an economic model based on exclusion and permanent job shedding is not sustainable in the medium- and long-term. I argue that the SMEs do matter as economic actors in their own right in light of the re-launch challenge that the Argentine economy faces.

Map 5.1. The Tigre Region



The case study attempts to evaluate *in practice* the relevance of three propositions asserted by those strands of the NIP thinking concerned with learning and innovation in the framework of local and regional economies. These are firstly, the 'relevance of learning and innovation' as strategic behaviour underlying competitive performance of the firm; secondly, the 'power of economies of association'; and thirdly, the 'power of place', in boosting firm systemic competitiveness.

The following research questions are designed to test these theoretical claims: do geographical and cultural proximities play a role in enhancing learning, the development of innovative capabilities and interfirm division of labour in the regions and firms studied? Does the regional institutional set up operate as a facilitator or partner in firm learning processes and the development of their business strategies? Do the regional public and private institutions share communal interests and political agendas concerning both firm performance and, in a more general sense, local industrial development? On which socio-political and economic basis of governance do these communal interests materialise into local IP agendas? If the theoretical propositions evaluated do not reflect the reality observed in Argentina, what are the main theoretical and IP implications that need to be anticipated in this context? Do the dominant views observed in provincial and national institutions with respect the case for IP strategies at the level of localities and regions support, debate and/or oppose such a policy concern? Do those views support decentralisation of national policy agendas towards regions and localities in Argentina?

These propositions have been tackled through the study of four main variables. Firstly, I examine some social, cultural and historical factors in relation to economic evolution, factors of productive specialisation and performance. These are considered against certain strands of the NIP thinking that asserts their importance in shaping economic development (Brusco, 1982; Camagni, 1991; Garofoli, 1991; Piore and Sabel, 1984; Pyke *et al*, 1990). Secondly, I assess to what extent learning and the development of 'innovative capabilities' of the local firms matter in shaping their competitive strategies. In particular, I assess whether the former are interactive processes, involving other economic agents, and the extent to which they are processes in which geographical proximity matters, as addressed within the NIP literature (Cooke and Morgan, 1994, 1998; Florida, 1995; Maskell and Malmberg, 1997, 1999). Thirdly, I analyse the nature of the relations between economic

agents of the region, especially those that affect the competitive performance of firms. That is carried out by examining three types of relations, namely, inter-firm, firm-institution and inter-institution relations. In doing so, I attempt to identify and analyse elements of institution-building and territorial mobilisation concerning the generation of local policies aimed at supporting firms' competitive performance. Simultaneously, I evaluate the contextual constraints that obstruct the emergence of such elements. These issues are tested against different strands of the NIP literature asserting the importance of systemic relations and the institutional set up (Amin and Thrift 1994; Bianchi, 1994; Braczyk *et al*, 1998; Brusco, 1992; Cooke and Morgan, 1998; Keating, 1998; Storper, 1997). Finally, in order to place into context the debate proposed by the NIP thinking regarding localities and regions as platforms for policy making, I attempt to grasp the dominant imaginaries existing in provincial and national institutions concerning the three propositions above as well as on more general issues of competitiveness and IP.

More than a decade ago Becattini defined an industrial district as: "a socio-economic 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." (1990:39). Becattini finds the need to 'resurrect' the concept of industrial districts originally formulated by Alfred Marshall (c.1870) in order to emphasize "the dynamic linkages between the socio-cultural features of a productivity community and the rate of growth of both its productivity and innovativeness" (2002:484). Similarly for Garofoli, "[...] territory plays an active role in the process of development as it includes all those historical, cultural, and social factors that are the basis of specific models of productive organization, of the continuous interaction among economic and social actors and, therefore, of the actual processes of economic and social transformation. The emphasis on the territorially anchored organizational model of production hinges, therefore, upon at least two dimensions: 1. The system of production [...] 2. The social and institutional base that allows that specific organizational form." (2002:227).

These propositions have been enriched with insights from economic sociology, notably on 'embeddedness' (Granovetter, 1985), which asserts the importance of locally specific social and institutional features in shaping economic development. Subsequently, related concepts such as 'social capital' (Coleman, 1988; Putnam, 1993), refer to patterns of social

relationships that permit cooperation between actors that are, at the same time, competitors. Similarly, 'untraded interdependencies', coined by economic geographers (Morgan, 1995; Storper, 1995), refers to the advantages that firms can gain through informal links and patterns of social interaction favoured by proximity of economic actors (i.e. other firms, suppliers, supporting institutions) within localities and regions, giving insights that have enhanced NIP thought.

Besides introducing the case study, my aim is to tease out from the analysis of Tigre's economic development some factors linked to territorial identity, patterns of conduct and organisation, and entrepreneurial culture that may be crucial to interpreting the economic geography of this region. This chapter is divided into two sections. Section 5.2 describes the current structure of the regional economy and analyses the profile of its manufacturing industry. In particular, this section looks at both the timber and wood furniture industrial cluster existing in the region and some of its historical antecedents. Finally, this section briefly examines some of the factors associated with Tigre's geographical location that have influenced its economic development. Section 5.3 examines the institutional structure of the Tigre region by focussing on key aspects of its history and evolution. In particular, it analyses the specific institutions that have emerged dedicated to supporting firms, rather than on local and regional institutions as a whole. The concluding subsection summarises the empirical findings in light of the theoretical propositions evaluated.

5.2. Local economic system and manufacturing industry

The Partido de Tigre experienced outstanding economic dynamism through the 1990s in the context of the City of Buenos Aires (CBA) and the urban districts of the Province of Buenos Aires (PBA). Interestingly, 'public' official statistics were not available in Tigre's Municipality. Qualitative information collected during the course of the fieldwork enabled me to confirm that Tigre was one of the fastest growing localities within the CBA throughout the 1990s (personal interviews with key informants from ECLAC and FLACSO, 2001). Over this decade the Tigre region benefited from comparably high levels

of public (local) and private (non-local) investment.[65] Therefore, the primary reason for choosing the Partido de Tigre as a case study is that it allows exploration of whether underling this dynamism there are effects in line with the NIP assumptions mentioned earlier. Secondly, and in a normative sense, it is interesting to consider whether this dynamism may be enhanced in the future through policy agendas inspired by the new IP thinking.

There is a critical mass of manufacturing firms (632 in total)[66] in the Partido, which have a substantial participation in the local GDP (see figures in Table 5.1). Secondly, these firms can be classified as micro-, small-, and medium-size firms (see below in this subsection). Thirdly, an important number of these firms belong to the timber industry and related products, notably the wood furniture industry (see in subsection 5.2.1). For their number, geographical proximity, and sectoral composition these firms constitute, in a wide sense, an industrial cluster (Porter, 1990; Schmitz and Nadvi, 1999). Likewise, as the timber industry carries out a series of fragmented processes of transformation of raw material and manufacturing of intermediate goods before producing a final good, there exists a theoretical possibility to develop a division of labour between local and clustered firms, in the sense argued by the flexible specialisation school (initially by Piore and Sabel, 1984 and then Pyke *et al*, 1990).

Table 5.1. Economic Structure of the Partido de Tigre: divided into Commerce, Services & Manufacturing Industry

Activity	Number (Shop/firms)	Employees		Sales (Millions U$ dollars)		GDP (Millions U$ dollars)	
Commerce	3,030*	6,067	8.0	131,557,518	5.0	89,734,253	5.5
Services	1,059	51,197	67.0	116,256,557	4.0	57,380,423	3.5
Industry	632	18,948	25.0	2575,127,000	91.0	745,748,710	91.0
Total	4,721	76,242	100%	2822,941,075	100%	1638,612,096	100%

*130 shops sell "furniture and associated equipments". Source: IDEB-Tigre, 2000

[65] It is important to emphasise that the economic growth experienced by Tigre is not reflected in the figures of local employment and welfare. Unemployment and marginality have steadily grown since the second half of the 1990s.

[66] According to a study carried out by ECLAC- Buenos Aires, the lack of critical mass of firms in localities and even regions is one of biggest restrictions to setting up territorial programmes of IP in Argentina (Gatto, Cesetti and Fritche, 1997).

As shown in Table 5.1, the manufacturing sector is the dominant local sector with respect to commerce and services considering its contribution to sales and GDP. The manufacturing firms (632 in total, in year 2000) account for 91% of local sales and GDP, respectively. Local commerce and services as a whole amount for the remaining 9%. If one looks at the employment figures by sector the picture is notably different. Over two thirds of jobs filled (67%) correspond to the service sector, and only 25% to the manufacturing sector (over a total number of 1,059 shops/firms)[67]. The remarkable figure corresponding to the manufacturing sector within the local GDP made this region an exception with respect to the most part of localities and cities in Argentina, where either services or commerce often predominates.

With respect to firm size, there is no specific available statistical information. Key informants interviewed pointed out that with the exception of only a small group of large companies, the majority of local firms are micro-, small- and medium-size firms (IDEB- and UIA-Tigre). If one looks at the employment figures in the manufacturing sector in Table 5.1 (18,948 in total), and divides this figure by the total number of firms (632), it can be estimated that they employ on average 30 people each. For the most part these firms would fall thus into the category of small firms (6 to 50 employees).

However, qualitative information collected reveals that only a small group of large companies, Ford Motor Company (Ford) among them, account for a considerable part of the regional GDP (some of them MNCs). As stated by Industrial Union of Tigre (UIA-Tigre) and the Development Institute of Bonaerense Entrepreneur (IDEB-Tigre), this group of large companies as a whole amount on average to more than 80% of the manufacturing sector GDP. This figure includes MNCs such as Ford, Coca Cola S.A., and S.C. Johnson.

Therefore, the 'SME factor' previously addressed must here be taken very cautiously. As Gatto and Yoguel (1992) argue, the simultaneous presence of a few dominant large companies in manufacturing sectors and localities populated by a large amount of SMEs is

[67] Employment statistics in localities placed within large cities have however considerable shortcomings. Many people who live in these types of localities may work in other parts of the city, and vice versa, and this data is rarely registered by the census in Argentina.

one of the most typical characteristics observed in the Argentinean industrial geography. This fact neither represents a problem for the local SMEs themselves nor a restriction for this research. It may become an advantage as long as external economies and economies of association emerge as a result of the activity of these large companies (i.e. imitative technological and managerial spillovers, and subcontracting practices).

Table 5.2. Manufacturing industry of the Partido de Tigre: divided into subsectors by number of firms and sales

Activities	Firms		Sales (Millions U$ dollars)	
1. Food Products & Drinks	**83**	**13.1**	**356, 800**	**13.8**
2. Textiles and Articles	24	3.8	60, 643	2.3
3. Timber & Sawmills	**109**	**17.4**	62,498	**2.5**
4. Paper, Editions & Printer's	24	3.8	75,082	**2.9**
5. Chemical Products	62	**9.8**	225,558	**8.7**
6. Non Metallic Minerals	20	3.1	12,251	0.5
7. Basic Metallic	**103**	**16.3**	**197,437**	7.7
8. Machinery, Equipments & Vehicles	**153**	**24.2**	**1558,223**	**60.5**
9. Other Industries	54	8.5	26,635	1.0
Total	632	100%	$2575,127	100%

Source: IDEB-Tigre, 2000

However, these MNCs and the group of Argentinean large companies (i.e. Terrabusy; Frigorífico Rioplatense SA; and Techint SA) operate as sort of 'enclaves' or 'islands' within the regional economy. Despite their contribution to regional figures of employment and tax payments, qualitative information collected reveals that these companies hardly develop 'down-stream' linkages with local SMEs and institutions. The subsector of Machinery, Equipments & Vehicles, which is shaped by only a large company (Ford) and many auto-part SME suppliers, represents the only exception in this sense. However, the SME suppliers have for the most part been merged or acquired by different large automotive companies operating in the country (Ford included) during the last decade. Hence most of these firms are no longer independent. If ownership is considered, the subsector of Timber & Sawmills (wood furniture firms included) becomes the biggest group of local firms owned by local entrepreneurs (see Table 5.2).

If the contribution of Ford and the remaining large companies to local GDP were eliminated, the panorama would be quite different. The remaining 20% of the regional GDP, shaped by subsectors of Basic Metallic; Paper, Editions & Printer's; and Timber & Sawmills (Activities 2 to 6 and 9 together in Table 5.2) highly populated by SMEs, would become more important for the local real economy. The concept of 'local' refers to the fact that these entrepreneurs and their firms organise, coordinate, and run their business 'from' the local/regional *milieux*, they build up external links 'from' the local, and they interact with and somehow shape the local business and institutional environments. This is particularly the case for localities with diffuse boundaries, like Tigre, which are situated within larger cities. In fact, for the firms situated in Tigre and the region, the City of Buenos Aires constitutes their local and national market at the same time. Tigre's geographical location and its network of connections are factors that help to explain the significant number of manufacturing firms located in the region, particularly on the North *Panamericana* motorway (see map 5.1). However, the availability of external links in this case does not guarantee that local clustered economies easily can avoid, for instance, 'lock-in' of their technological trajectories (in the sense discussed by Bell and Albu, 1999).

5.2.1 Timber and wood furniture cluster

There is no commonly accepted definition of industrial clusters. However, some characteristics differentiate an industrial cluster from other concepts currently utilised in IP issues. Unlike networks, industrial clusters are critically associated to geographical proximity of firms and economic actors[68], which is thought of as a source of competitive advantage. Humphrey and Schmitz (1996), in a work specifically concerned with local industrial policy, offer a very useful definition of industrial cluster:

> "A cluster is defined as a sectoral and geographical concentration of enterprises. Whether specialization and cooperation develop is considered a matter for empirical research and not subsumed in the definition. Once such a concentration exists, however, external economies are likely to arise, notably from the emergence of suppliers who provide raw

[68] I recognise the existence of 'virtual clusters', based on digital-organisational networks or e-business communities, as new competitive and collaborative economic spaces (see for instance Romano *et al*, 2000). As far as available information informs, however, small firms in traditional sectors of production in developing countries (in some cases) have only recently begun to use computers and information technologies as business tools.

materials and components, new or second-hand machinery and spare parts; or the emergence of a pool of wage workers with sector-specific skills. A cluster may also attract agents who sell to distant markets and favour the emergence of specialized services in technical, financial and accounting matters" (1996:1863).

Altenburg and Meyer-Stamer, (1999:1694) note that what makes clusters attractive from the IP perspective are the opportunities for promoting collective efficiency. Collective efficiency is defined as the competitive advantages derived from both (often passive) local external economies and, above all, (active) joint actions (Schmitz, 1995). This last dimension of collective efficiency, related to interfirm relationships and division of labour in the timber cluster, is addressed in Chapter 6 of this thesis.

Statistical information shows that the timber industry contributes the largest number of firms in the region. It accounts for an approximated total figure of 295 firms (109 and 186 firms in each Partido)[69] (see in Tables 5.2 and 5.3 respectively). These firms range from forest production (at the Delta islands) to firms concerned with wood derivates, such as sawmills, shipboards, carpentries, wooden crates, and the wood furniture industry (see photographs in appendix 2). Furthermore, those local activities and services associated with the commercialisation and supply chain of the timber industry should also be added to the total number of (sectoral related) firms. In Tigre alone there are about 130 shops that sell furniture and associated equipments (IDEB-Tigre, 2000), an important part of which sell wooden furniture.

[69] This figure is approximated because there exists a possibility that some timber firms had been considered in both Tables 5.2 (elaborated by IDEB-Tigre under a regional criterion) and Table 5.3 (elaborated by the San Fernando's Municipality, under a local criterion).

Table 5.3. Manufacturing industry of the Partido de San Fernando: divided into subsectors by number of firms and per cent of total

Activity	Number of Firms	%
1. Food Products & Drinks	**122**	**19.5**
2. Leather	6	0.9
3. Shipbuilding	22	3.5
4. Timber	**186**	**30**
5. Sand Extraction' Firms	5	0.8
6. Chemistry & y Rubber	58	9.3
7. Metallurgic, Metalmechanic & Auto parts	**125**	**20.1**
8. Plastic	20	3.2
9. Electricity	6	0.9
10. Graphics	52	8.4
11. Ceramics	9	1.5
12. Other industries	11	1.8
Total	**622**	**100%**

Source: Municipality de San Fernando, 2000

In the case of San Fernando[70] (in Table 5.3) the total number of timber firms reaches 186 firms (30% of the total) and, therefore, constitutes the main manufacturing subsector. From these 186 firms, 147 are SMEs devoted to industrial wood processing and, from these 147 firms, 115 firms are wood furniture producing firms which use both wood pine and algarroba (Municipality de San Fernando, 2000). The remaining 32 firms are either sawmills or wooden crate producers, which use willow, poplar, and eucalyptus as raw material. These latter species of wood mostly come from the Delta islands (see photographs in appendix 2). The small size of firms concerned with furniture production (not in furniture retailing) seems nevertheless to be a structural characteristic to furniture industry (Best, 1989) rather than a local specificity. For example, only nine percent of European furniture firms by mid 1990s had more than twenty employees (Maskell, 1998). As this scholar notes:

> "[t]hroughout the world, furniture production has always taken place in small firms regardless of numerous attempts to 'Fordize' the industry" (ibid:101). The "very nature of furniture consumption as a deeply personal statement of a consumer's taste and

[70] The timber cluster covers the Partido de Tigre and the neighbouring Partido de San Fernando (see map 5.1). Hence in this case for Tigre region I concentrate on both Partidos together.

personality and the relatively lengthy possession of furniture by a consumer worked decisively against the introduction of mass production in the furniture industry" (Hounshell, 1984 quoted by Maskell, ibid). Hence the furniture industry seems to be an industry of niches. "Most [small furniture] firms compensate for any size-related disadvantages by focusing on specific products or niches in the value-added chain of the industry" (ibid:102).

Finally, the timber industry is labour intensive, a characteristic that seems to be common to developing as well as developed market economies (Maskell, 1998) and, at least in the Argentine case, it displays highly sensitive job absorption rates in terms of increases in demand. Though there is no available official statistics of local employment by manufacturing subsectors, some entrepreneurs and institutions interviewed pointed out that the timber industry accounts for an important portion of the regional industrial employment. Bearing in mind the high level of structural unemployment registered in Argentina (23% of the workface in 2002, with a additional 22% under-employed), to study labour-intensive sectors of production, like the timer industry, represents an additional motive to choose the timber cluster as a case study.

5.2.2. External economies, identity and entrepreneurial culture

Following the distinction made between competitive advantages derived from 'incidental' or 'passive' collective efficiency that 'fall into the producer's lap (or external economies in the strict sense), and those that derived from 'planned' or 'active' joint efforts realised by clustered firms (Nadvi and Schmitz, 1999:1504-5) a first question arises: is there evidence of external economies ('passively') available to the local firms in the sense suggested by the theory at the wood furniture cluster?

The fieldwork reveals the presence of some external economies derived from the existence of a timber and furniture market in the region. As expressed by some entrepreneurs interviewed, some areas of Tigre and San Fernando function as if they were a furniture 'shopping mall'. This market is shaped by a series of actors: furniture wholesalers and retailers, the general public (who come to the region from all over the country to buy furniture), timber and furniture suppliers, who provide raw materials, intermediary goods, and new and second-hand machinery. Many of these suppliers regularly come to the region

to offer their products and, to a lesser degree, specialised services. Some suppliers have even opened sales outlets in the region. Likewise, the firms are provided with an easy access to workers with sector- and territory-specific skills related to the regional production of furniture. As described below, the furniture market has historically developed as a result of the dynamic between a critical number of related activities clustered in the same geographical location. These external economies mean a reduction in transaction costs for small entrepreneurs, manifest in reduced searching time and price bargaining. It is a decisive issue for entrepreneurship (even for the less exceptional and more common entrepreneurs) since "clustering makes it possible to advance by taking small and calculable –rather than large and wild- risks" (Schmitz and Nadvi, 1999:1506).

Consequently, the competitive advantages derived from the basic external economies due to the existence of this market of factors of production, low entry barriers to the industry (due to the low investment of minimal fixed capital required -Maskell, 1998-), and the relatively protected nature of the domestic market to international competition (at least until the early 1990s), makes the Partido de Tigre and the region a fruitful terrain for entrepreneurship. The 'active' and 'deliberate' learning processes have therefore been developed and activated by the presence of passive external economies. New firms go forth generating their own conditions of reproduction within the cluster, and this explains why the new entrepreneurs set up their firms and shops within the cluster, and often right next to the competition. Interestingly, a part of the market pull is directly shaped by the flux of tourists that visit Tigre every weekend. Many tourists come to Tigre for its traditional goods, such as fruits, vegetables, plants, jams, liqueurs, and a wide variety of crafts and furniture. According to the Tigre Sub-Secretariat for Tourism, on average 50 thousand people visit Tigre every weekend. In addition to the traditional produce, areas of tourist attraction lie in its geographical location (at the River Plate Delta islands' coastline) and its well-resourced infrastructure (i.e. riverfront, marinas, yachting and rowing clubs, and resorts and beaches in the islands). The tourism circuit is centred on Tigre's riverfront, the Delta's islands, and Tigre's harbour where many commercial and recreational activities are located (photographs in appendix 2).[71]

[71] Tigre's harbour has two main docks. The harbour's main dock accommodates the wood and sand trade (the most active and permanent businesses in the harbour) and it is the unloading area for boats transporting willow and poplar logs brought from the islands. The harbour's second dock is the location of the Fruit

Let us come the question raised in the introduction of this chapter concerning whether the socio-economic, cultural, and historical features matter in explaining the competitive performance of the local SMEs and the region itself. The evidence collected reveals that these factors, intertwined with the emergence and development of traditional sectors of production associated with the expansion of the Delta islands and Tigre harbour economy, were the original attraction to entrepreneurs to Tigre and developing a local entrepreneurial culture. A brief historical account becomes necessary here to explain this point.

By 1790 nine sawmills and a shipyard were functioning in Tigre, linked with the intense commercial traffic of wood from the Delta islands towards Buenos Aires centre. Forestry production for wood trading, along with fruits and vegetable farming, were the primary sectors of productive specialisation in the emerging local economy. The production of the Delta islands diversified towards the end of the 19th century. This included the production of jam, preserves, sausages, and liqueurs, which led to the accumulation of manufacturing skills in sectors linked with primary production. In addition to sawmills there were several carpentry workshops already functioning in Tigre.

The diversification of farming and manufacturing activities largely encouraged by official policies of the national administration aimed at promoting the settlement of European immigrants within the Delta islands. By the turn of the 19th century, and during the early days of the 20th century, thousands of immigrants, notably Italians and Spaniards, settled throughout the Delta islands[72]. The immigrants brought with them a varied set of crafts and manufacturing expertise (generically known as 'tacit knowledge') that had an enormous impact on the technological and managerial transformation, upgrading, and growth of the traditional local economy. Immigrants also brought with them institutional and associative experiences of community organisation (see details in the following section) that had a significant effect on the future organisation of the locality as a whole. In this sense the immigrants acted as technological 'gatekeepers' (Bells and Albu, 1999) in opening the

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Market. Local and non-local production of fruit, vegetables, plants, crafts, osier-based crafts, and a part of the furniture industry business operates within the Fruit Market's infrastructure.

[72] During the islands' production heyday, the Tigre's islands population reached about 20 thousand people, five times higher than the current figure (Municipality of Tigre, 2000).

regional knowledge system. This factor is intimately linked to the origins of the Argentinean industrial take off (Kosacoff, 1998).

How do these historical antecedents relate to the furniture industry's evolution, and the emergence of an industrial atmosphere? The origin of the wood furniture industry in the territory was a result of the positive combination (and then evolution) between tacit knowledge and manufacturing expertise developed by the traditional sectors of production within the region (such as sawmills, wooden crate, shipbuilding and other industries concerned with industrial processing of wood) and the 'carpentry' workshops that had been established by European entrepreneurs at the beginning of the 20th century. External tacit knowledge, which in this case can be thought as a technological innovation for the region, was incorporated in the new productive undertakings. Regarding the latter, when interviewed some entrepreneurs singled out Fritche's carpentry (a German cabinet-maker family) as the first *"master"* firm established in the region. Some Spanish families were also singled out as those who *"brought new techniques of production"* into the region, which were, over time, copied by the other furniture firms and transferred to the emerging wood timber-specialised local workforce.

The historical synthesis of both traditions as origins of the local entrepreneurial culture and identity was recognised by a number of entrepreneurs and institutional leaders interviewed. For instance, Poma and Gastaldin (a wood supplier and a local furniture manufacturer respectively), in response to a question about why the furniture entrepreneurs believe there are so many wood furniture firms in the area, pointed out: *"it is hereditary! "It is passed from one generation to the other"*. Poma added that there exists *"a furniture family"* in the region. In this sense, Gastaldin more precisely observed that *"a work culture"* has developed in the region linked to furniture manufacturing. He argued that this *"work culture"* came from the Delta islands to the Tigre locality, from sawmills to carpentries, and from immigrant grand parents to new generations. Gastaldin emotively concluded, *"this is my own history, this is the history of everybody here"* [in the wood furniture industrial cluster].

Furthermore, the fieldwork reveals that cultural identity observed in the wood furniture cluster 'belongs' only to the cluster (which presents some characteristics of an industrial

district) and to the entrepreneurs and institutions that shape it, rather than to the territory (locality or region, its actors and institutions) in a wider sense. Interestingly, the local institutions interviewed were evenly divided on whether there are factors of cultural identity and social embeddedness associated with Tigre's industrial profile and sectoral specialisation. Half of those interviewed identified Tigre only with "the two or three large companies" located in the zone of the Panamericana motorway. In contrast, the other half did so with the shrinking traditional sectors of production in the region, such as the forest and timber industry, sawmills, shipyards, nautical industry, and craft and farming activities. The absence of a marked local identity regarding local industry to a degree contradicts the NIP literature. Industrial districts and local *milieux* approaches (often inspired on 'illustrious clusters' -Cooke *et al,* 2002-) assign a critical importance to the existence of a local 'identity' (based on factors of sectoral specialisation i.e. those observed in industrial districts specialising in textiles, knitwear, furniture, and shoe production) so as to mobilise the interests of local economic agents.

5.3. Institutional structure and competitive performance[73]

The presence of local institutions make Tigre a good case to evaluate whether there is new thinking along the lines identified by NIP theory in producing collective efficiency (Schmitz and Nadvi, 1999), and in creating localised competitive advantages (Cooke and Morgan, 1998; Maskell and Malmberg, 1999). In particular, Tigre has been chosen as a case study due to the fact that since 1996 a group of local actors and institutions have been deepening the process of local institution building through the setting up of the Development Institute of *Bonaerense* Entrepreneur of Tigre (IDEB-Tigre), a 'decentralised' regional agency concerned with the provision of real services to firms. As pointed out in Chapter 4, IDEB (and IDEB-Tigre) represents a novelty in SME policy in Argentina. However, the institutional capacity observed in the region is not a product of the IDEB-

[73] References to public, private, and intermediate institutions will be understood to be those from the Partido de Tigre only, unless otherwise stated, while information referring to firms relates to the region (Partido de Tigre and Partido de San Fernando together). The difficulties in making a clear distinction between factors not delimited by political or jurisdictional boundaries, such as an industrial cluster or an institutional network, represent a methodological problem when one attempts to study localities or regions within large cities.

Tigre's establishment in 1996. As I show below, it rather is intimately linked to the socio-economic, political, and institutional history of Tigre. This subsection briefly looks at the history and evolution of the Tigre's institutional set up and its interrelationship with the development of the local system of production.[74] This review focuses only on formal institutions related to the local system of firms and the local economy.

5.3.1. Institutions of the local state

The institutions of the local state consolidated during the last decades of the 19th century are in part as a result of the economic progress experienced by the locality. The local state as such rose seven years after the first train came to the District of Las Conchas (the current Partido de Tigre) in 1865. The railway represented a milestone in Tigre's economic history since it gave considerable encouragement to the local/regional producers who could now gain efficient access to their main market, the CBA. In 1882 Dr Daniel María Cazon was elected as the first mayor of Tigre, an event that marked the origin of the first local administration for public affairs. During his administration (the most remembered in Tigre's history) the region achieved remarkable progress in its public infrastructure and facilities: primary schools were built, electric services were expanded, streets and roads were improved, and a sewage system was built. By then, a naval yard, promoted and financed by the national government, was established in Tigre's harbour. This naval yard let to enormous progress in the locality since it favoured not only the Tigre's consolidation as an important shipping traffic point, but it also encouraged population settlement (notably immigrants) and some small manufacturing activities in its adjacent areas. Furthermore, the first bridge on Tigre's River was built in 1878. This new 'access' bridge, along with the railway network, constituted the first direct terrestrial link between Tigre and the CBA. As I show in Chapter 7, public infrastructure and facilities, in particular 'accesses' to/from urban Tigre, even today represent a 'master key' of the local governments' agenda for local development.

During the 20th century the local state expanded through the creation of different agencies concerned with different aspects of the local affairs (health, justice, security, welfare,

[74] The local institutions' performance in shaping and encouraging competitive performance at the present time is analysed in detail in Chapter 7 of this thesis.

housing, education, treasury, among others). At present, the Municipality of Tigre (the Partido' political authority) and the Secretariat of Economy and Exchequer (the financial and economic authority) are the most powerful state institutions of Tigre, which have been controlled by the ruling political party since the late 1980s (see Chapter 8).

5.3.2. Private institutions and local financial system

The industrial take off of Argentina and its subsequent process of urbanisation experienced in the large cities, notably CBA, during the ISI period (1930/40s to 1970s), represented the main source of change for the Partido de Tigre and the region throughout the first half of the 20th century. Tigre used to consist of only fields, islands, and a small town at the beginning of 1900s. In contrast, currently the Partido de Tigre has an estimated population of 300,000 inhabitants (Municipalidad de Tigre, 1999). In the course of Tigre's process of transformation into an urban locality, through which the locality simultaneously began to become part of, and be absorbed, by Buenos Aires's expansion, the local actors began to organise themselves through the establishment of different local organisations and institutions. These were established to meet the locality's new needs and encourage its socio-economic and political development. Likewise, the European immigrants that settled in the region, and their descendants, played a key role in Tigre's first stages of the institutionalisation of its emerging entrepreneurial business community.

The first business associations were created to meet the demands of the (by then rising) traditional sectors of production of Tigre. The islanders created their first farm association (called the Permanent Council of Islands' Producers) in 1935 in order to organise and regulate the commercial activity of the Delta islands farms. This farmer association played a decisive role in the creation of the Fruit Market at Tigre's harbour in 1938. As mentioned already, the fruits, vegetables, and derivate products from the Delta islands were sold through this market. Furthermore, this was the origin of the furniture market that subsequently developed in the region. Both the Chamber of Delta Tourism Entrepreneurs and Cooperatives of Delta Osier Craftsman were more recently created linked to the Delta islanders, the Fruit Market, and the harbour's activities. Almost simultaneously as the creation of the farmer association, the timber entrepreneurs established the Industrial Timber Centre (CIM) in 1938, at the neighbouring Partido de San Fernando. CIM was

created to promote and defend the timber industry as a whole. Hence, this institution has incorporated the whole of the regional timber industry: the primary forest production of the Delta islands; primary industrial wood processing; wood transformation into intermediate and final goods, such as timberwork for the shipbuilding industry; and the wood furniture industry.

At that time some financial institutions existing in Tigre already provided the financial services that were necessary for the needs of the local farming, commercial, and manufacturing activities. In 1920 the Banco de la Nación Argentina (National Bank of Argentina) opened a branch in Tigre. In 1959 Banco Provincia de Buenos Aires (Buenos Aires Province Bank) also opened a local branch in Tigre. As a result of the Delta islands' economic expansion, this bank innovated by setting up a mobile service branch to serve (and still serve) the Delta islands, catering for the islanders' banking operations and tax payments. Therefore, the national state, in the first case, and the provincial state (Province of Buenos Aires –PBA-), in the second, played a decisive role in the establishment of a financial and banking system in Tigre. However, this arose also as a result of both the local economy's dynamism and the organisational capacity of local actors and institutions. At present, some private and cooperative banks also operate in Tigre. The existence of local branches of banks does not imply, however, the existence of local bank policies (set up by local branches) suitable to meet the needs of local firms. In the Argentine economy of today, decision-making processes of banks are, without exception, extremely centralised at the banks' headquarters in CBA, and yet they operate entirely on the basis of national (or provincial) policies. Hence local branches of national/provincial banks have rarely been considered as a 'variable' in studies on local/regional industrial development carried out in Argentina (Gatto *et al*, 1993; Yoguel *et al*, 1998; Costamagna *et al*, 2000).

Once the local process of urbanisation reached a significant level of maturity, the urban commercial activities were organised through the establishment of the Commercial and Industrial Chamber of Tigre (CACIT) in 1967. CACIT was created to provide basic business services to its members (i.e. information and consulting on legal, labour, and tax issues), but due to internal and external problems it was closed under the last military dictatorship (1976-1982). After a long period of reorganisation, it was reopened in 1996 and currently claims to 'represent' the small commercial activities of Tigre's urban centre.

More recently, after a period of expansion of manufacturing firms in the region, the Industrial Union of Tigre (UIA-Tigre) was created in 1987. UIA-Tigre was set up by a group of dynamic small- and medium-sized entrepreneurs established in the region during the last stages of the ISI period (1960s and early 1970s) and the first decade of transition towards the neoliberal economic model (1976 to 1985). As already mentioned, many large companies, in addition to SMEs, came to the region attracted by advantages of geographical location and existing infrastructure. As I show in Chapter 7, the fieldwork reveals nevertheless that factors associated with the good administration of public affairs by the local government have also positively influenced the locating of firms. Two specificities made UIA-Tigre a different business association to those mentioned above. UIA-Tigre is the first local business association specifically concerned with manufacturing activity and it is the only one created after the dramatic collapse of the ISI model in 1976, under the last military dictatorship. UIA-Tigre claims to be the main business association operating in the region, which comes to represent the interests of the whole regional manufacturing industry. In particular, it claims to represent the interests of the regional SMEs. Though UIA-Tigre constitutes a 'decentralised' regional delegation of the Argentinean Industrial Union (UIA)[75], its creation was promoted and engineered by local entrepreneurs. From an evolutionary perspective I would hypothesise that due to the fact that UIA-Tigre was born in a very different economic context (characterised by market liberalisation, rising import competition, and change in the patterns of organisation of production and management of firms) it should represent a new case in relation to the business associations that were born under a protected and regulated economy. Some aspects derived from this proposition are analysed in the following chapters of this thesis.

Finally, IDEB-Tigre Institute (Institute of *Bonaerense* Entrepreneurial Development) was established in Tigre promoted by and under the umbrella of UIA-Tigre, along with the PBA's government and some other local institutions. As testament of this, IDEB-Tigre's offices are situated within UIA-Tigre's headquarters (more details in Chapter 7).

[75] UIA used to be the most important business association existing in Argentina. It used to represent what during the ISI model was known as 'the national industry'. Though UIA still maintains a portion of its former political power it no longer represents the real economic powers that today rule the Argentinean economy, such as the financial sector and the largest national and multinational economic conglomerates.

5.3.3. Institutions of the technological and educational system

The technological and educational institutions are the last group of institutions that I would like to mention in this review, since they are intimately linked to the needs of the local system of production. The state National School of Technical Education N°5 (ETN) was established in 1946 in order to meet the need for a skilled workforce from local industries such as shipbuilding, nautical, and furniture manufacturing industries. The ETN had a marked effect on the labour market for the timber industry: many local workers, as well as future entrepreneurs, were trained in this school and in qualifications suited to the needs of local firms, notably in the carpentry trade.

The National Technological University of Tigre (UTN-Tigre) is in turn the only state university existing in the region specifically concerned with the education and training of diverse technical disciplines related to engineering. Though UTN-Tigre was created as a result of a different process than ETN (since it is a regional sub campus of the UTN Buenos Aires), it came to meet similar demands from sectors of production with an important presence in the region, such as metal processing, machinery, and the motor vehicle industry. Since 1983 (once Argentina returned to democratic rule) UTN not only undertook a strategy of active and close contact with the manufacturing firms in the region and beyond, but they also undertook an active strategy of institutional involvement and networking with other local institutions (notably UIA- and IDEB-Tigre) and general supporting activities relating to the firm system in the region (see details in Chapter 7).

Two additional comments need to be made in relation to these two institutions. Firstly, their existence represents an external economy accessible to the local firms, which arises as a result of both the sectoral agglomeration of related firms and the organisational capacity of local actors. As argued by Maskell, "the agglomeration of firms in related industries creates a demand for an improved supply of transport systems, educational facilities, and other *infrastructure advantages*" (1998:110) (emphasis in original). As already seen, the educational infrastructure in Tigre represents a competitive asset for some local timber firms in terms of advantages associated with the labour market (in the majority of the cases) and, to a lesser extent, local availability of training and consultancy (i.e. in quality control).

In this sense, IDEB-Tigre's establishment can be also thought of as a result of Tigre's institutional dynamism derived from both the geographical concentration of manufacturing firms and the organisational capacity of the local entrepreneurs and institutions.

Secondly, the existence of these institutions within the region represents an opportunity for the local firms from the perspective of those strands of NIP literature that assert the critical importance of the so-called local/regional systems of innovation (i.e. Braczyk *et al*, 1998). ETN, IDEB-Tigre, UTN-Tigre, along with other institutions not mentioned in this review, would constitute key components of the local/regional system of innovation, related to the manufacturing firms. Whether these institutions constitute both a 'system' that also 'innovates' will be discussed in Chapter 6 of this thesis. At this stage of analysis, it can be pointed out that in cases like Tigre, situated within a large city and delimited by many other local institutional set ups, it would be more accurate to talk about (extremely) open and borderless systems. If it is indeed a 'system', perhaps a network is a better word to use in this case.

5.4. Conclusions

This chapter has introduced the case study by focusing on a set of factors related to Tigre's socio-economic and institutional history, considered with reference to the NIP literature. Three provisional conclusions can be highlighted from these first findings. These concern firstly, the complex relation between economic and social factors that helps explain the industrial atmosphere existing in the region; secondly, the importance of clustering in the development of external economies; thirdly, the risks involved in the possible confusion between industrial identities and local identities.

Firstly, the economic and institutional dynamism observed in Tigre can hardly be explained without having taken into account the historical dialectic between the socio-political, cultural and economic dimensions of its development. This allows us to hypothesise that in those localities or regions where a relation between these dimensions does not exist, the generation of competitive advantages derived from external economies and the result of the

economic process in general will be different than those observed in Tigre. The Argentinean industrial geography, and in particular regions where there are high concentrations of SMEs, abound in these types of negative experiences (ECLAC, 1999). This links into the important finding by Altenburg and Meyer-Stamer that "cluster support in Latin America often proceeds on unrealistic assumptions about development potentials of (groups of) firms and clusters, ignores the specific logic guiding entrepreneurial decision-making, and understates the inertia of local sociocultural milieu, thus failing to design adequate policies" (1999:1694) (brackets in original).

The strands of the NIP literature evaluated in this chapter are correct in asserting that history, culture, and social embeddedness matter in explaining the economic dynamism of territories. However, this does not support an extreme historical determinism according to which IP is unable to break path-dependent trajectories. The conscious policy decisions of settling European immigrants is a good example, since it prompted a remarkable process of technological updating and innovation of the local system of production as a whole. In fact, they were brought into the country by the national government as carriers of 'civilisation' (or 'best practices' to use a more fashionable expression). At present, as I will show through the following chapters, there are a series of IP instruments that can play a similar role to that played by the immigrations a century ago. Likewise, the literature on clustering in Latin America (i.e. Humphrey and Schmitz, 1996; World Development, 1999) informs that a long common history and a shared culture were not the main ingredients of economic success in several successful experiences of industrial clusters. For example, this is highlighted in the case of Chilean small furniture manufacturers, which have undertaken, in less than a decade, a successful process of internationalisation starting from export-oriented networking practices and subsequent 'injection' of institutionalised public and private support, (Messner, 1993).

The importance of the geographical agglomeration of firms from related industries in developing external economies in the region is the second issue that requires highlighting. Although some external economies available for all firms have arisen in the region, such as public infrastructure and the entrepreneurial atmosphere, the most important ones are sector-specific. This is principally the case for the market existing in the region for some local products (notably furniture) and an important part of the institutional/educational

infrastructure (i.e. ETN and UTN-Tigre). Such externalities are a critical factor in stimulating entrepreneurship. This can be observed in the wooden furniture industry of the Partido de Tigre and the region, at least until the early 1990s (further details on this point are given in Chapter 6). However, the evidence also reveals that the particular geographical location of the Partido de Tigre has had (and still has) an important effect on its industrial profile and arising external economies. Although geographical location is considered a static comparative advantage, and therefore it does not fit into the NIP framework, I argue that when effectively used from a policy point of view this factor becomes a dynamic competitive advantage.

Finally, the Chapter shows that the elements of 'cultural identity' associated with factors of industrial specialisation and socialisation observed within the wooden furniture cluster do not necessarily correspond with the elements of cultural identity observed in the locality taken as a whole. Though we have yet to consider local governance and politics, this lack of correspondence has had important effects on the decision-making process related to the local policy framework (as I will show in Chapter 7). Consequently, IP approaches in Argentina should be careful in assuming that territory (whether locality or region as a whole) should 'coincide', in terms of cultural identity or political projects and sectoral interests, with the 'extension' and 'character' of cultures, ideas, and interests observed within an industrial cluster (in its entrepreneurs and linked institutions). The literature on IP and territory in Latin America has underestimated the analysis of local culture issues. This is perhaps due to the strong influence received in Latin America (notably, in Argentina) from approaches focused on the Italian industrial districts experience, which often do not make a clear distinction between local/regional 'identities' as a whole and the local/regional industrial set up. This factor perhaps does not represent a problem in the case of successful industrial districts in Europe where a harmonic relationship seems to exist between both spheres. However, in light of the Tigre case study this distinction may be of critical analytical importance.

In the following chapter I look at the processes of learning, generating of knowledge, and development of innovative capacities in a sample of SMEs of the wooden furniture industrial cluster of Tigre and the region in order to evaluate the relevance of these theoretical propositions for firms' competitive performance.

CHAPTER 6
Learning and Competitiveness

6.1. Introduction

Chapter 6 evaluates two propositions arising from the studies concerned with the 'ILK triad'. The first proposition stresses that innovation is an interactive process between different actors, rather than an act of Schumpeterian heroic individualism. The second proposition asserts that geographical proximity and industrial agglomeration enhances innovation by favouring collective and interactive learning.

Accordingly the chapter specifically looks at interfirm relationships, primarily between the wooden furniture firms of the case-study cluster. The primary reason for choosing the 'interfirm relationships' level is that it is one of the most important levels of aggregation (apart from the 'intrafirm' and 'firm-institution' levels) through which learning and innovation are realised as collective processes (Morgan, 1997; Lundvall, 1992, 1994). Secondly, interfirm collaborations, as asserted by the flexible specialisation school and industrial districts approach (Piore and Sabel, 1984; Pyke *et al*, 1990), may result in division of labour and subsequent firm specialisation. Finally, networks of firms have been identified as a key dimension for design of local IPs's in developing countries aimed at SMEs (Humphrey and Schmitz, 1996).

The specific research questions tackled are the following: How do the furniture firms of Tigre's industrial cluster learn and develop their innovative capacities? Do the firms engage in a collective dynamic of learning and innovation as asserted by the theory? Do the geographical and cultural proximities observed in this cluster play a role in enhancing the collective and interactive learning process, knowledge creation, and interfirm collaboration in production?

6.2. Development of innovative capacities and learning economy of firms

6.2.1. General competitive environment

The firms have had to survive under a turbulent and uncertain macroeconomic environment throughout the Argentinean economy's transition into a free market economy. Hence, without exception the SMEs analysed can first and foremost be characterised as *surviving* firms. As claimed by the entrepreneurs, to be *"still alive"* under such conditions indicates that, in principle, all these firms to a lesser or greater extent have developed a 'minimal threshold' of capabilities and competitive assets that have allowed them to remain, and in some cases, grow and succeed in the market place. It should be emphasised here that this research was carried out in the context of a 40% failure rate in the wood furniture industry[76] (FAIMA, 2000), during the more critical period of economic recession in 2001. As can be seen in Table 6.1, output in the wood furniture industry fell by 26% between 1996-1999[77].

Table 6.1. Wood Furniture Total Output, 1996 to 1999

Sales (billions of US dollars)				Percentage of variation (1996-1999)
1996	1997	1998	1999	
1,050	1,030	880	780	**-26%**

Source FAIMA, 2000

Losses for the period 2000-2001 were even more dramatic as the domestic market continued downsizing and as import competition intensified: the majority of entrepreneurs interviewed pointed out that sales dropped by an average of about 50% between July and October 2001, just before the economic collapse in November 2001. Therefore, the meaning of 'minimal threshold' of capabilities and competitive assets accumulated by the firms is a very important issue for this research.

[76] Wood furniture industry represents 70% of the total furniture industry in Argentina.

[77] Official figures aggregated at a national level for firm failure are not available in Argentina since the last industrial census was carried out in 1993. However, some studies based on samples of firms conclude that more than 30% of SMEs would have disappeared between 1993 and 2002 (UIA-SME Observatory, 2001).

A second important contextual factor is the high level of heterogeneity regarding business strategies observed among the firms interviewed. In the past, heterogeneity in the ways in which firms used to process their business problems and, consequently, take decisions on courses of action and strategies, was rarely observed at an intra-sectoral level in Argentina (Fundes-UNGS, 1999; Kosacoff, 2000). Regardless of how the level of heterogeneity in the conduct of firms observed during the 1990s might be explained, the phenomenon imposes an important limit on generalisations made with respect to the firms. Consequently, while the first factor facilitates the search for regularities between the firms' competitive strategies, the second necessarily forces me to deal with the diversity among them.

6.2.2. Incremental innovation and the passage towards a major innovative capacity[78]

Much of the literature on innovation as a source of competitive renewal assumes that small firms innovate in a gradual form, through permanent incremental improvements and in a collective form through the firm's network of relations. Innovation and learning is said to be largely favoured by spatial proximity and local entrepreneurial cultures drawing on tacit and experiential knowledge rather than codified knowledge.

The findings of the fieldwork reveal that the NIP assumptions only partially hold. The evidence shows that firms learn, innovate and compete in different ways, depending upon the type of SME, the market in which they operate, and the nature of the individual entrepreneur. Indeed, two groups of firms clearly differentiated in relation to the development of innovative capacities and sources of learning and knowledge have been identified. The first group of firms is characterised by its 'incremental capacity' for innovative improvements, and the second group by its 'higher innovate capacity'.

[78] I have preferred use the term 'innovative capacities' instead of 'innovation', to refer to incremental innovations that small firms gradually develop in the different areas that the microeconomy of firms comprise. It is important to emphasise that the evaluation is based on qualitative information. This indicator is taken from G. Yoguel's works (1996, 1998, 1999), who has developed a series of statistical indicators to measure 'innovative capacities' in Argentina. The main variables considered in his studies are: the efforts in training carried out by the firms; quality in product and processes; customer tailored production; development of new products in their contribution in the total number of sales; percentage of engineers and other employees involved in activities of R&D; technological cooperation with other economic agents; and post sales services, among others.

6.3. Firms with incremental innovative capacity

This first group represents up to 80% of the firms interviewed (17 in total) and is made up of the smaller and younger firms on the panel. On average these firms employ less than 20 employees, and were mostly established during the 1970s or 1980s when the local economy began its transition towards an open and internationally exposed market economy. They are typically 'family' firms, in which the owner-manager oversees all aspects of the firm. In many cases these entrepreneurs lack formal education (only some of them have finished secondary school), which, as I show below, has effects on the development of the firm's innovative capacities. All the firms in this group are located in the cluster of the Partidos de Tigre and San Fernando. Although these firms do not display a proactive, sustained, and planned strategy in order to improve their innovative performance, they display a level of dynamism that has allowed them to remain and compete in a market place that has been extraordinarily unfavourable in recent years. This dynamism, which I have referred to as the 'minimal threshold' of capabilities and competitive assets, is based on two factors: the firm's strategy of product differentiation and the craft skills and expertise of the entrepreneurs.

a. Product differentiation. The findings revealed that product differentiation has been the key strategy adopted by the small furniture firms in order to improve competitiveness over the last few years characterised by increasingly international exposure. Indeed, this strategy has mainly been triggered by the need to differentiate their portfolio of products from imports. Through permanent trial and error, the smaller entrepreneurs have sought new market niches in which import competition can be avoided or at least minimised. Furthermore, the evidence shows that the product differentiation strategy is directly sustained by a second strategy, namely, 'customised production of *specially made* furniture'.

Through a product differentiation strategy these small firms have opened up new markets. In turn, product differentiation combined with tailored customer production necessarily entails a notion of demand-oriented competitiveness from the firms' side. As illustrated in Box 6.1, the core of this competitive strategy is the close contact and interchange of ideas

concerning products between entrepreneurs and customers. This in some cases results in an emerging concept of 'specialisation' directed towards higher quality production.

There exists a growing consensus between the entrepreneurs that both product 'quality' and 'design' should become the core of their competitive strategies. They understand that it is practically impossible to compete with foreign firms via lower prices due to the scale and technical advantages of importers, mainly Brazilian firms. Product innovation in general is associated with the creation of new markets or with the quality improvements of existing products (Evangelista *et al*, 2002:178). Both factors are observed in this group of firms. Along with the product differentiation strategy the entrepreneurs mentioned 'cutting fixed and variable costs' as another key factor in their competitive performance. Within studies on innovation this factor is usually associated with process innovation, for instance, via introduction of new technologies to improve productive efficiency (ibid). In this case, however, cost cutting responds only to a 'belt-tightening' strategy of the firms rather than any improvement in production.

Finally, the nature of the product differentiation strategy can also be characterised as 'reactive' or 'defensive' as long as it has been triggered by the threat represented by import competition. These findings coincide with those found at European level by Tödtling and Kaufmann (2001:206), to whom the SMEs, particularly in traditional industries, tend to develop 'reactive' innovation strategies, in which specialisation on niches, the focus on quality advantage, redesign of traditional products, and cost cutting are predominant.

b. Craft expertise. The fieldwork revealed that the learning process and, therefore, the development of firms' innovative capacities, is largely based on practical-experiential knowledge and know-how, intuitiveness, manual abilities and accumulated expertise of the craftsman-entrepreneurs, particularly in relation to products and process of production. The craft/artisan business approach is a highly valued competitive asset in the studies on industrial districts (see for instance Piore and Sabel, 1984). These approaches identify the

nature of innovation associated with this type of intangible assets such as 'craft innovation'. As the CITEMA-INTI[79] manager pointed out in interview:

> "They are artisans, they are artisans. They are people who learnt by doing. Let's say, they trained themselves on a day-to-day practice, starting from a previous knowledge coming from the father or the grandfather. This is to say, there are firms that come from a second or third generation of artisans, and this fact is very interesting. Well, they have a high capacity in the timberwork and even in managerial and negotiation issues, but they are intuitive people, they are people who... well, perhaps this quality has a high value, hasn't it? Nobody taught them to make all that they know how to make, they just learnt it".

In addition, being an artisan is considered a strength by these entrepreneurs, through 'business-artistic' management of their relationship with customers. As I show later in this section, 'customers' are key actors in the learning process and knowledge creation of these firms. Mr Feldman, a small entrepreneur from Tigre, specialising in the manufacturing of kitchen furniture, explains this competence in the following terms:

> "Given that we work with specially made furniture I try to interpret what people want [...] People ask you for a piece of furniture model and you try to make them understand what they want. If you don't understand what people want is better that you don't get involved in this business. You have to be sure you understand what people want. If you understand, there is no problem. [...] Put it this way, I try to interpret the clients' dreams."

The craft expertise of the entrepreneurs is directly linked with the capabilities on which the product differentiation strategy relies. The entrepreneurs firstly appeal to their 'intuitiveness' to search for new furniture models and fashions with the help of magazines and, in the minority of cases, visiting trade fairs and furniture expositions. This basic marketing strategy, typically observed in small firms, has been termed 'intuitive marketing' (Brooksbank, Kirby and Wright, 1991). This in turn reveals the 'imitative' nature of product innovation in this group of firms. Once the search for new models has finished, the entrepreneurs utilise their craft skill 'to copy' and 'to adjust' these new ideas to the firm's technical capacities (mainly to its machinery and equipment), and then manufacture a new

[79] Centre of Technological Innovation To the Wood Industry (CITEMA) of the National Institute of Industrial Technology (INTI). This public institution of technological support to the timber industry is situated in the north part of the CBA, though not within the Partido de Tigre and the region.

product. It is important to point out that these entrepreneurs minimise the relative antiquity of their machinery (10 years old in average) by arguing that their own expertise and not the machinery is what matter in the manufacturing process of a new product. Mr Ferreira (a local small furniture entrepreneur) claims: *"I am able to make any sort of thing with the machinery I've got"*. From an evolutionary perspective, these kinds of routines of learning can result in non-intentional knowledge creation. Maskell and Malmberg (1999) note that "learning from experience, by trial-and-error and by repetition represent incremental improvements which accumulate over time and gradually result in new and better ways of doing things". As seen in Chapter 5, the craft knowledge of these small entrepreneurs can be traced back to the work culture brought by the European immigrants (notably Germans, Italians, and Spaniards). The entrepreneurs have acquired this practical knowledge gradually living in the region and performing the activities of this industry (Maskell, 1998).

Crucially, what remains to be answered is whether these strengths are sufficient for success in the context of today's competitive global economy. Product differentiation strategy (linked with product quality improvements) seems to go along with the key aspects pointed out by the theory of flexible specialisation. However, crafts skills and business strategies based on the intuitiveness of the entrepreneurs may be a weakness for the firms (as explained below) with respect to the imperatives of the learning economy and permanent adaptation. To return to the CITEMA-INTI manager's insights, who, after having stressed the artisanship of the furniture entrepreneurs, remarked:

> "[...] However, when the firm achieves a level of development from which it can think about export, this [the condition of artisan] is not enough, this is not enough. Well, then a more professional training is already needed, isn't it? A different work organisation, I don't know; tools and methodologies that until then the firm was not utilising. Right there, at that point, firms come here [in CITEMA-INTI offices] asking how can we help them."

Therefore, what has been characterised as a strength can become a weakness, especially in the international market. The furniture firms trying to reach external markets soon find that they must satisfy a series of basic technical requirements and norms of quality certification, such as those required for the 'drying' and 'stabilisation' of wood, which cannot be met by the craft entrepreneurs themselves. They need professional support and technical training to

meet this type of more sophisticated requirement, and the business strategies based on intuition are often in contrast with both needs. Furthermore, because these entrepreneurs neither utilise professional consulting (for instance, before they set up their business strategies) nor carry out their own market research to test their product and commercial strategies, the only way in which they can control their furniture designs and value added in product differentiation is through the *ex-post* test of a product in the market (see in Box 6.1). These entrepreneurs cannot easily visualise the relation between training/technological updating programmes or consulting and outputs for the firm's performance, as these tools do not necessarily mean or imply sales in the short term. These findings coincide with those of Humphrey and Schmitz (1996) for whom 'cumulative' technological upgrading is critical in achieving continuous improvements in SME competitiveness in developing countries and, therefore, a key aspect in their agenda for a local IP. Many entrepreneurs within this group of firms recognise their weaknesses in understanding, managing, and controlling management; aspects such as cost control and financial tools, marketing, international trade, and information technologies, among others. Often craft entrepreneurs, in particular when they lack formal training or qualifications (as observed in this group of firms), are not outward looking and this may lead to a narrow strategic vision in relation to the necessity of updating and change (Smallbone *et al*, 2000).

6.3.1. Collective learning and innovation?

Contrary to the emphasis of the NIP literature on the collective nature of learning and innovation, the empirical evidence reveals that in Tigre learning is essentially 'firm-centred', relying on the craft skills and expertise of the entrepreneurs themselves. Through informal and gradual processes of trial and error the entrepreneur learns and incorporates new knowledge into the firm by translating external inputs (i.e. information and new ideas) into new products (the entrepreneurs in this group rarely mentioned 'process' improvements as an aspect of their innovative development). The development of new products is generally carried out through the utilisation of machinery and equipment already existing within the firm. Hence the innovative capacity of these small firms refers to a process of permanent adaptation of the existing capabilities and the development of new competencies, which are idiosyncratic and firm-specific. Sometimes, the more qualified employees are seen as an important asset in the process of learning. Interestingly,

the intrafirm level of learning appears to be operating even at a level of (owner-intensive) small-size firms that, unlike larger firms, often do not have any internal functional divisions. Some of these dimensions are illustrated in Box 6.1, a typical case example:

Box 6.1. "Muebles Ferreira".	Relevant factors:
Ferreira is a small furniture entrepreneur, whose firm is located within the cluster. Founded in 1988, this firm specialised in the manufacturing of lounge and bedroom furniture made from 'raw' pine. Currently the firm operates with five employees, along with Mr Ferreira and his wife, who also run their own furniture shop located in a nearby locality.	• Small family firm
Mr Ferreira's entrepreneurial background dates back to the early 1980s, when he was employed in a large local firm specialising in pine furniture manufacturing. In that firm Mr Ferreira learned how to produce pillows and cushions for wood furniture. Indeed, when he decided to become independent, he started up his own business as a supplier of pillows and cushions for the local furniture firms. As described by the entrepreneur, he found an opportunity to buy some second hand machinery for the manufacturing of furniture on special offer. He bought the equipment despite his lack of furniture manufacturing experience, relying on his knowledge of the pine furniture business in general. Not long afterwards Mr Ferreira received an offer from an individual interested in working with him who was also skilled with the machinery. Mr Ferreira accepted this offer and thus they began to produce furniture besides cushions. Mr Ferreira admits that at the beginning he lost a lot of money as a result of production mistakes and the low quality of the furniture manufactured. However, they were gradually, without any external support or advice, improving the furniture quality and acquiring manual skills and expertise.	• Spill-over & sectoral inertia • Gradual learning • Learning from their own mistakes
This firm's innovative changes occurred in 1999 as a result of the threat to the firm from the 'low-cost' import competition coming from Brazil (i.e. furniture made from *chipboard*). Interestingly, Mr Ferreira, as well as many other furniture entrepreneurs, shifted his strategy firstly towards the production of commodities, made as cheaply as possible, in order to compete with the imported furniture via price. This strategy failed, after a short period of time. This was the firm's turning point, since they then took the decision to change once again and begin to differentiate their products from the imported competition, *"by producing things that nobody else was producing"*, as the entrepreneur points out. Furthermore, this change also entailed an improvement in the quality of the furniture manufactured by the firm.	• Innovative improvement in product differentiation • Product quality improvement • Artisan intuitiveness
The marketing strategy based on product, which the firm followed, is described	• Special made strategy

by Mr Ferreira as follows: "We first produce one piece of furniture, then we see how it goes [with the clients], and then we produce that piece of furniture depending upon how [sales] go". This strategy, characterised as a permanent trial and error of products, is also used for new models of furniture that Mr Ferreira along with his 'partner' find and copy from specialised journals and magazines. However, the firm's main source of new ideas and furniture models are from its commercial clients. In Mr Ferreira's words: "People come here with ideas, drawings, you know? A furniture dealer once sent me a drawing of a piece of furniture, he wanted a lounge bar like this (he shows me). Well, we made the lounge bar exactly how that person wanted it, and we left it here (in the workshop main entrance until that client returned). Well, the client took one week to come back for his lounge bar, and we sold it three times! [during that time] (laughing)". This lounge-bar, along with other similar models manufactured starting from the original model brought by that client, constitute the main products in the firm's current portfolio. As stated by Mr Ferreira, although the demand for these high quality products is not as big as he would like, it is demand after all that keeps his business running, and he no longer competes directly with the firms from the cluster or with imported furniture.	• Trial & error strategy rather than use of modern marketing tools • Firm-centred innovative & leaning process

As illustrated by Box 6.1 the innovation and learning processes are firm-centred. Other 'rival' firms from the cluster, professionals, and supporting institutions are not mentioned in relation to the firms' innovative strategies. Interestingly, as the evidence reveals, the 'customers' of the firms were identified as the main source of innovative ideas and incentives to creativity. The customers, who can be commercial customers (i.e. furniture dealers) or final consumers, are those that bring new models of furniture or general ideas to the entrepreneurs, for instance drawn by hand or depicted in photos. In the words of Mr Feldman[80], these drawings or general ideas reflect what the customers desire to have, and the entrepreneurs try to *"interpret"*, through interactive practice with the client, that new idea or *"dream"* (as Mr Feldman metaphorically puts it). Hence the strategies of product differentiation and specially made furniture principally rely on the direct contact and interaction between the entrepreneur and the customer. A key to understanding this face-to-face and interactive practice is that the majority of the furniture firms have their own shops where they sell directly to public. The nature of this learning process allows the

[80] Mr Feldman is a small entrepreneur from the Partido of Tigre, who manufactures fine kitchen furniture.

entrepreneurs to adapt their capabilities (exploration), built on artisan know-how and expertises, to the client's desires and needs, and therefore to develop a demand-oriented business approach. Customer's demands and preferences, which Burton-Jones terms 'customer capital', constitute (besides the firm workforce -human capital- and the systems, products, processes, and capabilities -structural capital-) a firm's knowledge capital (1999:6).

In turn, customers, in accordance with neo-Shumpeterian and economic-geography approaches (Lundvall, 1992; Johnson and Lundvall, 1994; Maskell *et al*, 1998; Morgan, 1997), are one important source of (interactive) learning for the firms. The fact that a commercial outlet chooses a given firm among the many located in the cluster, indicates at least a critical threshold of knowledge and 'trust' between firm and customer that make the linkage possible. Trust, a key concept in inter-firm relation studies since the first researches on Italian industrial districts, "enables a network of firms to adapt flexibly to unforeseen circumstances and to engage in continuous improvement and innovation, or what has become known fashionably as 'learning'" (Sako, 1998:23) (emphasis in original). Thus, apart from the market relation involved in a firm-customer relationship, the 'personal network' of the entrepreneurs (along with the entrepreneur's skills and expertise) would seem to be the basis for the learning process and the creation of knowledge. The personal network refers to the (social and business) primary network of entrepreneur's relations (i.e. friends, family, colleagues, the first and/or closest customers and suppliers) that become a key supporting structure or 'sponsors' for smaller and (relatively) newer firms (Johannisson and Nilsson, 1989; Johannisson and Nowicki, 1992).

However, the firm-customer relationships found in this group of firms are not necessarily those emphasised by the NIP theory. Firstly, it is a 'bilateral' relationship between an entrepreneur and a customer (or user-producer relationship) rather than a 'collective' relationship, where there is a multiplicity or network of actors participating. Though constructive relationships with a customer are an important strength for a firm with respect to its learning process, they can also result in a situation of sectoral 'dependency' with respect to the need for variety and scope in a firm's innovation process (Tödtling and Kaufmann, 2001). Finally, the fieldwork reveals that although there is an informal and tacit transfer and interchange of ideas between firm and customer, this interchange mainly

occurs through market relations. I did not find any evidence of formal networking practices between these firms and their customers. Market relations are in effect one of the factors that determine the nature of innovation in small firms, and "the more dependant a firm is on certain actors in the value chain –primarily customers- the more incremental is the character of its innovation activity" (Tödtling and Kaufmann, 2001:206). However, the question for an IP framework should concern how firm-customer learning (which comes close to mainstream learning) can lead to more formal and further-reaching patterns of learning when the relationship-base is a market link.

As regards interfirm links, there are three factors that characterise the nature of 'relationships' on this level in the Tigre's furniture cluster: there seems to exist an emerging need to 'open up' the firms towards other firms, despite the fact that the entrepreneurs do not associate interfirm relations with their firms' learning process; geographical proximity has had a marginal positive effect on building up business interfirm relationships; and building up linkages and the development of networking activities among firms is largely prevented by an 'individualist' business culture embedded in the Argentinean industrial philosophy. Structural conditions linked to the chronic macroeconomic instability helps explain this business culture as well as current restrictions on interfirm relationships in spite of the firm's emerging need to 'open up'. These factors are analysed through the following three subsections in order to grasp the exact meaning and relevance that interfirm links and relationships have for the competitive performance of firms, measured against the expectations of the NIP literature.

6.3.2. Emerging need to 'open up' the firms

The fact that many of these small entrepreneurs do not manifestly mention other firms in relation to their learning process, or do not conceive of how other (rival) firms within and outside the cluster could favour this process, without doubt represents a substantial restriction for any IP programme seeking to encourage interfirm relations. However, the evidence also reveals signs of an increasing need for complementary assets between firms. In other words, there seems to exist an emerging need to 'open up' the firms toward other firms through supply chain linkages. Three different 'opening up' practices were observed within the cluster: complementing the portfolio of final related products (finished

furniture); acquisition of intermediate goods (pre-finished furniture); and subcontracting of services to third persons.

As regards complementing the portfolio of related products, this type of commercial link constitutes a new, and perhaps the more utilised business strategy used by this group of firms (20% of the firms) in relation to rival firms. According to the entrepreneurs, the main rationale behind this need for complementary 'finished products' is to be able to offer a more integrated supply of furnishing products to the customers.

As regards acquisition of intermediate goods (pre-finished furniture parts) manufactured by third firms, this constitutes a new business strategy within the cluster (though it is used by only some firms -10% of the cases-). San Pedro (the biggest firm in the cluster) and Gastaldin (a small firm) stated that they have recently begun to incorporate pre-finished furniture in their process of production such as furniture's base-structure (boards), on which the final good is made. Large timber suppliers from the country's northern forest regions provide these intermediate goods through market transactions. There is no evidence of more formal subcontracting activity in these transactions. In this regard, San Pedro recognised that incorporating this kind of intermediate good into the production process has made a considerable impact on the firm's performance. It has allowed the firm to gain productive efficiency and a significant level of flexibility through the substitution of entire lines of production that were formerly part of the firm's production process. Additional details on the effect that these pre-finished structures have on the final goods' composition were not provided, however, the entrepreneurs note that this new business practice will most likely spread in the near future to the other furniture firms of the cluster.

In the past the SMEs were highly integrated vertically, thus this type of business relation with other firms (in this case large firms) was rare. Therefore, the opportunity cost that prompts entrepreneurs 'to buy' from a third firm constitutes an important change in the industrial philosophy of entrepreneurs. In keeping with new arguments on vertical disintegration this qualitative change leads to an initial process of learning and unlearning with respect to the routines and path dependences of the firms. In particular, it leads to a novel decision-making process for the firms in relation to what 'to buy' from a third firm and what 'to make' internally. Though it is an old question in the theory of the firm (Coase,

1937; Williamson, 1985) it seems to be a new one for this group of entrepreneurs. In addition, buying instead of making some components necessarily entails the gradual 'passage' towards a minimal level of productive specialisation within the firms.

However, the emerging trend towards lower levels of vertical integration and higher specialisation, has so far not lead to more systematic linkages with suppliers of the type of intermediate or final goods mentioned earlier. The range of intermediate possibilities between 'make' or 'buy', such as 'cooperation', is non-existent within the wood furniture cluster. This is true even in the case of some firms such as "La Porteña", which have developed long-run (strictly) 'commercial' relationships with other firms from the cluster.

As regards subcontracting, the firm "López Hs" represents a slightly different experience to the business commercial practices in relation to those previously discussed. "López Hs" is one of the bigger firms within this group (16 employees in total). It began to subcontract services in 1997 as a result of a decline in sales and the consequent decision to start selling directly to the public through a new commercial shop opened by the firm for that purpose. The subcontracted services are linked to the 'secondary' production needs of the firm, such as furniture 'upholstery' (*tapicería*) and 'lathe products' (*torneado*), and are carried out by individuals. A specificity observed in this case is that these services often are carried out within the firm, using the firm's installations and machineries. Mr López remarked that these services are sourced from former employees, those who are both from the region and have been working with this entrepreneur (whether subcontracted or employed) for about nine years. Hence each subcontractor, who individually runs his/her own micro-firm, has already developed firm-specific skills.

Though this entrepreneur indicates that subcontracting is a secondary activity within the firm's production process, what is occurring in this case is a search for productive efficiency through a minimal notion of vertical disintegration. Interestingly, though "López Hs" has developed a long-run relationship with its subcontractors, the entrepreneur maintains the direct 'control' on his contracts with third parties since they are carried out within the firm. As evolutionary approaches inform us, this reveals that even in those cases where there is a rising need to 'open up' the firm towards third parts, to change the firm's

routines in production and the entrepreneur's mentality is a very complex process for the entrepreneurs.

6.3.3. Does geographical proximity matter in learning?

The wood furniture cluster or the local *milieux* are not mentioned by the entrepreneurs as encouraging or 'playing' a role in their innovation process. This is especially surprising since these firms are geographically and culturally close to other firms. In reality, the customers, the firms' key asset in innovation issues, are not generally from the region. They are located in areas closer to Buenos Aires City centre or other more distant cities and provinces of the country. Geographical proximity does not seem then to be a factor in the firms' learning process. However, the geography of learning of this group of firms needs to be understood in a double sense. Though the firms' main sources of new information and innovative ideas are not local, their learning process basically operates 'locally', once customers come to the workshops personally. As the evidence shows, these entrepreneurs in general 'travel' neither virtually nor physically searching for new sources of innovative ideas. Lack of information, financial resources, time, and technical training are factors that help to explain why these small firms 'learn' and 'innovate' at shorter distances. As I will show in subsection 6.4, both ways of travelling are key tools in explaining the innovative performance of the second group of firms. Therefore, two IP options include, firstly, to bring a larger variety of external sources of learning to the firms and, secondly, to help entrepreneurs to (virtually and physically) 'disengage' themselves from 'workshop-bindings', both having important implications on IP.

There is, however, one positive, although minor, localised source of soft learning. This is related to 'tracking rivals'. Three small entrepreneurs from San Fernando, whose firms are located in the area of major concentration of wood furniture firms, hint that they learn 'by looking' at and mainly 'by hearing' what the leading firms from the cluster do, what they do not do, or what the others give up doing. In other words, the leading firms, or those first movers in terms of their business strategies, act as role models for the smaller firms within the cluster, either in a positive sense, by showing what should be done, or in a negative sense, by showing what should not be done. Messrs Gastaldin, Ferreira, and Reynoso use the case of "San Pedro" as an example to argue against producing 'standardised' furniture

and 'acquiring new technology' as profitable competitive strategies. The problems that "San Pedro" (see in Box 6.2) was experiencing were presented as tangible proof of the risk in producing standardised goods and acquiring new technology in the current context. What is more, these entrepreneurs utilised similar 'verbal expressions' as those utilised by Mr San Pedro himself (the firm's owner/manager) to explain his firm troubles when he was interviewed.

Box 6.2. "San Pedro":

San Pedro is one of the two biggest wood furniture firms from San Fernando. The firm's current strategy is to produce standardised furniture of relatively low quality and price to meet the bulk of the demand in the (shrunk) domestic market. In order to augment the firm's scale of production, San Pedro incorporated high technology in its production process, such as modern 'centres of work' assisted by computer, during the late 1990s. As a result, the firm enormously improved its productive efficiency.

However, the San Pedro's gains in productivity were not enough to compete with prices of imported furniture. Though the firm is not deeply in debt due to its investments in new technology, they currently (2000-2001) have serious economic and financial troubles since the furniture market diminished. As a result, they not only reduced their workforce by up to 60% but also sold off some of the high-tech machinery purchased just a few years previous.

Knowing exactly what rivals are doing (i.e. in product strategy), and how they are doing it (i.e. what technologies they are utilising) is one of the key advantages of geographical proximity. Tracking the competition is not necessarily an inter-firm relation in the sense stressed by the NIP theory; it is concerned with both social relations between actors socialising in the cluster with local entrepreneurs, and the daily circulation of information (which may takes the form of 'gossip') derived from these social relations. This kind of activity can be called 'cluster noise'. This noise arises out of the effect of 'individual' performance on other entrepreneurs within a cluster. Schmitz (1999:1644) remarks that "[p]erformance within clusters varies and the excellence of one firm tends to have incidental positive effects on others [...] Proximity ensures that such external effects do not "evaporate"" (emphasis in original). These findings agree with those found by Lorenzen and Foss (2002:10) for whom '[p]roximity promotes face-to-face interactions along with monitoring and gossip, and hence shared experiences and point of reference", and with

those found by Breschi and Malerba (2001:827), for whom "co-located firms... tend to experiment with a variety of approaches and solutions to similar problems, spurred in this activity by the incentives and the opportunities provided by the possibility of constantly monitoring, comparing, selecting, and imitating the solutions chosen 'next door'" (both quoted by Amin and Cohendet, 2002:148-149). Interestingly, the actors who generate these noises are not only actors belonging to the cluster (i.e. entrepreneurs and neighbours) but also those visiting the cluster (i.e. customers, suppliers, general public). The latter in fact guarantees a minimal level of flux of information external to the cluster.

The tacit transfer of information (i.e. prices) and knowledge (i.e. production strategies) between firms draws on neighbourhood links between the entrepreneurs located in the cluster. An example will illustrate this point. Three small furniture producers interviewed (Ferreira, Gastaldin, and Reynoso), along with other local entrepreneurs and some suppliers (notably, suppliers of glue for wood, sandpaper, and metallic hinges, among others) meet for lunch once a week where they seize the opportunity to talk about the problems and worries of their businesses. It is in these informal spaces of socialisation where primary ideas and discussions with respect to possible associative actions between the entrepreneurs have arisen in the last years. Gastaldin and Ferreira indeed indicate that on occasion, they have used these meetings to propose to other entrepreneurs the establishment of what they call a 'commercial cooperative' (a furniture outlet) to sell directly to the public, whether in the Tigre's Fruit Market or in the Buenos Aires City centre.

Observations of this nature did not appear from the entrepreneurs whose firms are more geographically isolated and therefore less exposed to these informal instances of learning. Such transferred information and knowledge is vital for these small entrepreneurs who in general, as previously seen, do not have access to professional advice and do not participate in trade fairs or visit leading firms overseas. Nor do they participate in meetings of entrepreneurs organised by local and non-local business associations or other institutionalised forms of meetings in which problems and problem-solving strategies related to the furniture industry are discussed. Furthermore, this occurs without any cost to the firms, but depends on externalities of proximity, making it easier for small firms to appropriate new information by giving 'tangible' examples (local firms that act as 'localised' role models) on how new technologies and systems may (or may not) be used

under specific circumstances. The level of 'tangible-ness' of, for instance, a best practice in furniture production becomes a key issue for craft-entrepreneurs for most of whom feasibility is based on 'seeing is believing' regarding such a best practice.

Finally, although all these practices do not represent a formal process of learning in a strict sense, it does generate spill-over business information and practical knowledge that helps firms to reduce their level of 'uncertainty' about what to do concerning their technological, product, and commercial strategies. As previously seen, reducing 'uncertainties' is a core element in explaining increasing collective advantages of agglomeration (favoured by geographical proximity) to the approaches of local *milieux* (Camagni, 1991) and untraded interdependencies (Storper, 1995; 1997).

However, these minimal advantages of 'being there' must be evaluated against what being there means in ideal types of cluster relationships 'canonised' in particular by the Italian industrial districts literature. One example clearly illustrates the distance from the latter. Although in the cluster "all the pine furniture entrepreneurs know each other in one way or another, they say hello to each other and they ask each other how they are, at the end of the day nobody cares too much about the fate of the others. That's the truth" (Ferreira). More precisely, in answer to a question about what entrepreneurs do in the case where they need to solve a technical problem in their firms, Ferreira recognises that effectively there exists an interchange of technical know-how between the local entrepreneurs when they ask other entrepreneurs for advice 'who are friends at the same time'. He ironically complains, nevertheless, that "to any other entrepreneur that you ask if you have got a problem they will probably give you the advice you are asking for, but to cock things up!" Though this comment may be a sharp exaggeration, it probably reveals part of the truth about the nature of personal relationships among entrepreneurs within this cluster. In this sense Maskell rightly informs us "one can find extensive differences in the relations between firms within an existing local or regional milieu, ranging from rapprochement to detachment and indifference or uncompromising rivalry" (1998:110). Therefore, geographical proximity and agglomeration guarantee neither interaction nor collaboration between firms.

'Being there' does not extend even to the interchange of information and technical know-how. As the entrepreneurs note, there exists a sort of industrial 'jealousy' and above all

'distrust' among local entrepreneurs. This would seem to concur with Maskell (1998) that, "small firms often envisage the producer down the street as their main competitor" (ibid:110). Paradoxically, the problem seems to be fuelled by the fact that the entrepreneurs know each other personally within the cluster. One of the reasons that explains the industrial 'jealousy' and 'distrust' between local entrepreneurs is that a part of the 'circulation of information', and noise-generating, within the cluster (i.e. relating to prices, discounts, and payment conditions) is informally carried out through furniture dealers who visit the different workshops seeking to purchase products, bargaining for better discounts and payment conditions. These dealers often cite prices in other firms to put pressure on an entrepreneur. Obtaining major discounts from the entrepreneurs under circumstances in which every body knows each other often generates friction, resentment, and distrust between them. Consequently, the business environment and the factor of local identity observed within this furniture cluster does not necessarily lend itself to the development of 'untraded interdependencies' and 'trustful relations' among the local firms needed for localised learning to take place.

This helps to explain why none of the firms studied have participated in more collective variants of interfirm collaboration, such as buying or selling groups, which appear to have become more popular in recent years in Argentina. Such collaborative or cooperative practices would allow them to negotiate collectively both down-stream in the firms' value chain, with the main suppliers of raw materials (i.e. timber dealers) and up-stream, with the main clients (notably, the hypermarkets and home centres)[81], and therefore to developing traded interdependencies among local firms. Therefore, a second level of difficulties exists within the cluster working against collective interfirm agreements. Though entrepreneurs are aware that the cost and the risk involved in setting up a collective agreement are lower if the investment is realised collectively, they also admit that it is extremely difficult to get the entrepreneurs together and, then, to get them to commit to a joint business venture (Ferreira and Gastaldin).

[81] It is important to remember that the monopsonist business practices from big suppliers along with the 'dramatic' concentration of the demand in supermarkets and chains of distribution have been identified as two of the most important exogenous restrictions on the SME's competitiveness by Fundes-UNGS report (1999).

6.3.4. Local business culture and interfirm relationships

The prime obstacle, then, to networking practices among firms is an 'individualist' business culture, which is pervasive in the Argentinean industrial philosophy. Characterised as 'individualist' and/or 'selfish' by the entrepreneurs, this idiosyncratic factor of the Argentinean business culture (as a whole) can be singled out as one of the main restrictions to building up interfirm relationships. In different ways local entrepreneurs often made reference to this problem. A small entrepreneur from Tigre, referring to the local furniture entrepreneurs, claimed: "The furniture industry, the timber guild, is very problematic, because everyone looks after his/her self-interest. It is not even possible to set up a joint outlet together here in Tigre" (Aldo). In a more general sense, CIM-San Fernando's manager, also a timber entrepreneur, notes: "we, Argentineans, do not have a culture or an education for cooperation". In addition, Mr Poma (a wood supplier from San Fernando) reflects metaphorically on this point very well, by pointing out: "the football teams are the only thing that work as a team in Argentina". The practical consequences of this individualist business culture are very clear for the entrepreneurs: "The industrialists are very selfish, and one has to get by on one's own. That is the reality" (Feldman).

The individualist business culture draws on three different strands. The first stems from the classic problem of *homo economicus*; the second from the subtler problem of the entrepreneurial background of local entrepreneurs (which in Argentina can be generalised to all the SMEs); the third from the structural constraints of the Argentinean economy. These three factors work together and in different senses they challenge the NIP literature concerned with collective learning and interfirm collaboration. In order to develop these points I will use information from the entrepreneurs from the second group of firms (characterised as that of 'higher innovative capacity').

The first problem is illustrated in the following example. Mr Biagetti (a entrepreneur from the second group of firms), who permanently subcontracts to third firms, succinctly summarises the *homo economicus* problem as follows:

> "the majority of the entrepreneurs have the idea that to subcontract is, frankly speaking, like feeding the other". The consequence is an ethos of: "why am I going to send the

> work outside [to other firm] if perhaps I can make it [internally] by putting one more person to work! So, I do not give the work to any other firm, I make it myself, and so I earn the money myself".

As seen already, this business rationale has dominated the Argentinean industrial philosophy for many years, leading to entrepreneurs making instead of buying or subcontracting almost without consideration for any business strategy based on the search for collective efficiency. The highly protected domestic market and the lack of suppliers of some intermediate goods have favoured these types of practices (Katz and Kosacoff, 1989; Kosacoff, 2000).

The second problem refers to the entrepreneurial background of the entrepreneurs. The individualistic business culture is also associated with the high value that entrepreneurs assign to decision-making power issues over all the aspects related to their firms. IDEB-Tigre's manager for example notes that for the entrepreneurs:

> "... the passage from being absolutely independent, or from managing themselves with a certain level of independence, to having to search for consensus over certain issues related to your own firm, with people with whom they never had any sort of previous relationship is not easy at all for an entrepreneur. Which is so even when a associative activity among firms is being set up only in order to carry out common buying".

Indeed, the sample of entrepreneurs largely consists of former employees of larger firms that in the course of their career decided to undertake their own entrepreneurial process by setting up a new firm. As stressed by entrepreneurship studies (i.e. Johannisson and Nowicki, 1992; Larson and Starr, 1993), one trigger for new entrepreneurs to set up a firm is the desire for personal 'independence' and 'self-determination'. It follows that both needs (independence and self-determination) are realised and materialised in the new entrepreneurial venture, hence the high value assigned to them by the new entrepreneurs. Therefore, I argue that the personal 'independence' and 'self-determination' power achieved by these ex-employees (once they become entrepreneurs) becomes threatened when faced with more formal practices of interfirm collaboration (i.e. a subcontracting policy between two firms). In practical terms it means that an entrepreneur necessarily must

share and negotiate both 'the power of decision-making' and 'the decisions' themselves on issues that were always decided, managed and controlled by the individual.

Individualist business culture, along with the entrepreneurial background and the lack of other role models (there is little accumulated experience of interfirm relationships among manufacturing firms) leads to an important practical restriction. Entrepreneurs, regardless of their experience in this type of business practice, imagine large problems of 'coordination', mostly referring to the management, control, and legal and regulatory aspects involved. For example, Mr López, in response to a question about the possibility of interchanging and/or sharing machinery and equipment with other furniture firms[82], declares:

> "[T]hat idea is foolish, because people here [in Argentina] are not prepared to do it, that is the truth. Imagine that today one employee breaks a machine, ...poor guy! The firm's owner who borrowed that machine must pay to the machine's owner for the mistake that one of his/her employees has done. Then... it does not work for me, it is too risky". He concludes: "on my side, it does not interest me, neither do I think people are trained for that, nor do I think it gives good results in this business. Why? Because we need employees to operate the machines, so if I assume that the machines are going to be used for three or more firms, say, firms that bought the machines, how can you regulate the use of the machines and the amount of time they are used; how can you organise your work in that way; how can you control which wood is from one firm and which from the other one. In one word, that would be a big mess!"

For entrepreneurs like Mr. López, who in reality recognise the advantages of specialisation and interfirm collaboration and who admire the success of the Italian furniture industry, the best solution would be to have a machine that is readily available. Having to share a machine with other firms may be the less expensive option, but this compromises independence of control and access.

The third problem refers to structural constraints associated with the chronic macroeconomic and institutional instability, which have posed an important restriction to building interfirm relationships. The case posed by a pilot experience of association

[82] This question responds to the fact that although some firms in the cluster have acquired modern machinery and equipment over the last decade they currently only use that technology a few days a month.

between SMEs from the Partido of Tigre illustrates this point very well. Promoted by IDEB-Tigre, four 'peer' local firms created a joint venture during 2001 aimed at combining efforts for exporting cosmetics. Two of these firms manufacture containers made from plastic and the other two cosmetic products. The IDEB-Tigre's manager, who has been involved since the initial stages of this experience, explains the problem linked to structural constraints in the following terms:

> "This group of entrepreneurs was very well structured, they knew where they wanted to go [with the associative project] and they knew how to access that. But, because of both internal problems that the entrepreneurs were having internally in their firms [as a result of the economic crisis] and the limited results that we (IDEB) were in the short term able to show them with this project, was discouraging the entrepreneurs' participation". Internally "these firms began to have many troubles, such as the temporary suspension of employees and falling into bank debts, etc. So, specific and serious problems arose with these firms that we did not consider when we established the joint venture of these characteristics, which thus affected the group itself [...] Why? Because, to form an associative group I have to personally unite, and then I am responsible for what we establish in the group. What does 'personally united' and 'responsible for' mean for what the group establishes? If I am with you, if I join you in order to, say, set up a buying group to subcontract a specific product, what happens with the association if tomorrow you fulfil your part of the agreements and I cannot fulfil my part because internally I have financial troubles; labour problems; and a lot of other problems; under circumstances that I must be united and responsible [with the group]. As a consequence, these entrepreneurs [under the current context] do not want to assume certain agreements [e.g. mutual reciprocity and accountability] that even they themselves do not know if they are possible to be fulfilled."

Macroeconomic and institutional instability are acting as an important obstacle to building and developing business linkages and collaboration among firms, even in those firms that have been proven to have a clear intention of searching for collective efficiency through 'opening up' towards other firms. Interfirm collaboration requires a minimal planning horizon and hence stability in the economic activity becomes a key issue. In a context of volatile markets and institutional instability (relating to the system of contracts as a whole) planning horizons are shortened, which affects the firms' decision-making process concerning any strategic decision, at short-term (i.e. fulfilling subcontracting contracts in due course and form) or at a long-term (i.e. establishing joint ventures with other firms and

attached investments), as in the case described above. I will return to these issues in the concluding chapter of the thesis.

6.3.5. Conclusions

In light of the findings, does the furniture cluster of the Partido de Tigre and the region look like those clusters often highlighted by the NIP literature? In many respects it differs from those stylised NIP models that have influenced the academic and policy discussion in developed countries (Pyke *et al*, 1992; Storper, 1993). Although evidence of incidental Marshallian external economies, factors of cultural identity and institutional presence have been found (see in Chapter 5), at present these factors only partially underpin the learning process and innovative performance of the firms within the cluster. As seen, learning and innovation is incremental, imitative and is mainly based on intuitiveness, craft skills and expertise (which is reflected in the firms' strategy of product differentiation). Above all it is firm-centred, though the primary network of relationships of the entrepreneurs (notably, some key customers) are key pieces of an interactive learning through which the entrepreneurs 'innovate' in product. This learning is nevertheless bilateral rather than collective and is mostly based on market transactions.

All these factors explain a certain level of dynamism of this group of firms. However, I have not found any evidence of business interfirm relationships and division of labour between local firms that allow positive conclusions related to the interactive and collective character of localised learning processes. Local institutions were not mentioned as interfaces or facilitators in the firms' learning process. Furthermore, untraded interdependencies between local firms are only restricted to selective friendship- or neighbourhood-based relationships between entrepreneurs, but they do not constitute a cluster-wide observable asset. Consequently, geographical proximity is not seen to encourage competitiveness. The unclear vision of its advantages, the lack of trust (existing between local firms) and the marked individualist spirit of the entrepreneurs were singled out as the main constraints to interfirm networking and collaboration. These findings are analogous to those found by inter-cluster comparative studies carried out in Latin America (LA). Altenburg and Meyer-Stamer (1999), conclude for example that industrial clusters in LA, apart from being 'very heterogeneous' and 'quite different' from those complex and

innovative clusters described by studies on Italian industrial districts, have three main deficiencies in common: heterogeneity of development levels and lack of competitive SMEs, lack of innovative capabilities and low degree of specialisation and interfirm cooperation (ibid:1708).

This characterisation is true for Tigre as well despite the emerging process of specialisation and 'opening up' of the firms within the cluster towards other firms (in and outside of the cluster's boundaries). This characterisation is also the case despite the informal mechanisms of learning (i.e. by looking and by hearing) based on the noise generated in the cluster by the permanent casual contacts between entrepreneurs -and between them and different stakeholders - (notably customers and suppliers), which have been identified. As shown, the 'cluster noise' allows the entrepreneurs to track the competition's strategies 'close up', in issues such as products, prices, technologies, marketing and organisation of production, and as a result they are able to 'costlessly' reduce the high level of uncertainty under which their firms operate. This free circulation of information derived from the externalities of geographical and relational proximity may become a competitive asset for the firms as long as it is transformed into new knowledge.

6.4. Firms of higher innovative capacity

This small group of firms represents under 20% of the total sample of firms interviewed, and less than 10% of the total number of firms considered in this study. On average these were the biggest, oldest, and more successful firms on the panel. They employ more than 20 employees each and were established under the ISI model. Two firms are external to the cluster. The remaining firm is situated within the cluster but not in the most densely populated area of furniture firms. Despite being a small group of firms (3 in total), they show a level of dynamism that offers interesting comparison to the NIP literature for three reasons. Firstly, the learning process and higher innovative capacity of these firms relies on interfirm relationships. Secondly, the organisation of their production process displays critical levels of flexibility, specialisation and, in one case, strategies of vertical disintegration. Thirdly, although these characteristics are the exception in the SMEs in low-

tech sectors of production in Argentina, they constitute the 'best practices' within such sectors and therefore they could signal important implications for a more relevant IP framework.

The fieldwork revealed that this group of firms learn and innovate through more interactive practices in relation to the search, exploration and generation of new knowledge. Though the entrepreneur remains important for these firms, the process of learning firstly centres on relationships with external sources of new information, knowledge, and know-how, notably 'foreign firms' (in contrast to the NIP literature that stresses local learning).

Biagetti, Occhipinti, and Solano, the entrepreneurs leading these three firms, all stressed the importance of linkages with foreign firms for their learning processes and development of innovative capacities. This has taken two forms. The first is based on visits that the entrepreneurs make to leading furniture firms from leading countries in the furniture industry (i.e. Germany, Italy, Spain, and the US) and/or to international trade fairs of furniture and related machinery and equipment. As indicated by the entrepreneurs, through visits to foreign leading firms they see, ask, learn, and absorb practical knowledge from firms that often work with *state of the art* technologies and methods of production organisation. Foreign firms act as 'role models' transferring best practices *in practice* for the local firms. Expressions like *"I have seen it myself in Italy!"* (Mr Biagetti in reference to a case of division of labour and subcontracting strategy that he saw personally in a large Italian furniture firm) typifies the impact of this type of experiential learning. In addition, this modality of learning, which requires 'physical' proximity, provides 'empirical proof' of the validity and effectiveness of novel innovation strategies (i.e. vertical disintegration of production through outsourcing and subcontracting), that otherwise would remain only at an abstract level for the entrepreneurs. As shown in Box 6.3, this experiential process of learning has positive effects on the firm's conduct by encouraging the explorative and innovative vocation of the entrepreneurs.

Box 6.3. "Biagetti Hns"

Biagetti is a dynamic SME, located in the west part of Buenos Aires City, dedicated to the manufacturing of 'complete installations' of furniture for offices. It competes in a market of high product quality, by producing specially made furniture through a system of contracting 'by projects'.

A highly flexible system of production based on both a disintegrated productive structure and an active policy of subcontracting is the firm's core competence. Through this system they achieve coverage of a wide variety of markets within furniture and furnishing industries, operating as if it were a proper building firm. They keep the core competencies of the business 'in-house' such as the design and coordination of the projects; quality controls and; as the entrepreneur stresses, the general *'score'* (the style, the form and timings) of the works carried out. Technical professionals (i.e. architects) work in the areas of project design. The firm subcontracts entire lines of production, depending upon the projects being executed, through two main groups of subcontractors: working teams specialised in installations and a team of professionals. The former (five teams made up of three or four people) work at the location where the projects are being carried out and the latter (basically three architects) work within the firm on the design of products and projects (i.e. integral recycling of offices).

The firm formally employs only fifteen people (the smallest in this group), though often they operate with over twice that number (with the subcontracted personnel) depending upon the projects in progress.

Biagetti's system of production represents a typical case of a 'network-firm', in which traditional categories utilised to characterise firms (i.e. boundaries, level of specialisation, etc.), are often inappropriate. It produces a wide number of different furniture products, which are incorporated into each integrated project that the firm sells, but they work on the basis of a disintegrated productive structure. Furthermore, the firm has achieved an important level of specialisation in the conception and control of its projects but not in their execution, which is generally subcontracted. The subcontracted working teams that carry out the projects however, are specialised in what they do.

Mr Biagetti's oldest son (the firm's current manager) stresses that through this system of production they have developed a capacity of rapid response with high quality products to segmented demands and at short notice. All factors that become the firm's key competitive advantages with respect to the competition of larger local and foreign firms.

Relevant factors:

- Tailored customer production
- High quality products
- Flexible system of production
- Specialisation in core competences
- Subcontracting
- Network-firm
- Second generation of entrepreneurs
- Innovation in processes

The second type of learning operates through the development of either commercial agreements or joint ventures with foreign partners. This type of learning constitutes a more formal learning process and was observed in two of the three cases that comprise this group of firms. It includes the transfer of codified knowledge and technical know-how in product and techniques of production. The main rationale behind the commercial agreements is the need to widen the portfolio of related products, supplied by the local firm, with imported furniture or intermediate goods. In turn, the rationale behind the joint ventures is the need to import modern parts and pieces for furniture manufacturing which are not produced in the domestic market. In both cases the link is based on market transactions. Furthermore, these linkages have in two cases ended in the signature of franchising agreements through which local firms obtain a right to exclusive commercial representation of foreign brand names in the domestic market. Ms Redona (CAFYDMA's expert in international furniture trade)[83] argues that the trend towards developing joint ventures with leading foreign firms is one of the most important business strategies recently undertaken by the top and more dynamic local furniture firms. This is the case of "Occhipinti Hns".

[83] CAFYDMA stands for (national) Chamber of Producers of Furniture, Upholstery, and Related Products.

Box 6.4: "Occhipinti Hns"	Relevant factors:
Occhipinti is a medium-size firm (45 employees) dedicated to the manufacturing of modern lines of wardrobes and closets, which successfully competes in a niche market of high quality products. Indeed, Occhipinti has become one of the leading local firms in this niche market during the last decade.	• High product specialisation
One of the firm's main competitive assets is its highly flexible system of production, through which it can produce furniture parts and pieces that can be interchanged among the different models that shape its portfolio of products. Hence the firm is able to manufacture customised or specially made goods complementing economies of scope and scale. The operability of Occhipinti's system of production largely relies upon an integrated informatics system by means of which the firm can connect, on-line, the needs and requirements of customers to the areas of management and production. It follows that the information system developed by and for the firm (computer assisted design – CAD-), constitutes one of its most important innovations. Through this system the customers, technically assisted by qualified employees, can design the piece of furniture that they are looking for, choose the quality of materials, colours, sizes, etc., and know the final costs in an automatic form. Thus, once a client decides to buy, the buying order (with the technical specifications required by the client) is automatically sent on-line to Occhipinti's workshop for manufacturing.	• Flexible system of production • Tailored customer production • Use of high technology in product and processes • Integrated informational system
As highlighted by Mr Occhipinti, the system of joint ventures with foreign firms has represented the key achievement and asset for the firm. Through joint ventures, the firm has been able to incorporate different high-tech furniture parts that are not available in the local market, such as soft metallic structures for organising clothes; super light systems of sliding doors and windows; and aluminium frames of different colours for mirrors, among others. As a result, Occhipinti is now able not only to compete with modern and sophisticated lines of furniture in the domestic market, but also, starting from their external linkages, to develop their own systems and product lines. The firm calls these product lines 'Occhipinti's Systems'.	• Innovation in products and processes starting from joint ventures with foreign partners • Positive and active transference of technology
This case is a good example of how a firm that operates in a traditional manufacturing sector, such as the furniture industry, has been able to update by producing goods that 'spread' technological progress within the domestic market by developing innovative capacities starting from own strengths and joint ventures with foreign firms.	• Learning and innovating from other firms

Under the surface of formal linkages with foreign partners there exists a variety of learning processes that are determining factors in the innovative and competitive performance of these firms. In order to incorporate high-tech parts and products in the production process, the local firm needs to modify and update its production routines and technologies to match them with the technological frontier 'imposed' by the (often *state of the art*) technology utilised by the foreign partner. In other words, to adapt to new inputs and processes the local firms need 'to move' their own technological frontier. In doing so the firm, unlike the firms in the first group, changes and evolves to become a new firm. The foreign firms, in turn, acts as the technological 'gatekeeper' (Bells and Albu, 1999). This is well illustrated in Box 6.4. In order to able to incorporate the imported technology, "Occhipinti Hns" has had to improve and update its production system as a whole along with some manufactured products, making them compatible, in terms of design, quality, and other technical requirements, with the imported technology. As a result of these *cumulative* improvements and technological updating, the firm developed both a modern system of production organisation (innovation in process) and a new and innovative line of products (innovation in product). According to Ms Redona, this displacement has pushed local firms not only towards a higher quality product but also towards higher levels of specialisation in their productive supply. Consequently, these entrepreneurs have been able to win niche markets in segments of medium and high quality products, competing directly with large foreign firms from leading countries. As the entrepreneurs argue, even though the latter utilise state of the art technology and large economies of scale, they cannot combine three key competitive advantages achieved by these local firms: customised goods, that are of a high quality product using high incorporated technology, and produced and delivered in a short period of time.

Linkages with foreign firms, a key aspect in understanding the geography of learning and the competitive success of this group of firms, have not been the focus of the NIP framework. This second group of firms show us how the building up of links in the international setting are possible by, for instance, visiting leading firms or trade fairs. Virtual and/or physical internationalisation of the learning platform of firms could become part of an IP framework aimed to enrich the firms' sources of learning and local institutions may become key players in promoting a policy in this sense.

6.4.1. Collective learning and innovation?

Although there is evidence that interfirm collaboration between firms located in clusters in developing countries tends to be more 'selective' (Schmitz and Nadvi, 1999), in this group of firms it is restricted to 'bilateral', 'partner to partner' and based on non-localised relationships. In this sense it is worth asking whether the examples come close to the mainstream reading of learning derived from, for instance, joint ventures and strategic alliances based on market transactions only. Learning at a distance has, particularly in its more formal forms (i.e. through joint ventures), a high component of intentional, planned, structured, and building of relationships costly (i.e. Redona and Solano remark that it includes several previous travels oversees). However, I have also shown that, starting from joint ventures, these firms have developed learning processes and innovative capacities that were not *ex-ante* stipulated in the contracts established with a foreign partner, and were very probably not *ex-ante* planned or even wanted by the local firm. Mainstream reading of learning and learning as forwarded by the NIP literature seem therefore positively converged in 'distanced' learning based on interfirm collaboration.

The emphasis placed by these entrepreneurs on the foreign firms as a source of learning and encouragement for the development of innovative capacities, contrasts with that expressed in relation to both the local and non-local (national) firms and institutions. As regards links with local firms, Occhipinti Hns, Solano SA and Biagetti Hns all report that they do not have links of this nature with any local counterparts. That is, they have neither 'horizontal' collaboration, with rival firms, nor vertical collaboration, with key suppliers. It may be said that these are firms that have broken with the main 'subjective' constraints (notably, the 'individualist' business culture) to interfirm collaboration, but only at an international level. The case of Biagetti Hns (the smaller and less internationally linked firm in this group) sheds light on a factor so far not considered in my analysis, i.e. the 'subjective' constraints of the entrepreneurs as regards business 'relationships' with local firms taken in a broad sense. Like the other two firms in this group, Biagetti does not recognise the local firms as a source of learning. Biagetti's competitive performance is, however, based on both an active subcontracting policy using different (smaller) local firms and, interestingly, it has also successfully engaged in a process of learning and innovation starting from a 'joint venture' with an ex-local partner. One of the subcontracted parts of Biagetti's system of

production used to be a 'system of office dividers' made from aluminium, provided through what the entrepreneur calls *"something like an informal joint venture"* with a local firm. Through this 'joint venture' both firms used to subcontract each other depending upon which firm sold the contracts. When Biagetti's partner sold a contract, they subcontracted to Biagetti the production of wooden furniture parts and, vice versa, Biagetti subcontracted to the partner firm the aluminium's systems. Finally, after a period of incorporating know-how from the partner firm, Biagetti went on to internally develop its own system of modular divisions for offices made from aluminium. Although Biagetti broke the joint venture after learning the partner's production knowledge, (a classic opportunistic conduct that generates mistrust towards interfirm collaboration), this example reveals that there is 'objective' room for interfirm learning among local firms. This is particularly salient for smaller firms that lack the resources and capacities to operate in an international context.

As regards links with local institutions (in a broad sense), they seem to play a marginal role in the development of the firms' innovative capacities. However, 'access to business information' and the 'organisation of travel' to participate in international fair trades and, eventually, to visit foreign firms, are activities recognised by these entrepreneurs, although they are not highly valued by the entrepreneurs in relation to their learning process. Interestingly, two of these three entrepreneurs (Occhipnti and Solano) are themselves lead actors within business associations. I will return to the analysis of the roles of institutions in firm's competitive performance in Chapter 7.

Geographical proximity is not seen as a source of competitive advantages for learning and innovative development in this group of firms. As shown already, the emphasis falls on the network of 'de-territorialised' and 'distanced' relationships that the firms develop with foreign firms in the international arena.
In turn, the network of business relationships of these firms and their entrepreneurial system as a whole are scattered through different places, beyond the local circuit.

6.4.2. Learning and innovation as dynamic processes

The comparison of findings concerning the two groups of firms reveals some key dynamic factors exist that explain the different innovative performance of firms. Indeed, the

evidence shows that the nature of the strategic transformation of the second group of firms and their disposition to change largely rely on the evolutionary character of the learning and unlearning process of the entrepreneurs and the firms themselves. Although the entrepreneur remains an important actor within the second group of firms, she/he no longer represents the classical 'artisan'; she/he has become an entrepreneur, while the firm has become a more professional and complex organisation. Those small- and/or medium-size entrepreneurs who run successful firms understand that there is a clear 'turning point' in the evolutionary path of the firm when they change from being 'craft-based' to being 'industrially-organised'. For these firms, to become an industrial entrepreneur involved them adopting a radically different approach to their business, including:

- A recourse to permanent and cumulative training in areas such as management, marketing and international trade, among others, as well as changing use of consulting services in these areas as well as in technological support in quality and plant lay out planning.
- Gradual technological upgrading (during the last decade), through investments in soft (i.e. varied forms of training aforementioned) and hard technologies: modern machinery and equipment such as semi-automatic machines and modern 'work centres' operated by numeric control.
- A gradual process of internal restructuring making areas such as management and production more professional, and gradual incorporation of technical professionals such as engineers (i.e. in areas of product quality) and architects and designers (i.e. in the design of new furniture models and furnishing projects).

What this experience shows is that IPs concerned with learning and innovation should not be based on a 'hit-and-run' IP approach (as often happens in Argentina) but rather on a 'sequential' and 'cumulative' strategy of firm support. In previous sections I have shown the difficulties that firms and entrepreneurs have in changing established routines and path dependencies. In this section I argue that dynamic learning and unlearning in traditional small firms involves 'long periods of time' and that it is therefore necessary to be aware of both the life cycle of firms and the stage of the entrepreneurs' career before arriving at IP conclusions concerning, for instance, interfirm learning at a territorial level. A dialogue

between the NIP literature and the insights coming from entrepreneurship studies is needed to meet this theoretical gap. For instance, CAFYDMA's expert in furniture international trade (Ms Redona), argues that the 'experience accumulated' by the entrepreneurs, (through several business contacts with other entrepreneurs, trips to leading countries in this industry and, above all, long-term experiments of trial and error in her/his business strategies), is one of the most important assets in helping firms to create a qualitative jump in their evolving path. The younger firms in this industry find it difficult to attain success, for instance, in international market access, without having adequate accumulated experience. She notes that in the furniture industry, realising these requirements can take two or more decades. Hence the need for 'exposing' the entrepreneurs to different types of experience or for accelerating their process of accumulating experience is a clear implication in terms of IP.

Unlike the learning of codified knowledge and know-how described above, the nature of learning and knowledge creation in this case is essentially tacit and is largely embodied in the person of the entrepreneur. As a result, it is often untransferable and irreplaceable. It follows that there is also a need for encouraging knowledge transfer within (small) firms themselves. This implies not only a minimal codification of routines but also the transference from the older owner/manager to the new generations and key employees. In addition, the break of old routines and searching for new ones often involves a 'generational change'. The development of new technological routines in the older and more successful (family) firms in the sample occurred through the new generations, when the 'youngest' and often 'more qualified' members of the family succeed the older in the control of the firm. Related to this, the CITEMA-INTI Director points out that although qualitative changes of entrepreneurial 'attitudes' or 'mentality' have been observed in the last few years in small firms, they are harder to achieve when compared, for instance, to the change in technologies: "One can develop a product in two years if one has the necessary resources, but perhaps two years to change the mentality of a firm is nothing, it requires much more time. That is to say, they are processes that require more time". Generational change thus appears to be linked to attitudinal changes in the firms' conduct. Apart from the accumulated experience and generational breaks of those firms that reach a 'transition point' it is also the case that they are in general the bigger ones (15 to 20 employees) among the smaller firms. However, the size of firms matters in dynamic learning only in so

far as it is associated with 'the workshop's' strategic transformation into an 'industrially-organised' firm. San Pedro is the biggest firm within the cluster but at the same time shows a similar scheme of production organisation and management to those observed in the smaller firms.

Consequently, to generate conditions of 'access' and 'assimilation' of learning experience for the younger firms and entrepreneurs along with making accumulated experience transferable among firms (in particular between larger and more successful firms and the smaller firms) and within firms (from generation to generation and key employees) represents important challenges for an IP framework concerned with dynamic learning and small firms. The findings show that geographical proximity in industrial agglomeration may facilitate informal and formal interchange of experiences among firms, as long as they are promoted by an IP programme (i.e. through an intermediary agent). However, the lack of accumulated experience among the firms of the cluster studied, for instance, in international trade, subcontracting, and interfirm collaboration issues obligates us to think of alternative sources of learning beyond the cluster boundaries.

Table 6.2. Learning and innovation in the wooden furniture SMEs

	a. Firms of incremental innovative capacity (Group 1)	b. Firms of higher innovative capacity (Group 2)
Nature of the innovative process:	• Firm-centred • Mainly based on intuitiveness and craft skills of the entrepreneurs (craft-based firm) • Incremental improvements in product • Imitative and reactive • Rudimentary soft and hard technologies	• Interfirm relationship-centred • Strong internal and external professional support (industrially-organised firm) • Dynamic and cumulative learning • Innovation in product and process • Imitative/creative and proactive • High technology incorporated
Learning as an interactive and collective process:	• Customers as the main source of learning (little scope of sources of learning) • 'Bilateral' learning (based on firm-customer relations) • Based on unplanned market links • Institutions are not visualised as sources of learning	• Foreign firms as the main source of learning (gatekeepers of new knowledge) • 'Partner to partner' learning • Based on planned market transactions • Limited role of institutions in encouraging firm learning
Interfirm learning:	• High levels of vertical integration despite the emerging need to 'open up' the firms towards other firms • Uncertain view of advantages of interfirm collaboration • Individualist business culture (lack of experience and lack of role models)	• Flexibility and increasing vertical disintegration (but not division of labour) • Clear view of advantages of interfirm collaboration, but only at an international level • Distrust of interfirm collaboration at a local level (individualism and fear of opportunistic behaviours)
Localised learning:	• Geographical proximity matters only marginally in firm competitiveness • Learning 'at shorter distances' • Informal and unplanned sources of learning derived from localised social relationships (tracking the rivals)	• Geographical proximity does not matter in firm competitiveness • What matters is distanced learning, through virtual or physical travels and building up relational proximity

6.5. Conclusions

The nature of learning and innovation in the majority of firms studied is incremental, unsystematic and sometimes unintended (as outlined in column 'a' in Table 6.2). Likewise, the potential advantages of clustering, notably collective learning and efficiency, have not been developed within the cluster studied. Tigre's furniture cluster can be characterised as a 'survival cluster' of micro- and small-sized firms (Altenburg and Meyer-Stamer, 1999). However, the evidence also reveals that a small group of furniture firms, located within and outside of the cluster boundaries, display a higher innovative capacity, which is based on dynamic and evolutionary learning (as described in column 'b' in Table 6.2). As a result, these firms increased their competitive performance. Therefore, while the first group of

firms, and the cluster itself, are showing some of the main contextual restrictions of the NIP framework (when it is read in the framework of small firms working in traditional sectors in developing countries), the second group sheds light on where the NIP could be aiming in order to boost competitiveness. Three policy implications arise as a result of these research findings, without consideration for the macroeconomic conditions (inflation, rates of interest and exchange, etc.) and availability of financial resources.

First, there is a prime need for a package of policies aimed at strengthening the productive efficiency of individual firms since in 'survival clusters', as Altenburg and Meyer-Stamer, (1999) conclude, there exist pronounced problems of inefficiency at the firm level, which impede the operability of any policy aimed, for instance, at technological upgrading. Provision of real services in areas such as management techniques (i.e. marketing, cost control, personnel, and post-sell services) and technological external support and training (i.e. in issues such as quality control, lay out of plant, control of stocks) can help the firms to overcome inefficiencies allowing them to build the basis on which more proactive, systematic and cumulative learning processes may take place (or business intelligence develop). Improvements in product observed in the first group of firms could also trigger a qualitative jump towards an improved product 'quality' and more sophisticated 'designs'. Injection of new machinery and professional 'translators' (able to bring and to transform fluxes of new knowledge into outputs) or 'intelligent cells' (Landabaso, 2000) within the firm may become 'vehicles' for the transformation of a 'craft-based' firm into an 'industrially-organised' firm. SME policies such as these, aimed at individual firms, could be collectively delivered through groups of entrepreneurs and therefore could also be a cluster policy (third level of policy).

Second, policies are needed aimed at deepening and widening the 'relational' sources of firms' learning. The former refers to the firm's existing stakeholder network (notably its customers and suppliers) and aims at the systematisation and exploitation of the encounters between entrepreneurs and stakeholders in order to trigger the conditions to obtain useful and accurate business information (learning by asking and listening). As regards stakeholder networks, Gibb (2000) in a challenging study referring 'the growth of ignorance' in academic research on SME policy, concludes:

> "[A]n alternative approach to small business advice might be to expend public money on improving the potential for companies to learn better from their transactional relationships with customers, suppliers, bankers, accountants, regulatory authorities, internal staff and so on. There seems little doubt in this respect that this is the field where most small businesses do most of their learning and that they probably learn better from the experience of their peers" (2000:29).

In industrial clusters located within a larger city, such as the Tigre's furniture cluster, the firms frequently develop business links beyond the cluster boundaries. Therefore, a policy aimed at strengthening the asking and listening ability of entrepreneurs is only partially a cluster policy.

As regards new sources of learning, this entails the building up of links and relationships (beyond the existing links of a firm) in order to 'expose' the entrepreneurs to new sources of information and (practical) knowledge (often carried out through direct experience and observation). Visits to trade fairs, visits to more advanced firms and/or centres of expertise at a national or international level are three key mechanisms of 'exposure' to best practices. As seen, the search for 'external' sources of learning, whether in a more informal (i.e. through visits to leading firms in leading countries) or, more importantly, in a more formal way (i.e. establishing joint ventures with foreign firms), is commonly a result of long-term individual endeavours (including time, energy, and money). Through IP institutional instruments as those mentioned above, these practices can be promoted at their initial stages (contacting and linking). Successful experiences of joint ventures achieved at an international level involving local firms (i.e. the case of Occhipinti) can be used as role models for group of firms without previous accumulated experience (for instance within the cluster).

Third, there are implications for how clusters are imagined. In the 'survival cluster' economies of association are scarcely developed, Altenburg and Meyer-Stamer (1999) contend that policy makers and practitioners should seek first to raise the 'awareness' of the potential advantages of clustering among entrepreneurs. According to these scholars, experience of cluster policy in Latin America shows that "an important starting point would be to encourage the establishing of a local stakeholder dialogue to identify economically viable projects of collective actions in fields where economies of scale are relevant" (ibid:1698) (i.e. purchasing of raw materials, selling groups, and hiring consultants). At the

same time, trust-building between local entrepreneurs, and between firms and local institutions, should be a critical IP concern in a context of the absent development of untraded interdependencies and strong cultural barriers (notably, individualist business culture) to collaborative actions. Factors such as dialogue, inclusiveness and a disposition towards consensus-building (Landabaso, 2000) in the mechanisms of the governance of a cluster/local policy, along with the existence of *"effective sanctions"* (Schmitz and Nadvi, 1999) to opportunistic behaviour, seem to be key aspects of trust-building and networking. On the basis of a clear view of advantages of collective learning and an increased trust it is possible to imagine changes in the routines of firms and an associated increase in interest in subcontracting and the most sophisticated practices of 'horizontal collaboration' involving division of labour. Once the catalysing effect is attained at firm level, which, in LA occurs in general through network brokers (Altenburg and Meyer-Stamer, 1999), the following stage concerns linking network firms up with the local and non-local supporting institutions.

CHAPTER 7
The Role of Local Institutional Support

7.1. Introduction

The NIP thinking asserts, in the words of Amin, that "economic life is both an instituted process and a socially embedded activity and therefore context-specific and path-dependent in its evolution" (1999:366) (Amin and Thrift 1994; Bianchi, 1994; Brusco, 1992; Cooke and Morgan, 1998; Morgan, 1997; Pyke *et al*, 1992; Storper, 1997). This chapter claims that both social and institutional foundations underlie economic development and institutions play critical roles in boosting competitiveness[84]. The research on European industrial clusters, notably, those concerned with Italian industrial districts (Best, 1990; Brusco, 1992; Brusco and Righi, 1989; Pyke *et al*, 1990), has given a particular attention to the roles played by local and regional governments in providing, in the words of Schmitz and Humphrey, "a framework in which clusters of SMEs can flourish" (1996:1861). In turn, studies based on evolutionary theory assert that the determining variable in explaining learning and innovation is that they must be understood as collective, interactive and systemic processes (Braczyk *et al*, 1998; Cooke and Morgan 1998; Lundvall, 1992; Morgan, 1997). In Lundvall's views, the strategic capabilities of a firm "reside not only in its machinery and in its individual employees, but also, and primarily, in its organising capability to transform inputs into output. And this capability, in turn, depends on its institutional relationships with suppliers, customers, public agencies, research institutes and

[84] 'Institution' is by nature a fuzzy concept, in particular when it is used in empirical studies. Theoretical definitions clearly distinguish between 'informal', 'soft' or 'tacit' institutions (such as sets of habits, routines, conventions, values and social norms) and 'formal', 'hard' or 'codified' institutions (i.e. laws, rules, and organisations) (Amin, 1999; Cooke and Morgan, 1998), or between institutions ("the rules of the game") and organisations ("the players") (North, 1993:26; Johnson, 1997). Empirical research often requires the triangulation of both dimensions in order to give an exact account of the phenomenon studied. In order to be able to study 'informal' institutions (such as 'trust' and 'cooperation culture' among economic actors) it is, methodologically speaking, necessary to analyse (and then to infer from) the conducts observed in 'formal' institutions (notably, firms, local governments, business associations and the like). Storper in this regard contends: "Institutions cannot be reduced to specific organizations, although the latter may be important in the generation of expectations, preferences, and rules" (1997:268). This dialectic relationship of mutual determination is what will be utilised to analyse local institutions in this chapter.

on the domestic institutional set up as a whole" (1992:311). In particular, Lorenzen points out,

> "competitiveness based on product quality, flexibility, and customisation through automation or specialisation subcontracting is a trajectory that many furniture producers in several OCDE countries have followed for a number of years. This type of competitiveness, based on localised learning, is strongly dependent on a particular institutional environment for furniture production, promoting co-operation and information exchange between firms and providing SMEs with "real" services" (1998:26) (emphasis in original).

These conceptual claims are evaluated through the analysis of the nature of the relations between wood furniture firms from the cluster studied and the local institutions 'supporting' activities for firms from the Tigre region. I have taken local institutions to include public, private and intermediate institutions, which include those bodies grouped under the name of 'techno-educational' institutions (details in Table 7.1). Specifically, I am interested in evaluating the impact that the local/regional institutional set up has had on firm competitive strategies and performance, that is, to evaluate the role of institutions acting as both facilitators as regards provision of relevant business information and access to means and incentives to learn and to innovate, or as partners as regards planning, designing, and setting up firms' commercial, managerial and production strategies.

7.2. The nature of the relations between firms and local institutions

As described in Chapter 5, there are many public, private, and intermediate institutions in the Partido de Tigre (see in Table 7.1). All these institutions profess to be committed to the socio-economic development of the region, with some specifically concerned with industrial development. Does this institutional 'presence' play a role in firm competitiveness consistent with the NIP literature? I will argue that this is not the case. The nature of the firm-institutional relations in the region can be summarised as follows: 1) limited attention aimed at the SMEs within the region; 2) top-down instruments and programmes targeted at the firms; 3) inadequate development of a local 'institutional thickness', reflected in an insufficient communication and lack of accurate knowledge

among firms and institutions and in scarce mutual awareness. This gives rise to a need for institutional representation that has been expressed in a number of different ways by the entrepreneurs. These results are discussed in turn below.

Table 7.1. Local institutional set up and firm supporting activities

1. Sector	2. Institution	3. Activity
a. Public sector:	1. Municipality of Tigre	• Political direction and administration of Tigre's local government
	2. Municipal Sub-secretariat of Tourism & Sub-secretariat of Culture	• Promotion of the local tourism industry & local cultural development
	3. Municipal Office of Industrial Affairs	• Promotion of the local SMEs
	4. Radical Civic Union bloc in the Local Assembly (*Honorable Consejo Deliberante* –HCD-)	• Political opposition's bloc within the Local Assembly
b. Intermediate Institutions:	1. Institute of *Bonaerense* Entrepreneurial Development (IDEB), Tigre (IDEB-Tigre)	• Intermediation of the regional SMEs' access to real services and direct provision to services and business information
c. Private sector: (Business associations)	1. Industrial Union of Tigre (UIA-Tigre)	• Political representation and promotion of the manufacturing SMEs of the region
	2. Chamber of Commerce and Industry of Tigre (CACIT)	• Political representation and provision of basic services to local, small commercial activity.
	3. Industrial Timber Centre (CIM), Partido of San Fernando	• Political representation and intermediation of the regional timber industry's access to services
d. Institutions of the Techno-Educational sector (public budget):	1. Technical School N°5 of Tigre (ETN5)	• 'Secondary' professional training to secondary level in technical careers ('trades')
	2. National Technological University (UTN-Tigre)	• 'University' professional training in engineering and management disciplines and provision of services to the SMEs
	3. National Institute of Agrarian Technology (INTA-Tigre), Tigre Office	• Intermediation of services to the farming activity of the Delta islands
	4. Centre for Technological Innovation in the Wood Industry (CITEMA-INTI) of the National Institute of Industrial Technology (INTI), Partido of Hurlingham	• Provision of advanced technical services to the timber industry at a national level

7.2.1. Limited institutional attention

The majority of entrepreneurs interviewed were categorical in highlighting the 'non-existence' of institutions and services aimed at encouraging local firm competitiveness. In particular, they have rarely seen institutional support for business strategies and learning processes. Hence the entrepreneurs claim a 'lack of interest' in SMEs on the part of the formal institutions, particularly local government. Box 7.1 illustrates the typical case of a small entrepreneur, relatively new to the furniture business and not linked with any local public agency, business association, or wood furniture firm despite being located in a dense

zone of furniture shops within the cluster (the Tigre's commercial area around the Fruit Market).

Box 7.1. "Muebles Pino Av. Italia"	Relevant factors:
With respect to the Municipality of Tigre, have you had any kind of support in issues such as...?	• Absence of Institutional support
No! we have not. (the entrepreneur interupts)	
I was saying, some kind of support for commercialisation, training or...?	
No. In our case we have never had any kind of support. That is the truth. I do not know about the others [entrepreneurs].	• Isolation of the firm
And with respect to the timber sector in general, do you...?	• Institutional vacuum
No, nothing. (the entrepreneur interupts again) // Finally, I would like to ask you about local institutions such as the Industrial Union (UIA-Tigre) and the Chamber of Commerce of Tigre (CACIT). Do you have any kind of links with or have you received any kind of support from these business associations?	
No, no, nobody comes up to us. I do not know if all is dead here in Tigre. Everything vanished here, you see? In Tigre there is no interest, there is nothing to say: '...look, I can produce chairs because the chamber of ...', any chamber, comes here and say: 'well, here there is a credit of 5 grand available, so we are going to advise you to buy a machine in order to make a specific work, we are going to verify that you effectively have bought that machine, etc, etc.' Well, nothing of this happens in Tigre.	• View of business associations as a potential source of support

The second illustrative example comes from "López Hs" (Box 7.2), a medium-size firm that is well known and respected within the region. López, has links with local and non-local business associations and also an in depth knowledge of the local furniture industry. It is therefore well placed to provide a wider picture of the character of the institutional services aimed at supporting SMEs.

Box 7.2. "López Hs"	Relevant factors:
Mr López, have you ever received any kind of support from the local institutions, for instance, from the Municipality of Tigre? No, on the contrary. No, from the Municipality? We do not, nothing. On the contrary, some times they have fined us because of a law concerned with environmental issues, because we did not submit the documentation in due time to the Municipality. In other words, collaboration from the Municipality, nothing. On the contrary, they try 'to drown' us, as if we were nobody. // ... I understand, I see. But, would you say that at the outset there exists a concrete interest in the local SMEs in general from the Municipality? No, no!, there is not an interest. At least this is my opinion, because if they had an interest they would look for the ways not to pressure us, the entrepreneurs. Let's say, to give you an idea of what that I am saying. If you did not submit in time some documentation required they fine you $ 300 pesos! (Equivalent to 300 US dollars, a basic salary at that time). This is to say, if we are talking about collaboration from the Municipality? Nothing. They do not even stock up with local suppliers of manufacture for public works that the Municipality has done or to the works that they might do in future. At least they could look for a way for the SMEs located in Tigre to give an estimate. For instance, on furniture's prices, couldn't they? // So, what about the private sector, have you received support from, for example, the Industrial Union (UIA-Tigre) or the Chamber of Commerce (CACIT)? No. I didn't have too many links with the Industrial Union. They have invited me, but I did not resort to them, because I have the... Wood Chamber (he refers to CAFYDMA though, interestingly, without remembering the name) Although I do not use it either. I disagree also with the wood chamber because they come with proposals that for me are useless. It is useless for me set up a system of marketing or a training program aimed at the employees when what I really need is a market to sell my products. Only after that may I think about the other things.	• Absence of the public support • Negative factors of the public policy in relation to the firms • Lack of interest in the local SME • Minimal contact from the UIA-Tigre • Critical view on the activities of the business associations • Questioning instruments of micro competitiveness

In order to begin to understand the lack of institutional interest in local firms, as claimed by the entrepreneurs, it is necessary to note that the local institutions, with the one exception of IDEB-Tigre, also admit that they have no contacts with local furniture SMEs, nor specific programmes for the sector. Indeed, the general institutional view is that the furniture firms belong to the craft sector existing in the region rather than to an industrial activity worthy of formal policies.

On the margins, however, some signs of institutional supply activity are discernible. As can be observed in the cases of "López Hs" (Box 7.2) and "Gastaldin" (Box 7.3), there exists, entrepreneurs note, the presence of some level of institutional activities aimed at local firms. These activities fall into two categories: First, general business information, mostly from UIA-Tigre and IDEB-Tigre. This information refers to standard matters such as sources of credit, tax changes or labour regulations, and business meetings. The private institutions also identify the offer of a package of basic 'professional services' aimed to support the entrepreneurs in issues such as taxes, labour regulations, and accountancy. Although these 'traditional' services are in general recognised as necessary by the entrepreneurs, they were not mentioned in relation to the institutions studied. In fact, for reasons of timing and convenience all the entrepreneurs prefer to contract out these types of services. The second information base relates to advertising and organising participation in national and international trade fairs and visits to foreign firms. This activity is organised by national furniture business associations such as CAFYDMA[85] and FAIMA[86], in which some entrepreneurs 'participate'. However, in neither case did entrepreneurs identify activities geared towards helping learning or boosting competitive performance. This is explained partly by the fact that business associations see their main role as the *"defence of the sectoral interests of the firms"*. This means lobbying at local, provincial and/or national levels, which often are planned and managed from the national level. But here too, as I will show below (in section 7.2.3), entrepreneurs are very critical of the role that local and national institutions play in 'representing' and/or 'defending' the interests of the sector.

7.2.2. Top-down institutional support

With respect to institutional support for the firms, the entrepreneurs claim that the services supplied often do not suit the existing needs of the local firms. One example will suffice to illustrate this second factor of the firm-institution relations in the territory:

Mr Gastaldin, (Box 7.3), is a small entrepreneur who has not only developed a certain level of institutional contact with local business associations but has also participated in some

[85] Chamber of Makers of Furniture, Upholstering and Related Products.

[86] Argentine Federation of The Timber Industry.

activities organised by IDEB-Tigre. This firm is located in the pine furniture firm cluster of the neighbouring Partido de San Fernando and, therefore, the entrepreneur's opinions will serve as a control case with respect to Partido de Tigre.

Box 7.3. "Gastaldin"	Relevant factors:
With respect to the Partido of San Fernando, for example, in relation to the Municipality. Have you received any kind of support from the Municipality, in aspects such as programmes of technical assistance, training...? No, no (the interviewees interrupt). They come along only when they need a vote. And with respect to the IDEB-Tigre, for example? ... well, they dropped off some information some time ago. I have attended a couple of meetings [at the IDEB's offices], but frankly speaking they did not convince me because the credits were too expensive. Because it was credit that they were offering us, and expensive! Instead, it is work that we need.	• Negative view of the public sector • Sporadic delivery of information from the private institutions • Unsuitable institutional supply for the firm needs • Market as the firm's main need

In Gastaldin's case the mismatch between the IP instruments offered by the institutions and the instruments needed by the firms refers to a financial instrument that was generically promoted and offered to all of the local SMEs by IDEB-Tigre. Hence, this service was conceived without consultation with the entrepreneurs. "La Porteña" comes to a similar conclusion to "Gastaldin" on local institutions: "The Industrial Union [UIA-Tigre] has sometimes sent me some information, but it was not suitable for my business, for my problems". This firm has never heard from any other local institutions, including the Municipality of Tigre.

The evidence also reveals that local services in general are conceived, designed, and even managed by the national institutions to which the local institutions are linked. For instance, the few services offered by CIM-San Fernando (i.e. information on new machinery and equipment, support to firms' application-process to national IP instruments and professional advice on international trade) are entirely determined by FAIMA at the national level. Thus the services offered by CIM-San Fernando are not designed to match local needs. Furthermore, though CIM-San Fernando offers these services locally they are

delivered in FAIMA's headquarters in the centre of Buenos Aires. Therefore, even in the small number of cases where local institutions appear to offer IP support, the top-down approach through which the activities and instruments are conceived to be harming the credibility of and then the interest in such support.

7.2.3. Inadequate development of local 'institutional thickness'

Two aspects best show the nature of 'institutional thickness' in Tigre. First, 'insufficient communication' between firms and institutions and, second, the desire for institutional representation expressed by the entrepreneurs.

7.2.3.1. Insufficient communication between firms and institutions

It was striking during fieldwork that only three local institutions (UIA-Tigre, IDEB-Tigre, and the Municipal Sub-secretariat of Tourism) have recently conducted research (i.e. surveys or market research) and analysis on their institution's target group (local manufacturing firms and tourism services providers in this case). For instance, information systematised in a database developed by IDEB-Tigre, although limited, constitutes the only database on manufacturing firms that exists in the entire region. This type of database, which includes only the entrepreneurs' name, address, telephone, and production subsector, is rarely available at the local level in Argentina. In addition, the Municipal Office of Industrial Affairs only compiles basic information from official registrations (i.e. legal authorisations and terminations). Further information compiled by the Municipal Secretariat of the Treasury only includes the dates of firm registration and its main business activity.

"San Pedro's" case, (Box 7.4), one of the two biggest wood furniture firms in the region, demonstrates a second level of problems associated with communication links between firms and institutions. San Pedro has developed a considerable degree of institutional participation at the local and national furniture business associations (CIM-San Fernando and FAIMA respectively). Furthermore, due to his position as a leader in the local furniture industry, he has close links with the public authorities of the Partido of San Fernando. But, as Box 7.4 shows, he is negative about the role of institutional support.

Box 7.4. "San Pedro"	Relevant factors:
And talking about San Fernando, at the level of the Municipality, have you had access to some kind of support from...? No, no! (The entrepreneur interrupts) ... or, for instance, some institutional support to search for solutions to your current problems? No, no. So nothing, nothing. ... Well, yes, they [the Municipality of San Fernando] contacted us to export once. Apparently they were trying to promote exporting at the level of the local industry, but we do not have furniture appropriate for export. The furniture made by pine for example warps entirely when it passes from the cold to the warmth (he explains). // Are you participating in some business association? Yes, in the Timber Industrial Centre (CIM). Yes, but they can do nothing. Here [in Argentina], here there should be a policy aimed at reinforcing the domestic market rather than one aimed towards outside.	• Asymmetry in access to information with respect to the smaller firms • The public sector's lack of knowledge about local firms • Questioning the capacity of the business associations • View of solutions only at macroeconomic and national level

As can be seen from Box 7.4 the lack of accurate knowledge is reflected in the public sector not holding information about the specificities and technical characteristics of the goods manufactured by the furniture firms of the region, most of which use 'pinewood' as their main raw material. Accurate knowledge about the type of furniture that the firms produce would enable the institutions to design appropriate instruments.

The insufficient communication between firms and institutions is also reflected in the passive strategies through which the institutions 'communicate' and 'transfer' information to the firms. In the case of the private sector, the majority of the business associations (i.e. CIM, CACIT, UIA-Tigre) use a non-periodic institutional magazine as the main method of communication with entrepreneurs. At times, in urgent cases, the entrepreneurs are also contacted by telephone. With the exception of UIA-Tigre and IDEB-Tigre, the business associations do not make use of the Internet. Interestingly, IDEB-Tigre, which, as previously mentioned, operates along with the UIA-Tigre, is the only institution that makes 'personal visits' to entrepreneurs in the workshops in order to discuss or to promote

initiatives and programmes related to the local SMEs. One example illustrates well the implications of insufficient communication between institutions and firms observed in the region. As an important instrument of their strategy for local wood furniture firms, Industrial Timber Centre (CIM) authorities have been promoting "Furniture CORFO" (Corporation of Encouragement of the Furniture Industry). The Furniture CORFO's main aim is to bring together all the wood furniture firms in the Partidos de Tigre and San Fernando, as well as some wood suppliers, in order to encourage a division of labour between local firms. CIM authorities even claim to have obtained official support from the National Secretariat of Industry (a part of the Ministry of Economy) and FAIMA (the main national timber business association) to carry out this initiative. Surprisingly, none of the local wood furniture firms interviewed mentioned this project during fieldwork!

The public sector, through the Municipal Office of Industrial Affairs, communicates with firms only through generic means such as local radio or newspapers. This Office does not use any means of communication specifically designed to contact firms, despite the fact that it was established as a channel of communication between the local government and the manufacturing SMEs. Thus as one official puts it: "The Office of Industrial Affairs has some programmes aimed at the SMEs, but I do not know, I do not know what results it has had, I do not know whether or not these programmes are being carried out. I think not." Both local entrepreneurs and institutions in fact characterised the activities developed by this public agency as extremely minor, or as non-existent, and hence this Office's role is discredited within the territory.

In light of these findings, the accuracy of what both the public and private institutions claim to know about the firms should be put into question. Rather, it would be more accurate to say that they have limited updated information or knowledge about local firms. Interestingly, the approach of the Municipal Sub-Secretariat of Tourism, another local public agency, contrasts widely with that of the Municipal Office of Industrial Affairs. The Tourism Sub-secretariat has an active policy of communication with firms in the tourism sector. The Secretariat is closely linked with tourism firms either directly or indirectly through the Chamber of Entrepreneurs From the Delta (which embraces approximately 20 firms). Accordingly, the Sub-secretariat, the Delta Chamber, and local entrepreneurs have

begun to jointly develop training and updating projects aimed to support the competitive performance of the local tourism industry.

7.2.3.2. The desire for institutional representation

Without exception, every entrepreneur expressed the need 'to be recognised' and 'to belong' or 'to be represented' when they were asked about the roles that the public and private institutions should play in relation to the firms. The need refers to the region, constituting a demand on public and private local institutions, but also to national business associations and the national state and the political system as a whole. Box 7.5 illustrates the need for recognition at local level.

Box 7.5. "La Porteña" and "Ferreira"	Relevant factors:
a. "La Porteña": What happens here is that to feel part of something [a local institutional setting] you have to be involved, in the sense that, ... you see, nobody from the Municipality ever came here to say to us: 'Well, let's see, what are your firm's problems exactly?' When you see that [interest], ... how can I explain this to you. If they come and listen to you, then you have to give something to them as well. One gives when one receives, otherwise it is not going to happen... b. "Ferreira": I think that they [the Municipality de San Fernando] have never taken us into account because we have never made ourselves be taken into account. I always said, we were around 70 carpentries here [in San Fernando], so reckon that up, if you take the 70 firms and bring all those people to the San Fernando square, it is probable that they [the local government] will realise and say: 'there is a market here'! Don't you think so? Well, nobody ever took into account that there is a market in this part of the Partido. // Now, you (to me) are visiting around. I don't know, perhaps you don't bring solutions, but you can bring a perspective instead to say: 'well look at this guys, perhaps this product might come out better than that one; ... or to make 20 different products is not profitable, it is better to make just 10 and study them carefully, and you will see that it is more convenient; or, why don't you try to cut off your final cost, etc'. But, apart from this nobody ever cares about us.	• Institutional absence in the territory • Lack of mutual awareness and acknowledgement among firms and institutions • Need for reciprocity and mutual compromise • Lack of interest from the public sector • Need for institutional acknowledgement • View of collective action at local level as a possible vehicle for recognition

The situation in Tigre does not seem to differ from elsewhere in Buenos Aires. Biagetti (Box 7.6), located in the economically depressed Partido de Jose C. Paz in the northwest area of the Greater Buenos Aires, confirms this.

Box 7.6. "Biagetti Hns."	Relevant factors:
We cannot say that programmes and resources reach us from the national level, but they do not do so at the Municipal level either. I think that we do not know what the Municipality [of Partido de Jose C. Paz] does because they do not publicize what they have done, although I do not know whether they do something. Likewise, I would say to you that I think the Municipality does not know what we do, because even though they regularly re-register and licence [the local firms], those registers vanish as if by magic! Not long ago they came here to say us that we were not re-registered, and we did it five hundred times! I tell you what, we have been contracted to make some works for the Municipality of the City of Buenos Aires, that is, a Municipality away from us [Partido de Jose C. Paz]. However the Municipality of Jose C. Paz never came along to ask us for an estimate to do some work. So instead of promoting an idea of regional development as others Municipalities do, which is to applaud, here we are deprived of that benefit. Again, I do not know what are the policies for the firms that the Municipality [of Jose C. Paz] is carrying out, nobody came to see me, and neither have I gone to see anyone. That is to say, I am not saying that institutions do not exist in their respective areas of work or they do not have the support that they should have. But the thing is that personally I do not feel myself represented by any of them. That is to say, if you look at the newspapers to see what they [the institutions] are discussing with respect to the industry, and when you read what they are putting forward [in order to support the industry] perhaps it is not what you need. I understand that it may respond to a generality, but I do not feel represented because what is being discussed [by the institutions at a national level] is perhaps neither going to reach me in a direct form nor I will be able to access it in the short term.	• Absolute lack of mutual awareness and acknowledgement • Lack of interest from the public sector • Problem of lack of and need for representation • View of a proactive institutional role in development issues • Gap between the institutional supply and the firms' needs • View of IP as unreachable for the SME

Interestingly, the need for recognition varies by firm size. The smaller firms claim that they are entirely ignored, as reflected in expressions such as *"we do not exist for anyone"*, *"they never come here"* or *"nobody worries about us"*. As noted already, this segment constitutes the most isolated group of firms in terms of relations with local firms and institutions. Instead, the biggest firms (i.e. Occhipinti and Solano) complain of 'lack of representation' by the public and private institutions of SME interests, rather than 'lack of

recognition'[87]. *"Nobody comes out in defence of us"* is an expression that best illustrates this complaint. In particular, these entrepreneurs claim that the institutions should exert more influence on both the national state and the bigger economic interests (MNCs, the larger Argentine companies and the financial sector), which are identified as the most influential spheres of decision-making on economic policy issues in Argentina.

From an IP point of view, both needs (recognition and representation) imply a different approach. However, the needs of entrepreneurs at the local level are not clear. In some cases it refers to recognition by local government or, in a more general sense, to lobbying access to provincial or national policy decision-making spheres. In other cases it refers to the generation of business opportunities for the firms, or access to the provincial and national IP instruments and programmes for SMEs. In all the cases, despite the critical judgement of the role played by the local institutions in supporting firms (as seen through subsection 7.2.2) the firms still assign a role to the public and private institutions. This represents an institutional opportunity waiting to be taken, in particular from the IP point of view at local and regional levels.

7.3. Institutional set up and firm competitiveness

The base-line aspect of firm-institution relations described in the previous section is that the 'institutional presence' (a necessary condition for the establishment of 'institutional thickness') in the Partido de Tigre and the region does not mean, *per se*, that the local institutions play a role in firm competitiveness. What is more, local SMEs do not even associate with the local institutions any of the factors of competitiveness upheld by the different schools of thinking analysed in Chapters 6. This leads to a primary reflection. To limit the research methodology to examining institutional 'roles' in relation to firms assumes that to a certain extent the entrepreneurs 'know' about these potential roles and that, therefore, they are also able to 'identify' and 'evaluate' whether the institutions are fulfilling them. The point is to identify exactly what terms such as 'institutional support',

[87] It is important to remember that the larger entrepreneurs in the sample are all members of some business association, often of a sectoral character such as CIM-San Fernando at a local level, and CAFYDMA, CEMA or FAIMA at a national one.

'institutionalised support', or 'institution' itself mean for the entrepreneurs with respect to their competitive performance, in a context characterised by scarce mutual knowledge and extreme fragile links between firms and institutions[88]. Indeed, the majority of entrepreneurs refer to the local public and private institutions with descriptions such as: "The Municipality charges taxes, fines, and builds squares"; "politicians don't know [anything about business]" or "they come over only when there are elections"; "business associations are useless" or "they cannot do anything"; and "the institutions sometimes drop off information", but in general "they do not exist!"

A second reflection is that, even in those cases in which entrepreneurs identify institutional support, the top-down approach on which the institutional supply is based, has direct and indirect negative effects on the perceptions and attitudes of the entrepreneurs, in particular the smaller ones, towards all of the IP instruments and programmes. The top-down approach seems to be affecting not only the entrepreneurs' view on the 'traditional' institutional supply available in the region (i.e. basic support in tax and labour regulation issues), but also on those most modern IP instruments such as managerial training and technological upgrading programmes, various consulting services, and ICTs (Information & Communication Technologies). ICTs constitute key tools for firm competitiveness in today's economy. I have shown already that these IP instruments do not constitute a priority from the SMEs point of view. The evidence reveals that firms, in particular smaller ones, justify their lack of interest on the grounds of a general distrust of utility and relevance. A vicious circle emerges because although almost every local institution identifies the scarce development of technical capacities and the limited access to training programmes of local small firms, the evidence reveals that except for certain institutions (i.e. UIA- and IDEB-Tigre, and some techno-educative institutions) this recognition does not necessarily translate into institutional support in dealing with these weaknesses. The majority of the local institutions studied were extremely critical of instruments to boost competitiveness (such as training programmes, product quality, continued improvement programmes, and post sales services) claiming that they are useless in a context of

[88] In fact, it turned out to be extremely difficult in this research even to ask about institutional issues and their potential link and relevance to the firm's competitive performance.

economic crisis.[89] Consequently, the entrepreneurs, as well as local institutions, often perceive the national sphere, rather than the local or regional spheres, as the only legitimate source of solutions for their needs.

A third reflection is that the very nature of firm-institution relations observed in the region constitutes one of the main reasons why the entrepreneurs have an extremely 'passive' attitude concerning the development of contacts with, and the participation in, local institutions. CACIT for instance remarked that although professional services are supplied for free by CACIT (in issues such as taxes, labour regulations, and accountancy) "the entrepreneurs do not demand them!" In addition, a CACIT official remarked that when they call a meeting, "the attendance is minimal, often it is the Chamber's body and twenty more people". That is why, he concludes, "when we want to organise an assembly, we often alert people two months prior, and sometimes it is even necessary to bring the associates (via car, taxi, etc). At least this is the way in which things work in Tigre. Perhaps other chambers function better, but the general situation must be more or less this."

ECLAC report (2000) confirms that territorial identification, institutional participation and recognition of public and private bodies (as legitimate interlocutor to place problems) are factors mainly observed in firms from small- and intermediate-size cities in Buenos Aires Province rather than in larger urban localities located within Buenos Aires City. Although firms from large urban localities often have better access to business services (i.e. training and consulting) they prefer linking with sectoral and generally non-local business associations. From CACIT's statement I can infer that the levels of receptiveness to the participation of the firms in institutional life is only thought of as a weakness by the institutions themselves (particularly by the business associations). Certainly I know that participation in institutional life by the firms is not the same as the use of the IP instruments and services. Like other business associations, CACIT faces a problem of lack of entrepreneurial interest and commitment. The entrepreneurs do not utilise CACIT services leaving it with the problem of credibility and legitimacy. CACIT, however, blames the

[89] An additional factor appears to be hampering firm-institution relations regarding provision of services and firm-institution links. The two main demands of the entrepreneurs on the local and non-local institutions (according to the institutions) are 'search for business opportunities' and 'access to bank financing', under the circumstances that the institutions neither supply financial support nor operate as trading companies able to directly generate market opportunities.

current economic crisis for the failure of its institutional strategies. The economic crisis has without doubt had effects on the activity of 'support' institutions, but by no means explains the marked absence of an institutionalised business culture in the region and the institutional sclerosis observed.

The three factors that characterise the nature of firm- institution relations in the region (limited institutional attention, the top-down approach, insufficient communication and the lack of mutual recognition) were not identified as problems by most of the local public and private institutions studied. Hence it could be hypothesised that updated information and accurate knowledge about the local firms is not needed for the institutions, as the decision-making process with respect to the institutional supply is top-down, directed by institutions at the national level without any consideration for the local firms' specific needs and the capabilities of the local institutions. Consequently, the lack of interactivity and receptiveness to the participation in institutional life by the firms, and the little credibility and subsequent lack of institutional legitimacy are hindering the critical process of institutionalisation concerning local firms and institutions that can help to establish institutional density in the region. How this process operates at an inter-institutional level is discussed below in section 7.3.1.

In light of these findings my hypothesis is that in localities or regions with an insufficient level of development of economies of associations between economic actors, a set of initial conditions is required. This set of initial conditions specifically refers to the building up of relational density in the region that makes mutual knowledge and acknowledgment, interaction and development of synergistic potential between economic actors possible. In other words, a context-dependent IP framework concerned with institutional support first and foremost should identify and act on those minimal elements of transformation from institutional 'presence' to institutional 'thickness' (Amin and Thrift, 1994).

Box 7.7. "Ferreira"	Relevant factors:
Have you had access to some type of support from the Municipality? No, never. Did they ever come here to ask what their main concerns and problems are? No. Once we solicited the Municipality to pave this street. They never paved it. // Certainly, furniture firms are labour-intensive.	• Absence of public support and lack of interest
... , if you reckon that we could have 10 more people working here, and you consider I am an only small firm. You do the sum (he says to me), we are five small carpentries here so, 50 more people would be employed just in this street! You understand?	• View of the public sector as a potential maker and facilitator at the local level
They [the Municipality] would have to look for the way to reactivate this zone, by advising the entrepreneurs. They should come and say: 'ok guys, let us go hold a meeting' or something like that, but nothing has been done. So, I am not against the Mayor, neither do I care, right? But I think they should worry a bit more and say: 'look, there are some firms around there, at the Partido's bottom, why do we not go there to see what we can do, for instance, so that they [the firms] take five more employees. There are a lot of things that could be done: 'Why don't you employ two more persons, we [the Municipality] are going to pay them a minimal salary, and let us see how we can build the houses that the Municipality is building over there. We are going to furnish these houses with two of your products'. Do you understand what I am saying? Let us go set up a cooperative of furniture producers or whatever you want to call it, and let us look for solutions. But no, none of this has been done.	• View of the industrial policy at local level • View of associative policies among firms promoted by institutions

As claimed by some entrepreneurs (see "La Porteña" case in Box 7.5), only once the relational factor has been activated will it be possible to think about relations of mutuality between firms and institutions (through which local institutions may become 'a peer' for the firms), and subsequently policies of collective learning and varied economies of association. The case for a more active policy of linking-up, acknowledging, and searching for shared solutions, is illustrated above in Box 7.7.

7.3.1. Emerging features of institutional thickness in the region

There are, however, certain signs of change in the IP culture. These signs are important points of possible IP solutions. The techno-educative institutions (notably, CITEMA-INTI, ETN5, and UTN)[90] along with UIA-Tigre and IDEB-Tigre[91] are slightly more progressive than other local institutions. They display distinctive characteristics that permit me to hypothesise new 'bottom-led' IP schemes.

7.3.1.1. The techno-educational institutions

Three aspects of the strategies followed by the techno-educational stand out. Firstly, all these institutions have recently developed a proactive strategy of building up links with local and non-local firms, mainly in the form of 'personal visits to the entrepreneurs'. According to these institutions, through such personal visits to 'the workshop' they have been able to contact, discuss issues face-to-face, and reach arrangements with entrepreneurs. In response to a question about CITEMA-INTI strategies to develop links with the firms, the Director explains:

> "Our link with the firms can occur in different ways. Let's say, there are firms that come here directly to present their problems and, accordingly, we then define how we can help that entrepreneur. Many times it also occurs through information spread by word of mouth among the entrepreneurs, or through some business association. Well, it is about the entrepreneurs knowing that there is a Centre [CITEMA-INTI] that can help the firms in certain specific technical aspects. The other way to [generate contacts] is by developing direct contacts with the firms, according to determined projects or issues that we want to promote, right? I would say that it has not been a good channel trying to link firms through business associations, although some of them are founding members of this Centre... [...] So, we came to a conclusion that the business associations are not good channels, and that we have advanced a lot since when we began to have direct contact with the firms. What is more, the most interesting projects for this Centre have arisen starting from the direct contacts with the firms".

[90] Centre for Technological Innovation in the Wood Industry (CITEMA-INTI); Technical School No5 of Tigre (ETN5); National Technological University (UTN-Tigre).

[91] Industrial Union of Tigre (UIA-Tigre); Institute of *Bonaerense* Entrepreneurial Development (IDEB-Tigre).

Secondly, with respect to the product supplied, the institutions underline two key aspects. First, they seek to offer specialised and customised technical services. CITEMA-INTI, which is specialised in the timber and wood furniture industry, for instance offers technical services such as materials resistance and product quality control. ETN5, in turn, offers a recruitment service to small firms, and it has also developed training programmes in advanced subjects such as use of pneumatic technology and CAD (computer assisted design). Second, UTN, supplies a wide range of courses and training programmes in all branches of engineering, and high-tech consulting, alongside other programmes in soft technologies (i.e. marketing, stock control, and management). As mentioned in Chapter 6, these institutions have noticed that in the last few years the SMEs have more frequently approached them to ask for help to solve technical problems or for specialised services in order to achieve greater productive efficiency. The institutions also emphasise that an effective way of building links with firms has been to offer new ideas and services directly to the entrepreneurs in advance of an established demand. UTN notes that this is in contrast to the common perception held by the entrepreneurs that universities and technical schools usually ask firms for their services, rather than marketing themselves as a service. UTN notes:

> "The mechanism, first and foremost, the main mechanism was a policy of supplying and never asking for. I will tell you why, because nobody believes in...[universities]. You come along to the firms and who believes you? (He asks me) So, we have created some mechanisms, the 'job centre' for instance, where we help the firms to select their personnel for free. That was a long-term project. Then, from the 1990s forward, we have begun to participate in any sort of event. I do not know, but every time we saw some event where we could participate to promote the University's name we did". The other key strategy for us was to promote ourselves through our graduates. Each one of our graduates is working for some company and they keep an active participation within the University. So, each one of them is our seller, they do our marketing. That is the way by which we were getting into the firms".

Thirdly, these techno-educational institutions make reference to the importance of response times to the requirements of the firms, along with the ability to convince entrepreneurs that solutions can take longer than expected, as key factors for an approach that aims to develop joint projects with the firms. For example, by offering the fastest possible answers to

entrepreneurs, UTN has been able to convince firms about the need for specialised technical advice and services.

Therefore, starting from strategies based on a shift in attitudes and a policy of institutional opening-up (rather than large mobilisation of financial resources), some techno-educational institutions have been able to change their development path towards more interactive schemes of institutional learning and management. Valuable practical evidence on how the relational factor and the development of the so-called un-traded interdependencies could give rise to a process of institutional building and networking between institutions and firms at a territorial level is provided by these institutions. Furthermore, this has been achieved by making proactive use of the institutional vacuum existing in the region, showing that even in a context of economic crisis and financial restriction the nature of the relation between firms and institutions can be changed through a process of institutional reflection. In cases such as CITEMA-INTI and UTN, this has involved a process of institutional upgrading and innovation that has allowed them to create an opportunity to avoid economic crisis. Indeed, financial restriction itself has become an activator of institutional change. UTN, CITEMA-INTI, and ETN5, for instance, depend upon a public budget, which was systematically cut throughout the 1990s. As a result, the need for change became imperative, since the only means of obtaining extra revenue was to offer services to third parties such as the firms.[92]

In line with the expectations of the NIP literature on local and regional innovation systems (Braczyk *et al*, 1998; Cooke and Morgan, 1998), some institutions of the techno-educational sector have not only achieved links with local firms (the minimal relational threshold), but they are also fulfilling roles in boosting the firm's competitiveness and their learning processes. However, owing to the scarce impact of these practices on local firms as a whole and the lack of articulation and complementarity between the techno-educational institutions, we can scarcely define this institutional set up as a 'local/regional innovation system'. Indeed, the techno-educational institutions (along with IDEB-Tigre) appear not to have had an impact on the particular sample of firms studied in terms of their competitive

[92] Interestingly, in all cases the type of SME with which contacts are established are mostly small family run firms. As seen already, small firms have minimal resources in terms of capital, capabilities and time. They are not active in contacting and generating links with the institutions.

performance. Instead, what I have found is a heterogeneous and in general isolated group of institutions, which show an individual rather than systemic potential to influence firm learning processes. Following the literature on local/regional innovation systems it must be recognised that to make the local techno-educational institutions more effective will require, besides larger financial resources, different capabilities, expertise and infrastructure that each one of these institutions cannot achieve individually. In this sense IDEB-Tigre and UIA-Tigre's cases, as shown below, are valuable since through a partnership they have been able to develop complementarity assets, giving rise to a novel process of institutional building.

7.3.1.2. Institute of *Bonaerense* Entrepreneurial Development (IDEB-Tigre) and Industrial Union of Tigre (UIA-Tigre)

Established under a more modern conception of the role of business associations in SME competitiveness, UIA-Tigre displays considerable dynamism in its process of institutional learning and change. UIA-Tigre has undertaken an active and successful range of modern IP instruments aimed at local firms. It has organised various seminars and training programmes in areas such as new technologies and managerial tools; offered professional advice on international trade issues; promoted the participation of entrepreneurs in international trade fairs; and delivered general business information within the territory. As a result, it claims to have succeeded in gaining support from the whole of the manufacturing industry of the region. According to several local institutions since its creation at the beginning of the 1980s, UIA-Tigre has become the reference institution for the industrial sector. UIA-Tigre has also been successful with respect to its political capacity beyond the region.[93]

Acting as a partner of UIA-Tigre (details in Chapter 8 section 8.4), IDEB-Tigre (created in 1996), has in turn succeeded in organising, promoting, and subsidising a wide range of IP instruments and programmes. These range from: managerial training (i.e. in marketing, trading tools and post sales services, etc.); business evaluation (i.e. identification of weaknesses and strengths); product quality consulting; international and internal trade; access to sophisticated technological assistance; promoting interfirm collaboration;

[93] UIA-Tigre's founder and first president became President of UIA at national level, and then Minister of Economy of Buenos Aires Province.

subcontracting; and training in ICTs (i.e. e-commerce). According to the IDEB-Tigre manager, the institution has succeeded in its initial step of formation by gaining visibility among the regions's firms. A proactive and personalised communication strategy and a supply of modern instruments of entrepreneurial development explains this success. Unfortunately studies on the impact of IDEB-Tigre's policies on the Tigre's manufacturing firms as a whole are not available to confirm this success. However, within the fieldwork only a small group of firms from my sample 'mentioned', though on a critical basis, activities conducted by IDEB-Tigre for the local SMEs. This paradox in part is explained by the fact that the local furniture firms have so far not been a target group for IDEB-Tigre strategy. As shown below, the main issue is again the top-down approach of IDEB. Due to the fact that IDEB is a pilot case, the analysis of its problems and restrictions will shed light on difficulties that any institution working on the provision of services to SMEs in the Argentine context might anticipate.

Two structural conditions constrain the IDEB's strategy. Firstly, the absence of an associative culture, reflected in the way in which entrepreneurs relate to institutions and, secondly, the top-down approach of the IP services and programmes supplied by the institution. With respect to the absence of an associative culture, as claimed by IDEB-Tigre and UIA-Tigre authorities (and other private institutions), the *"desire for short term solutions"* by the entrepreneurs substantially restricts the possibility for building up long-term relationships between institutions and firms (i.e. in such areas as technological upgrading, inter-firm collaboration and continuing quality). According to the institutions, this problem has become more obvious since the economy began to decline in the late 1990s. IDEB-Tigre stresses that its programmes of interfirm collaboration were affected by the economic crisis, because "those entrepreneurs who discovered that the results in the short term were not what they were expecting became quickly discouraged and went back to the old ways of doing things". In response to a question about use of services and institutional participation of the local entrepreneurs, UIA-Tigre's President put the problem in the following terms:

> "There is a bit of everything. There are entrepreneurs who are absorbed in their problems and that do not come to us, no matter how much you invite them [to a meeting] and explain it to them, etc; they do not come anywhere near here. And the reason why is that

his/her problem has already overcome him/her, and then they do not have the mental or physical capacity or time to be able to attempt to search for a new alternative, a new solution. And the ones who eventually do come are equally complicated but come along, come close, some how in his/her subconscious imagines that we have a magic wand. Either they do not participate, and thus meet colleagues to work in a team to face common problems, or they come along but pretend that our action is miraculous. The option in both cases is unrealistic and negative from my point of view" (Mr Occhipinti).

The implications for IP of the lack of a long-term associative culture are enormous. As addressed by the evolutionary approaches, IP instruments and programmes require a minimal threshold of time for 'maturing' before and after contacting the target group. This is true even in the case of generic policies, as entrepreneurs still need to be convinced of the utility of an IP instrument or programme before they get involved. Paradoxically, as I shall address below, the (political) opportunity cost of an IP that does not show positive results in the short term is extremely high in Argentina, in particular in a context of budgetary restriction and ideological adversity towards the IP idea itself.

With respect to the top-down approach of IP instruments and programmes supplied by IDEB, this has negative affects on all the service policies of the institution. As explicitly stated by some key informants, IP instruments and programmes supplied by IDEB are directly "downloaded" from the IDEB headquarters (located in the City of La Plata, capital of the Buenos Aires Province) and then they are made available to the localities where IDEB's Institutes have been established (i.e. Tigre). In other words, they are supply-side oriented and therefore designed without any consideration for either the local firms' needs or the institutional culture and idiosyncrasy existing in these localities. IDEB-Tigre's manager recognises that the local IDEBs' main services are standard products (i.e. generic tools of technological assistance and training) aimed at SMEs in general without consideration of size, sector of production and specific demands. Like other public and private institutions, IDEB's strategy has mainly been criticised for the generic character of its IP instruments and programmes. A study on IDEB's performance carried out at a provincial level by the Buenos Aires Office of ECLAC in 2000 concludes that all the IDEB systems so far were supply-side driven and that the IDEB Institutes operate as "selling points" rather than "reception-antennas" of local demands (a key source of knowledge for decentralised IPs). Hence, although IDEB attained institutional visibility throughout the

Province of Buenos Aires (PBA) in a relatively short period of time[94] (through standardised and 'catch-all' services), it has not achieved the build up of a more stable and cumulative relationship with the firms that guarantee their permanency within the IDEB's system of services. Firms tend to use IDEB services on an intermittent basis in relation to their immediate needs. Critically, permanency of firms within the system through a more constant utilisation of services would relate more to the institutional development of IDEB itself (by creating institutional density) rather than to its menu of IP instruments and services (ibid). Therefore, as the literature on supply of 'real services' in the Third Italy shows, the standard IP instruments and services have critical disadvantages with respect to their 'customised' counterparts. As shown above, although they appear to be lower cost solutions (due to both the economies of scale involved in their design and delivery and their larger potential market) in reality they may end up being ineffective for the long-term institutional strategy as a whole.

However, the inefficiencies of standardised IP instruments and services in Argentina should be discussed in light of the local political setting. ECLAC's report in this sense points out that IDEB strategy favoured the entry of firms within the IDEB system through the provision of generic IP instruments and services, and hence it also 'implicitly' excluded the larger sized firms with particular and/or sophisticated technical demands, mainly due to two 'short term' political imperatives. Firstly, IDEB was aware that it is the same SMEs that normally access IP instruments and programmes in Argentina, constituting a very small and closed user-supplier circle, which has both a marginal macroeconomic impact and a very low 'role model-effect' on the whole of the productive structure (ibid:29). Secondly, the strategy followed would allow IDEB to politically legitimate its performance as a public institution (ibid). In fact, any IP instruments or programme conceived in the 'neoliberal Argentina' of the 1990s must show 'short term results' (and therefore it needs to achieve 'visibility' as quickly as possible) and prove to be cost-effective (in the sense that it should quickly change from being a subsidised IP to a self-funded one). Aware of the trade off implied, IDEB strategy sought massiveness through standard instruments and services since failing to achieve any of the political imperatives mentioned above would be motive enough for the state to cut off funds and terminate such an instrument, programme or even the institution itself. How to change the dominant *status quo* related to the IP framework in

[94] From 1997 to 1999 around fifty thousand micro-, small-, and medium-size firms of the PBA have participated in activities and/or used services supplied by the IDEB Institutes.

Argentina under such structural conditionings is a critical issue for the NIP framework in this type of context. I will return to this point in the concluding chapter of the thesis.

7.4. Implications for the NIP framework and concluding remarks

The underdeveloped institutional set up and the absence of a shared institutional business culture observed in the Tigre region does not match the propositions of the NIP literature concerning provision of real services and learning and knowledge economics despite the visible presence of local/regional institutions of consequence to the supporting activities for firms. The latter do not identify a proper local offer of services, beyond some partial actions carried out by IDEB- and UIA-Tigre, which in general are not relevant for firms' needs. Furthermore, the firms do not recognise the local institutions as strategic facilitators, even less as partners, in their process of learning and development of innovative capacities. An awareness of the lack of institutional density, reflected in the insufficient level of firm-institution communication and the absent role played by the institutions as mechanisms of representation and coordination, helps in understanding the specificity of the institutional set up observed. Finally, despite the existence of IDEB-Tigre, a program of institutional policy expressly aimed at the provision of real services to firms and the encouragement of networking activities within the territory, both aims have not been developed in the region at the expected levels.

Two questions arise as to whether the NIP thinking can accommodate the evidence found. The first question relates to what I will term the cognitive and relational gap existing between firms and institutions. This gap is characterised by firms neither knowing what institutions do, in relation to firm supporting activities, nor do they develop formal or informal contact with them. The question second relates to the hypothesis that locality, as localisation, is synonymous with industrial development emerging 'from below'.

Regarding the first question, the existing cognitive and relational gap between firms and institutions blocks the applicability of institutionalist strands of the NIP literature in contexts where the nexus between firms and formal institutions is practically non-existent. What I have found in Tigre is a 'physical' density of institutions but not an institutional

density based on interaction, collaboration and association with the regional manufacturing industry. The underdeveloped institutional set up is, however, not neutral as regards IP. As the fieldwork reveals, this negatively affects entrepreneurial perceptions and attitudes towards the few IP instruments and programmes that attempt to encourage local firm competitiveness. Hence a vicious circle emerges as a result of which institutional immobility and (in some cases) sclerosis, on the one hand, and conservative entrepreneurial attitudes, on the other, reinforce each other, which could even neutralise attempts to change this path of blocked-relations. But, it is also the case that public, private, and intermediate institutions have, in the interstices hardly visible to the firms, begun to change their traditional paths of institutional functioning. A slow process of institutional reform and innovation has began since the early 1990s, involving opening-up towards more collective and interactive mechanisms of learning and deeper and wider levels of relational density with other actors. However, it is also true that the lack of an institutionalised business culture in the region places a restriction on further institutional reform in the direction of a multi-institutional NIP framework. This, however, raises the issue of whether we should think of NIP as best practice or as a loose frame of principles for local adaptation. Any policy framework needs to be sensitive to context and spatial-temporal circumstances. I will return to this vital point in the concluding chapter of this thesis.

The second question for the NIP literature raised by the evidence relates to 'bottom-up-led' industrial development at local or regional levels. What should we conclude from the reality that local SMEs feel neither recognised nor represented by local public and private institutions. Mutual recognition and representation are two key factors at the initial stages of a process of institution building, since the possibility of reaching agreement between firms and institutions at a local or regional level in order to set up supporting activities relies on the existence and legitimacy of these two factors. The national state is elevated as the only agency able to recognise and to represent the entrepreneurs. In light of the little positive evidence found of institutional building at the level of relationships between firms, vis-à-vis public and private institutions, the NIP framework should move forward in the following two senses. Firstly, it should pay considerable attention to those attitudinal factors that make it possible for a process of firm-institution institutional building to take place, such as those revealed by IDEB-Tigre, UIA-Tigre and, notably, the techno-educational institutions in their institutional strategy and supply of services aimed at the

firms (ETN5, UTN, and CITEMA-INTI). The 'personal visits to the entrepreneurs' carried out by the institutions 'at the workshops' in order to offer 'customised products and problem-solution strategies' have been the most effective media of communication for building linkages and developing joint projects with the firms. As shown in section 7.3.1.b, however, there are substantial contextual restrictions to the successful promotion of these kinds of policies in Argentina. I will elaborate these points in the concluding chapter. Secondly, the NIP thinking should pay particular attention to those factors that allow the institutional action to gain in operational scale and therefore build a larger presence within the locality/region, since so far it is limited to specific cases or success stories but not to the whole productive weave of the region.

Finally, the under-developed institutional set up in the region regarding both firm supporting activities and, critically, the development of firm-institution economies of association, question the essence of the concept of decentralised industrial policy forwarded by most of the NIP literature (i.e. Bianchi, 1994; Begg and Mayes, 2000; Cooke and Morgan, 1998). I will address this issue in the following chapter.

CHAPTER 8

The Role of Inter-institution Relations and Territorial Mobilisation

8.1. Introduction

This chapter analyses the nature of inter-institutional relations in the Partido de Tigre and the region, primarily between the main public and private institutions. In particular, it examines whether local institutions share communal interests concerned with local industrial development and whether processes of institution building exist that can result in territorial mobilisation in order to promote such interests. By institution building process and territorial mobilisation I mean those actions through which social, political and economical actors of a locality or region define communal interests and subsequently, through 'partnerships' or, in a broader sense, 'territorial pacts', promote and set up policy agendas aimed to support such interests.

This analysis is carried out against those strands of the NIP thinking that assert that local institutions and the architectures of politic-economic governance that they establish can become catalysers of the collective will and triggers of its synergistic potential for political mobilisation. To return to the concept of "institutional thickness" discussed in Chapter 7, Amin and Thrift stress that, besides the number and diversity of institutions, "high levels of interactions amongst the institutions in a local area", "the development [...] of sharply defined structures of domination and/or patterns of coalition" and "the development amongst participants in the set of institutions of a mutual awareness that they are involved in a common enterprise" (1994:14), are a critical condition for the establishment of institutional thickness. Establishing of a 'policy network', or a 'supplementary forum' and 'mechanisms of collective action' in Scott's (1998) words, is the result of political agendas aimed to promote participation, interactivity (a key condition for trust-building), involving commitment of the different actors concerned with and 'of consequence to' local industrial development. As Bianchi observes, industrial micro policies are:

> "essentially networking actions, or policies aimed at reconstructing a network of relationships, that consolidate mechanisms of integration among individuals" [...], which "have a strong territorial and sectoral foundation because it is easier to induce these processes of aggregation where a common cultural and technical base already exists" (1994:34).

However, the NIP literature also warns about the risks associated with situations of institutional 'sclerosis' and 'lock in' that can result in risk-adverse conducts, conservatism, and resistance to change (Amin and Thrift, 1994; Grabher, 1993). In this regard Boisier claims that in Latin American countries with a strong (and recently renewed) authoritarian culture (notably, Argentina, Chile, Uruguay) "there are technocrats (especially in regions) with a real terror of innovation, which reflects cultural patterns that look negatively at the innovator and may even go so far as to socially punish innovation (through mockery, marginalization, loss of employment, etc.)" (2002:21) (emphasis in original). Hence, in order to generate conditions for learning and overcome resistances to change in order to obtain results in line with those outlined above, the institutions need to undertake processes of adaptation, upgrading, and change, thus becoming more innovation-based themselves (Amin and Thrift, 1994; Cooke and Morgan, 1998).

What this chapter asks is whether local institutions interact by developing joint activities and projects concerned with firm competitiveness. It also asks if local institutions share communal interests and political agendas concerning local industrial development and, if they do, whether they are changing and innovating in line with the assumptions forwarded by NIP literature.

8.2. Relational gap and fragmented inter-institutional relations

The fieldwork revealed that the majority of the local institutions studied did not develop joint activities or projects (which I will call 'formal relations') with other local institutions regarding local SMEs competitiveness. What is more, in some cases they did not even interact with other institutions, for instance through informal contacts and/or meeting (to

which I will call 'informal relations'), in order to discuss problems or ideas in this respect. On this evidence, I firstly identify a 'relational gap' with respect to the nature of inter-institutional relations in the Partido de Tigre and the region.

Table 8.1. Matrix of inter-institutional relations: expressed in existing (+) and formal (F) or informal (I) relations

1. Institution/ Sector	1. Mun Tig		2. Tou Su		3. O IndAf		4. IDEB		5. UIA		6. CACi T		7. CIM		8. ETN5		9. UTN		10. CITEM	
Formal (F) & infor (I) rel.	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I
a. Public:																				
1. Mun. Tigre	-------		+	+	-	+	-	+	-	+	-	-	-	-	-	+	-	-	-	-
2. Tourism Sub-sec.	+	+	-------		-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	-
3. Office Ind. Affair	-	+	-	-	--------		-	+	-	-	-	-	-	-	-	-	-	+	-	-
b. Intermed:																				
4. IDEB-Tig	-	+	+	+	-	+	-------		+	+	-	+	-	+	-	+	+	+	-	-
c. Private:																				
5. UIA-Tigre	-	+	-	-	-	-	+	+	--------		-	-	-	-	-	-	+	+	-	-
6. CACIT	-	-	-	-	-	-	-	+	-	-	-------		-	-	-	-	-	-	-	-
7. CIM-S.F.	-	-	-	-	-	-	-	+	-	-	-	-	--------		-	-	-	-	-	-
d. Tech-Educ:																				
8. ETN5	-	+	-	-	-	-	-	+	-	-	-	-	-	-	-------		-	-	-	-
9. UTN-Tig.	-	-	-	-	-	+	+	+	+	+	-	-	-	-	-	-	-------		-	-
10. CITEMA-INTI*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	--------	

* CITEMA-INTI is considered in Table 4, despite not being a 'local' institution, due to its potential relevance for the timber industry

As Table 8.1 shows, the Municipality de Tigre and the Municipal Office of Industrial affairs (the public institutions 'of consequence' to issues linked with manufacturing SMEs') develop no supporting activity jointly with other public, private or techno-educational institution, apart from their 'decorative' participation at the IDEB-Tigre political board. In turn, private institutions display a similar pattern of non-collaborative institutional policy, with the only exception of UIA-Tigre (see column 5, Table 8.1). Interestingly, the complete

absence of relationships between the institutions of the private sector (CACIT; CIM; and UIA-Tigre) clearly shows how fragmented the private sector is in the region. Specifically, there is no relationship between institutions 'representing' manufacturing and timber industries (UIA-Tigre and CIM respectively), on the one hand, and between them as a group and activities linked with local commerce ('represented' by CACIT), on the other hand. There is nothing like a single homogenous 'private sector' in the region. Finally, the techno-educational institutions (ETN5; UTN-Tigre; and CITEMA-INTI) which, as shown in Chapter 7, develop activities aimed at local SMEs (with the only exception of UTN-Tigre -see column 9) do not collaborate with other institutions in the activities that they carry out. Like the private sector, these institutions have no joint activities. Therefore, the 'relational gap' identified affects the relations between public, private and intermediate sectors (inter-sector relations) as well as those inside each sector discussed (intra-sector relations). The depth of the existing relational gap clearly shows the absence of 'common interests' in the region concerning SME activities.

What explains this generalised relational gap? The scarce level of 'communication' between the local institutions is the most visible factor. The 'lack of time' for linking activities was in turn identified as the main problem facing institutions in building up inter-institution relations. However, what the evidence reveals most is an absence of discernible 'reasons' or 'motives' to interact and cooperate as identified by both private institutions such as CACIT and CIM and public institutions such as Tigre's Municipality and the Municipal Office of Industrial Affairs itself (see in Table 8.1). The former indeed do not even recognise the case for inter-institutional relations. Often, local institutions see other institutions as operating in different areas of concern to their own. They do not identify a 'potential link' between, for instance, techno-educational institutions and business associations or between the former and public agencies. Rather, some institutions see only 'buildings' or 'legal identities' with different missions within the region but not potential partners. As shown below, however, the role played by the local government as an intermediary within local industrial development, is one of the main causes underlying the relational gap existing in the region.

8.3. The role of the local state as intermediary

As well as "lack of interest" by local government in SMEs claimed by local firms (as discussed in Chapter 7), there is the absence of commitment to what I will call an agenda for local industrial development. As reflected in the quotation below, this absence of commitment represents an enormous obstacle for building up inter-institutional relations 'of consequence to' industrial development at local and regional levels. Institutions that are aware of this agenda such as IDEB-Tigre, UIA-Tigre and UTN-Tigre confirm this problem. Mr Pitaluga (National Technological University) explains the negative effects of UTN relations with the local government on its institutional predisposition to interact:

> "With respect to the Municipality [of Tigre], we do not click very well with them. The Municipality has a... a centralised system of decision-making through which the Municipality makes public works, and more public works, but there is not room [in the municipal agenda] for any issue that has to do with the local [industrial] development. In fact, they [the Municipality] have participated in IDEB-Tigre but ... do not tell it to the Mayor (Mr Pitaluga asks me), they sent [to participate in IDEB] a Director of Industrial Affairs who has no influence [on the local government]. So...?" (Mr Pitaluga finishes his comment doubting about the real interest that the local government has in IDEB-Tigre as an intermediary for local development).

Is there some rationale behind this lack of interest from the local government? In the absence of one industrial strategy or, in a broader sense, a coherent economic development policy, the local government has what can be identified as an infrastructure-led regeneration programme. Large public investments in infrastructure have been, and still are, the main priority of the municipal authorities. The public works undertaken by Tigre Municipality since 1992, under the Ubieto administration, include the construction of bridges and access roads in the early 1990s, followed by plans to build squares, street paving, school construction, local health clinics and, more recently, the new railway station, the fluvial station, and the renewed riverfront. These investments are directly linked with the promotion of a large (non-local) private sector interests in real estate. Indeed, there exists a wide consensus that promoting private investments to construct gated communities (called 'private estates' in Argentina) represents *"the strategy"* (Tourism Sub-Secretariat), the *"most important change"* (HCD), and the *"big issue"* (CACIT) occurring in Partido de

Tigre, from the second half of the 90s forward[95]. At the time of the fieldwork, around forty exclusive gated communities were being built in Tigre, on previously empty and low cost public terrains (grasslands), located close to Rio de Plata's Delta cost. As the IDEB-Tigre manager argues, the main rationale behind what he calls "Tigre's master plan" is that the gated communities will bring huge increases in council tax revenue for Tigre Municipality. Council taxes are estimated to triple by 2005-2010. It is estimated that on the basis of both, the Partido's total population will double the current figure and the percent of population expected to pay council taxes will grow from 30% (the figure at 2001) to 80% or 90% in future. Hence, the magnitude of the public works realised (notably, bridges and access roads to/from Tigre to/from Buenos Aires centre) have been linked to the need for rapid circulation for the inhabitants of these gated communities. This municipal focus on private estates is matched by an emphasis to promote the 'tranquillity' and 'natural life quality' of the Partido, associated with its extensive green areas, forests, rivers and wildlife, as an attraction for potential habitants of the new estates.

A contradiction exists between the key components that make up the local government's economic strategy and the needs of the local SMEs. On the one hand, as the local manufacturing industry has been in decline through the nineties the amount of council taxes that it pays has also declined. Thus, in addition to widespread tax evasion, the tax debt of the local firms to the local treasury is also growing. When questioned, the IDEB-Tigre manager ironically asked himself "why should I [if I was Mayor of Tigre Municipality] then support the local SMEs if they are both fewer and fewer and more and more bankrupt!" On the other hand, the manufacturing industry is often associated with negative aspects of urban life such as pollution, smoke, noise, and ugliness in general. These factors, as observed by the Tourism Sub-Secretary, contradict an environment-friendly strategy aimed at promoting 'tranquillity', 'beauty' and 'natural life quality' as competitive advantages of the Partido. Two examples illustrate the effects of this contradiction. First, despite private institutions' attempting to convince the local government to support the promotion of an integrated local supply of manufacturing goods (i.e. furniture industry) and

[95] Gated communities are a new modality of building neighbourhoods in Argentina. They are primarily characterised by their high internal security, which is guaranteed by the restricted access only to their permanent residents, and exclusivity. Due to their characteristics and high prices, they are mostly targeted at urban upper and high middle classes, whom are increasingly looking for safer places to live, as crimes against private propriety and street violence rose in large cities through the 1990s.

industrial services in order to generate market opportunities linked to the gated community building industry, nothing has been done by Tigre's Municipality. Surprisingly, the organisation of 'gardening courses' to meet future demands from the new estates is so far the only action of local promotion organised from the local government in relation to these private investments! Second, the unpredictable future of IDEB-Tigre clearly shows how a strategy for local economic development and local IP can clash. At the time of the fieldwork, IDEB-Tigre was suffering serious budgetary problems because of the financial struggles of Buenos Aires Province (upon which it depends). Due to a budgetary cut in 2001 IDEB-Tigre began to lose both presence within the territory (they could not continue promoting and funding some IP instruments) and operative capacity (they had to reduce the permanent personnel). IDEB-Tigre's future was and still is uncertain. Consequently, Mr Ruidiaz concludes that IDEB-Tigre failed, politically speaking, despite its success as a technical tool for firm support. He claims that the lack of institutional concordance (based on the non-existence of common interests) between the conception of local economic development sustained by the local government and those sustained by the institutions that made up the IDEB-Tigre's political structure (UIA-Tigre, UTN-Tigre, and Central IDEB) is the main reason for this failure. Mr Ruidaz explains this problem in the following terms:

> "IDEB-Tigre is established with a provincial budget, to work within a business association, with a municipality [Tigre], and with a university [UTN-Tigre]. IDEB-Tigre should have been sold, politically speaking, to [Tigre's] Municipality by the business associations and the universities, so that in time it demonstrates that an Institute of this category, of these characteristics, and interacting with [local] business associations, university, and Municipality, can be run with a very small municipal budget. [...] If we had been able to sell [IDEB-Tigre's idea] to the Municipality in these five years [...] we would have ensured that the money that Buenos Aires Province has cut at the present time would be covered by the Municipality!"

There exists an additional political constraint that hinders inter-institutional networking and specifically private/public partnership, namely, the style of leadership and government exerted by the local authority. Mr Ubieto (as explained further on in Section 8.5) holds extraordinary political power and influence within the region, even over those local institutions opposed to his personalised style of leadership. As a result, "the priorities of the local agenda are always imposed by the Municipality" (Mr Weis, a local MP, argues). What

is more, this MP claims: "in Tigre all is already pre-established. The bridge is there, the road, the Casino, whether you like or not. These works are going to be done, no matter how much they affect the community, the nature." Therefore, there is a widespread perception and in some cases a certainty, that nothing works in Tigre if the local government (and Mr Ubieto himself) is not involved in it. Hence, for this research the Tigre's local government is not only an important part of the problem for inter-institutional collaboration and local IP in the Partido but also a crucial part of the solution. I will return to this point in Section 8.5.

As shown above, the role of the local government and the Municipal Office of Industrial Affairs in building up relations with private and intermediate institutions is absent. There are however some small examples of institution building and institutional innovation of consequence to industrial development in the region that are worthy of discussion in imagining a potential new IP.

8.4. Emerging process of institution building

Against the pattern above, there is a group of local institutions, including private, public and intermediate institutions, which have been developing a proactive strategy of institutional linking-up in the region. This minority group of institutions, made up by IDEB-Tigre, the Municipal Sub-Secretariat of Tourism, UIA-Tigre and UTN-Tigre, display an associative strategy in order to promote common interests related to competitive performance of firms. This interest is mainly focused on tourism, through the Municipal Tourism Sub-Secretariat, and on manufacturing SMEs, through IDEB-, UIA- and UTN-Tigre.

8.4.1. Inter-institution collaboration and the local tourism industry

The Municipal Tourism Sub-Secretariat works closely with the "Chamber of Entrepreneurs of Delta" (Delta's Chamber), its main local partner, and is closely linked to IDEB-Tigre. Through an informal network established with the Delta's Chamber (which represents all local suppliers of tourism services), the Municipal Tourism Sub-Secretariat has succeeded

in organising activities aimed at firms (notably training programs and seminars) in areas such as place marketing, foreign languages, international cuisine, and other related services. Along with IDEB-Tigre, and at times with provincial government, the Tourism Sub-Secretariat has organised and participated in training programmes for the promotion of the tourism industry of Tigre at national and international levels (i.e. through trade fairs). As a result the local tourism industry has been able to improve the quantity and quality of its supply of services. Critically, it is now able to cope with demands of the growing flux of national and (to a lesser degree) international tourists that come to Tigre as a consequence of the promotion campaigns. Furthermore, the Tourism Sub-Secretariat is actively involved in an inter-Partido initiative called the North Metropolitan Region (RMN). Through RMN, established in 2001 (a few months before fieldwork was carried out) several public and private agencies from four Partidos from the northeast of Buenos Aires City are seeking to promote communal interests to the whole region in areas where economies of scale can be obtained such as (initially) the tourism industry and environmental policy. So far the only concrete action developed is the signing of a joint venture between the four Partidos through which a rubbish recycling plant was established.

How far are these actions helping competitiveness? After years of decline, the process of modernisation (through improvements in the quality of product supplied and the setting up of new tourism services) along with the public works carried out by the Tigre Municipality have given enormous encouragement to the potential of this sector. The Municipal Sub-Secretary notes that though the local tourism industry represents a small percentage in local GDP, it is both growing and beginning to attract tourists with higher expenditure capacity. This Sub-Secretariat, along with the Delta's Chamber, is working on a collective proposal in order to overcome inefficiencies that affect the competitiveness of this sector (for instance, it is mainly weekends or Sunday tourism and, paradoxically, at the same time there is a notorious lack of hotels and B&Bs in Tigre centre where tourists can remain overnight).

Inter-institutional collaboration seems to be playing a part in strengthening competitiveness. The supporting activities mentioned and the high level of firm participation in the activities organised are the result of the joint work between the Municipal Tourism Sub-Secretariat (public sector), the Delta's Chamber (private sector),

the firms themselves, and the Tigre Municipality (the main 'public' sponsor). Secondly, the public investments in infrastructure 'linked' with local tourism are the result of joint action by 'actors of consequence' to this industry (through presentation of concrete and consensual projects to be developed) on the local government. One example, the Tourism Sub-Secretary claims, is that the tourism industry is not a priority in the Municipality' agenda for local economic development. In fact, there is nothing like a local tourism policy strictly speaking in Tigre. Again, the level of proactivity of this inter-institution collaboration in mobilising the local tourism interest is limited as long as local tourism competitiveness seems to require a more active Municipal policy agenda aimed at supporting this industry.

8.4.2. Inter-institution collaboration and the local manufacturing industry

The 'policy network' that includes IDEB-, UIA- and UTN-Tigre (intermediate, private and public institutions respectively) constitutes one of the most interesting examples of institution-building in the region from the standpoint of this research. Operating either as a formal institutional network (as shown below in IDEB-Tigre's case) or through joint actions, these three institutions have succeeded in identifying and materialising common interests into a new platform of action supporting local SMEs.

IDEB-Tigre's establishment without doubt is the most important achievement of this experience. It was the result of a strategic alliance between UIPBA (Industrial Union of Buenos Aires Province), UIA-Tigre, the Ministry of Production of Buenos Aires Province (upon whom the central IDEB depends) and UTN-Tigre. Interestingly, it was the first IDEB Institute established in the whole Buenos Aires Province after the IDEB program was set up. A battery of real services (including training programs and seminars, technological consulting and professional support) has been made available to local firms since IDEB-Tigre's establishment in areas such as marketing, product quality, international trade and business evaluation. Secondly, IDEB-Tigre's institution building process became a key issue for understanding improvements in the institutional performance of UIA-, UTN- and the IDEB-Tigre Institute itself. Through the combination of capabilities with IDEB-Tigre, UIA-Tigre gained a presence as a technical support institution to the firms, a profile that UIA-Tigre did not previously have. UIA-Tigre can now offer real services to local firms,

which in reality are provided by IDEB-Tigre. Through its partnership with UIA-Tigre, IDEB-Tigre in turn gained institutional experience, contacts throughout the region, and critical political support from the most important business association existing in the region. All this permitted IDEB-Tigre to concentrate, as soon as it was established, on the provision of services to firms without the need to invest time on seeking political support from the local manufacturing industry and its leaders. Political support, which can range from a simple acceptance to commitment and direct involvement in the new institution, is necessary firstly to gain 'access to' and to 'gather' entrepreneurs and then to be able to operate within the region. The lack of political support from local business associations is identified as a critical factor of institutional failure for some local IDEB Institutes across the Buenos Aires Province (ECLAC, 2000).

Finally, UTN has gained a market opportunity for the technical services and training programs that the university offers to firms. This has been possible through technical consulting services carried out by the university's lecturers and researchers, channelled towards the firms through IDEB-UIA-Tigre, and through the use of the university's facilities such as scientific and technical laboratories, computer rooms, conference rooms, and workshops. Interestingly, UTN has internally innovated in order to be legally able to work with the private sector and intermediate institutions, by establishing a non-profit organisation and a Technological Centre as strategic tools to carry out its policy of extension towards the regional business community.

It is important to emphasise that IDEB-Tigre's example of inter-institution collaboration neither means that they are absolutely convinced of their partners' capabilities nor that they share the same interests and projects. Mr Pitaluga explains UTN-Tigre relations with UIA-Tigre in the following terms:

> "Well, we were working along with business associations. [But] the business associations do not... it is difficult for them, because business associations do not even know what they want to do. Actually, the business associations want to provide services to the entrepreneurs... but, they do not, do not... they have no authority to pull together [firms], nobody believes them, no entrepreneur trusts them."

However, they understand that their particular interests are more attainable through collaboration. Thus, both institutions (UIA- and UTN-Tigre), mainly through IDEB-Tigre, have successfully organised sectoral programs of technological support to firms (for instance, the program of quality control for local suppliers of the car industry). They have also sought, though without much success, to convince the local government about the need to generate a more active Municipal action aimed at the local SMEs (for instance, in order to both generate market opportunities for the local industry related to the estate building industry and to build direct access roads from the new estates to Tigre's and neighbouring localities' commercial areas and city centres).

How effective has such institution building been in helping competitiveness? It is difficult to answer to this question as long as there are no available impact evaluations. My findings, concerned with the timber industry, show that these institutions have succeeded only partially. As shown in Chapter 7, these three institutions are becoming a more visible source of business information for local firms and, as long as their links with firms improve, they will be able to begin to respond to the growing need for institutional support and acknowledgment (expressed by local firms). The sectoral program jointly organised by UIA- and UTN-Tigre aimed at quality improvements of suppliers for the car industry has enjoyed a massive participation from local firms, but nothing can be said in term of its effectiveness across the car industry's suppliers as a whole. Rather, what these institutions confirm are individual stories of success of single firms that have begun processes of updating starting from these supporting institutional actions. Furthermore, qualitative information provided by these three institutions suggests that their main success at regional level is to have stimulated a debate, previously non-existent in the region, regarding the SME issue. The IDEB-Tigre Institute indeed arose in the region as a result of the existence of minimal political conditions for territorial mobilisation linked with industrial development.

More recently, two collective projects have been established as a result of the proactivity and cooperative will of these institutions. First, UIA-Tigre, after a decade of 'distant' relations with the Tigre Municipality, achieved the development of a primary link between both institutions in order to cooperate for the generation of market opportunities for local firms. Through this link (initiated at the end of 2002) the new UIA-Tigre's web site, which

incorporates business information referring to local firms (such as products and services supplied, prices, address, telephone and e-mail) remains linked to the Tigre Municipality web site. Through its technicians the Tigre Municipality, whose official web site receives a high number of visitors, will be in charge of creating and updating the firms' web pages. Though the impact of these institutional links will perhaps be very small, it constitutes the first shared action relating to manufacturing SME interests developed between the two main private and public institutions of the Partido. Second, UTN-Tigre, in 2001 initiated an agreement of cooperation with three universities (from surrounding localities to Tigre) called UNI-Desarrollo (Universities For Development). It aims to put together the technical capabilities of the four universities (notably, professionals, knowledge, expertise and infrastructure), as well as of UIA-Tigre, IDEB-Tigre, Provincial Government, in order to generate supporting activities to promote what they call a regional "productive cluster". The first stage of UNI-Desarrollo aimed to carry out sectoral evaluations and feasibility studies of the regional industries of tourism, timber/furniture and the Delta's craft production. Although some studies have already been conducted (i.e. suppliers for the automobile industry), UTN-Tigre claims that Uni-Desarrollo's main problem is the lack of resources to fund supporting actions derived from these studies. They understand that the lack of support from the Tigre Municipality, on account of raising funding for UNI-Desarrollo is hindering the project as a whole. Linked to Uni-Desarrollo, IDEB-Tigre promoted throughout 2002 the signature of an agreement with CIM-San Fernando in order to generate supporting activities aimed at the local timber and furniture firms including training programs in design, quality product, and marketing. The first meetings with local entrepreneurs to discuss ideas and proposals were held during 2003 and the first IP instruments (i.e. training program in quality product) are currently being prepared.

As shown above, the need to obtain critical mass through joint ventures with partners from other localities is becoming an important mode of policy making. To this end, inter-institutional collaboration seems to be moving towards an idea of region or region building (as conceptualised in Chapter 4). In Tigre, it is taking place between institutions of neighbouring localities located within Buenos Aires City. In particular, the need to overcome obstacles if not restrictions found in undertaking agreements of inter-institutional collaboration with the Tigre local government seems to be a key reason that explains this trend towards collaboration beyond locality undertaken by IDEB-, UIA- and UTN-Tigre.

Contrary to the centralised style of governing observed at a local level, the Municipality of Tigre is also involved in initiatives of regional character.[96] In all cases these process of institution building are challenging the rigid political boundaries of localities.

8.4.3. Local state and institutional change

In section 8.3, I argued that the local government does not have a coherent strategy for local industrial development. What is more, its 'lack of interest' in local manufacturing SMEs, along with its style of governing, are blocking the emerging processes of institution building and territory mobilisation recently observed in the region. However, if the question is whether this is an example of governance failure, this section tries to show that the Tigre Municipality has been a key player in looking for good governance. This can be seen as a first stage in a process of institutional reform that can help to overcome the endemic institutional failures observed in Argentina. In Argentina one of the primary problems of economic policy has been 'institutional failure', rather than market failure, evident across the state, from the local to the national level, and in the private sector. It is a failure associated with factors such as operative inefficiency, bureaucracy, clientelism, corruption, political instability, short-term policy approaches and lack of long-term projects. Contrary to this, what the majority of the local firms and institutions identify in Partido de Tigre and the region is a case of institutional efficiency and good governance. Indeed, under Ubieto the local government has efficiently conducted the public affairs since he and the ruling political party (*Frente Vecinal de Tigre*) came into power in 1990. Legal and administrative reforms throughout the public apparatus became key aspects oriented towards bureaucratic efficiency and facilitating investment decisions for large private investors and local SMEs.

The local government has tried to foster a business friendly environment in the Partido. A CACIT official, after claiming that the Municipality does not have a specific supporting policy to local firms, notes:

[96] The Tigre Municipality along with three other Municipalities (from the northeast cost of Buenos Aires City) established in 2001 an agreement of cooperation called North Metropolitan Region (RMN). Although RMN is not directly linked with manufacturing industry development, it is the first inter-locality agreement signed in Argentina (between localities located within a large city) aimed at undertaking non-traditional projects such as a recycling plant (established in 2001), the international promotion of their tourism industry (as previously shown) and the policy of local security, which, in the framework of a large city, requires coordinated actions between neighbouring localities.

> "[...] but the Municipality does facilitate [things] for you. Tigre is very special in this sense [...] they [the Municipality] facilitate things because they do not put obstacles in your way. Of course they make you abide by the rules in force, but they do not raise any objection (when a firm or an institution has a project to develop). They clear a way for you, the legal and technical preparations for building up a private estate [is a good example]. If you abide by the rules you get your authorisation in logical time, they do not try to find faults [on your documents and papers]. They do not want any sort of bribe. There is nothing of this [in Tigre] at all. Fortunately, everything here is very clear and transparent".

In turn, Mr Gustavo (a small furniture entrepreneur), after criticising the local institutions for the lack of support, comes to a similar conclusion: "But Tigre has after all a guy [Mr Ubieto, the Major] that... you see, they do not annoy you. As long as you submit your documents in due time to the Municipality, everything is going to be fine with them".

The political stability and continuity of Ubieto's administration is itself recognised as a key asset in attracting private investments to the Partido[97]. Apart from the investments in gated communities already mentioned, private investors have also undertaken large projects such as a new casino (*Casino de Tigre*), a modern funfair (*Parque de la Costa*) and a tourism train (*Tren de la Costa*). All together, the public and private investments, along with Tigre's natural beauty, have made Partido de Tigre one of the nicest places in the Buenos Aires City.

How has the governance of public affairs by Tigre Municipality strengthened competitiveness? First, firms understand that it made a difference when compared to Tigre's previous administrations as well as neighbouring Municipalities. Bureaucracy, inefficiency and corruption in public affairs' administration constitute large diseconomies for firms in terms of the time, energy and money necessary to operate contracts, authorisations and legalisations. These diseconomies (also called transaction costs) have, without doubt, direct negative effects on firms' competitiveness. With regard to investments in infrastructure, firms recognise that they have been favoured in two senses. First, they now have quick and direct highways from/to their main market, Buenos Aires

[97] *Frente Vecinal de Tigre* and its leader, Mr Ubieto, have won three consecutive elections with around 70% to 80% of the total votes in each municipal election.

City. Second, the official initiatives of marketing place (managed by the Municipal Tourism Sub-Secretariat), apart from bringing tourists to the region (who are potential customers for some local industries) strengthens the sense of place and quality life of Tigre. I will return to this last point in the following section.

8.5. Links with the NIP theory

The NIP literature, in particular institutionalist approaches, asserts that bottom-up intermediation becomes positive and fertile when the state (either as a key coordinator or as a strategic facilitator) is involved in the process of institution building supporting local industrial development. It also asserts that the different actors that made up the private sector of a locality or region (notably, firms, business associations and their leaders) both share common interests and display critical levels of political consensus and mobilisation. Both public and private sector will thus be able to lay the foundations for a 'bottom-up-led' policy of industrial development.

Contrary to the expectations of the NIP literature, as shown in Section 8.3, the role played by the Tigre Municipality as an intermediary is weak, blocking the emerging processes of institution building observed in the region concerned with local industrial development (in particular those IP actions linked to IDEB-, UIA- and UTN-Tigre). In turn, the private sector is a fragmented, if not fractured, collage of interests and organisations which do not seem to share common interests and, as shown already, do not carry out formal or informal collective actions. Consequently, the lack of institutional thickness observed in the region with respect to the relations between the main local public and private institutions (and between them and firms) is unlikely to facilitate the development of a political network capable of promoting territorial mobilisation to establish local industrial development policies.

The question is whether the NIP framework accommodates the specificities of the institutional set up in Tigre. I will argue below that the emerging processes of institution

building are bringing about learning processes and institutional changes linked to collective learning and economies of association in line with the NIP thinking.

Tigre's local government is far from being a passive actor with respect to local firm competitive performance in Tigre, as we have seen. It has successfully sought to create a friendly business environment in the Partido. From the IP point of view this means that the claim by SMEs of a 'lack of interest' from the Tigre Municipality (reflected in the absence of explicit policies targeted at the firms) is disproved by actions and policies that in an 'indirect' or 'non-explicit' way do have effects on firms' competitive performance.

The approach of the Tigre Municipality, based on attempting good governance and promotion of public and private investments in infrastructure and services, seems, however, closer to the neoliberal approach to economic policy for local development rather than to active models of local government stressed by the NIP literature (i.e. Emilia-Romagna in Italy and Baden-Württemberg in Germany). By neoliberal approach I here mean one that seeks (apart from an efficient control of public spending) a 'non-interventionist' approach of economic policy limited to setting up 'the rules of the game' leaving private enterprise to proceed freely. As the Tourism Sub-Secretary in response to the question about what was the key issue that made Tigre different than other localities in Buenos Aires City, concludes:

> "There is a variable, there is a very simple variable, and let's go straight to the point. When the authority respects both the private enterprise and the private sector as engines of economy, things change! The Tigre Municipality has things very clear in this sense. This is to say, they (the Municipality) obstruct neither new ideas for development nor economic growth itself when these (ideas and proposals) are framed within the rules that govern this community. And to have [political] continuity and to be sure that what is agreed is respected [for the authorities] means a lot for an investor!"

The question that is important is whether public/private collaboration and territorial mobilisation for local industrial development can arise under this neoliberal scheme. The research evidence shows that this is unlikely to happen. In fact, it shows that the main public sector strategy for economic development does not even consider the local manufacturing SMEs. There are 630 manufacturing firms in Tigre; local unemployment rates have steadily been growing in the last few years; private investments have not created

the expected number of new jobs and; finally, an important part of the Partido's inhabited area is far way from the Delta coast, where the private and public investments in infrastructure and services are concentrated.

There is much scope for a related policy. A step towards a new IP requires a twofold change in the neoliberal conception for local development put forwarded by the Tigre Municipality. First, it requires a more active role of the local government in setting up and/or supporting activities aimed at local firms, by transforming good governance into good guidance. The latter consisting of identification of policy targets (i.e. industries of tourism, timber and furniture, and suppliers for the car industry), analysis and carrying out of feasibility studies and, subsequently, design of IP actions. Second, it also requires a more active strategy of networking and institution building along with firms and local/regional institutions of consequence to industrial development. Through networking the local government may not only legitimate its more active role in economic policy, but also it could be critical for the definition of common interests, partnership and political mobilisation around consensual local IP agendas. Networking in Tigre may be favoured since local institutions such as IDEB-, UIA- and UTN-Tigre are already carrying out some IP actions, and promoting others, in and beyond the region, on the one hand, and, on the other hand, they claim that the Tigre Municipality should be somehow involved in these actions.

Tigre's local government has succeeded in developing a local decision-making power 'from below', gained as a result of its economic success and political consensus and legitimacy and, therefore, it is a good example of positive decentralisation with respect to the Buenos Aires Province government. The presence of local actors with decision-making capacity, political power and influence within the territory is a necessary condition for policy making in the NIP framework. This is true despite the fact that in Chapter 7 I argued that the local institutional set up observed in Tigre (due to the lack of critical mass of relations with firms) could hardly fulfil positive roles as local scaffoldings of a 'top-down-led' policy of decentralisation concerned with IP issues. Paradoxically, the Tigre's local government has played an ambivalent role since it does not actually correspond to the kind of decentralised state that the NIP framework requires. Rather, the Tigre's local government has conducted a hierarchical and highly centralised scheme of decision-making

and government within the Partido. As previously shown, this scheme of government is blocking any attempts to building up inclusive and more horizontal architectures of governance for the promotion of interests concerned with local industrial development. In other words, the under-developed institutional set up observed in the region, as it so far is, could hardly give rise to a 'bottom-up-lead' policy that mobilises the region in order to promote local industrial development. But again, the power of circumstances obligates us to rethink this NIP requirement (in relation to the claim by decentralised states) in light of chronic institutional failure observed in Argentina. Could the Tigre's local government become less hierarchic, less centralised and more politically inclusive in the context of lack of cooperation, absence of institutional coordination, sectoral fragmentation and (on top of all this) absence of a national state able to fulfil the institutional roles mentioned above? As I will argue in the concluding chapter of the thesis, the presence of strong central players (like the Tigre Municipality in the Partido of Tigre) can be accommodated in the NIP framework if it is able to understand roles and characteristics that institutional set up, in particular local governments, should play and have in a context of weak and/or inefficient (national) states.

There are factors present in the case study associated with 'soft institutionalism' which form part of the institutional fabric that underpin competitiveness and which can be part of a first step in a new IP approach: i.e. the sense of place and the local entrepreneurial culture existing in the region. The sense of place seems to be reflected in the fact that the local actors, particularly those who live in Tigre, stress that they are very proud 'to be from' or 'to belong to' Tigre, which is identified as 'one of the nicest places' in the whole of Buenos Aires City due to both its natural beauty and the public works carried out. In this respect, an interesting observation arises from an entrepreneur who was asked whether he feels he belongs to Tigre:

> "We belong to ... I feel myself being from Tigre. Even more, although I do not live in Tigre itself I vote in Tigre because, just as I am criticising the Municipality, I have to say that in Tigre many things have been done. And these things have helped me, it has given me work, because public works have been done; it has been paved; they [the municipal authorities] have given Tigre a very nice look. So I do support Tigre in that sense, in as much as I'm giving my vote here, to the Municipality, to Tigre itself. But, I do criticise the other part of the story also, since there is not too much consideration in the case of

fines [to firms for tax debts] and so on. Which is exactly what should not be done to support the industry, right?" (Hernán López).

Consequently, the question for this research is how this sense of place or local identity, which has been kept alive despite the fact that Tigre became part of Buenos Aires City (a city of thirteen million inhabitants), can become a first step in a new local IP. The prime factor is that local actors 'feel' both that they share something in common (though they do not know what exactly it is), and that this happens because they are from Tigre only. This feeling of 'sharing things in common' can be utilised as an incentive in order to obtain commitment for action from local actors, in this case linked to the promotion of supporting activities for local industrial development. Critically, it can be achieved by "reinforcing local identities and production culture" and through "actions to store the accumulated [local] specific knowledge" (Belussi, 1999:741) related to industrial history. For instance, financing specific cultural 'deposits' such as museums regarding the craft, timber, and tourism industry, in relation to the history of immigrants (apart from the naval and local history museums already existing); and promoting the creation and renewal of a 'collective memory' (ibid) through seminars, expositions and civic demonstrations linked to the local industry. All of which, as Belussi concludes, can contribute to the "creation of specific identities, where common rules, loyalties and behaviours can emerge" (ibid:741). Interestingly, some of these ideas are beginning to gain consensus in Tigre. IDEB-, UIA- and UTN-Tigre, along with the participation of the Municipality, successfully organised the First Entrepreneurial Exposition of Industries and Services of Tigre, which took place at UTN-Tigre's facilities during August 2003. The exposition's main aim was to develop greater awareness and offer a meeting opportunity between the local and regional (and beyond) supply and demand of goods and services.

The entrepreneurial culture and the industrial atmosphere existing in the region, which indeed made up the sense of place discussed above, are also factors that can be part of a first step in a new IP approach. I argued in Chapters 5 and 6 that some cultural and idiosyncratic local traits associated with the political and economic history of Tigre such as, notably, the entrepreneurial culture and organisational culture brought by European immigrants and formal and informal processes of socialisation (carried out within families, schools, and neighbouring-based relations) that allowed its dissemination and reproduction,

made Tigre a special case in terms of its social capital. Reinforcing these factors of local identity in the local actors (firms and institutions) may, as discussed above, result in a strengthened identity and sense of place. As seen through Chapters 6, 7 and 8, however, these factors have not constituted sufficient conditions for establishing a local institutional thickness based on communication, interaction, association and political mobilisation around shared projects at the level of local firms and institutions. Does this mean that such factors do not at all determine the character of relations at local level? It is a difficult matter to address. Indeed, one could hypothesise that due to the existence of intangible 'common things' shared between actors, the lack of formal relations between them (in terms of concrete actions) or the lack of a 'formal' cooperative culture perhaps do not constitute a problem. These 'common things' shared between local actors are likely to quickly encourage economies of association when common interests emerge, as shown in the cases of IDEB-, UIA- and UTN-Tigre. However, they may also hinder networking processes, for instance by reinforcing conservative conducts in relation to new ideas and proposals that may be seen as different than those already established in Tigre. Certainly, these issues cannot by themselves guarantee the establishment of economies of association, but can only been taken as a potential asset active in the region which should, therefore, be considered in the design and setting up of 'tangible' IP actions.

CHAPTER 9

Conclusions: re-conceptualising the New Industrial Policy thinking

9. 1. Introduction

Far from offering an answer to the 're-launching' challenge that the Argentine economy faces, the findings of this research can contribute to debates that are beginning to take place in Argentina in relation to its future industrial competitiveness. This chapter is divided into two sections. Section 9.2 summarises the main research findings while Section 9.3 discusses, in light of the evidence, the main industrial policy implications and then reflects upon the NIP thinking in developing countries.

9.2. Main research findings

The findings show that 'basic' or 'passive' external economies are less important for firm competitiveness currently than they were in the past. At present, basic external economies do not even guarantee situations of entrepreneurial 'survival' within industrial agglomerations. Learning and innovation are seen as activities of minor relative importance for firm competitiveness, particularly in contexts of economic decline. The nature of learning and innovation is firm-centred, incremental, unsystematic and generally unintended. Innovation activities are reduced to *ad-hoc* strategies of product differentiation through which firms search to compete in market niches in which import competition can be avoided. Product differentiation in some cases implies a move towards higher quality products. These business strategies are 'reactive' to the changing business environments. Competitive capabilities of firms largely depend upon craft skills, intuitiveness, and expertise of entrepreneurs. As a whole these characteristics represent not only a weakness in the context of open economies, but they also represent a restriction to be able to cope with the imperatives of the learning economy. Firms in general do not associate interfirm

collaboration with their learning processes. The institutional set up is not seen as an interface for or a facilitator of learning and innovation activities. Firms operate on the basis of high levels of vertical integration despite the emerging need observed to 'open up' the firms towards other economic agents in order to obtain complementary assets. An extremely individualist business culture and the unstable business setting help to explain the low levels of interfirm collaboration observed. Small firms in general travel neither physically nor virtually searching for new sources of information and knowledge. They learn at 'shorter distances' in comparison with larger firms. Tracking rivals is a positive source of learning observed within the cluster. Small firms learn 'by hearing' what the local leading firms do, what they do not do and what they give up doing. I have used the term 'cluster noise' for all informal circulation of information that occurs through informal proximity-based social relations which helps firms to reduce their level of uncertainty.

In contrast, the evidence reveals that some firms learn and innovate through more interactive practices in relation to the searching, exploration and generation of new knowledge. Learning in this case is planned and cumulative and technological upgrading becomes an important element in firm business strategy. These firms innovate in product as well as in processes. Learning is based on relationships with 'foreign firms' which operate as technological 'gatekeepers' for local firms. This is a 'partner to partner' learning practice which is based either on market relations (through joint ventures) or planned training activities at national or international levels. Although these firms have developed a clear view of the advantages of interfirm collaboration, this practice is positively seen only if it involves links internationally; firms distrust interfirm collaboration in Argentina. Individualism and fear of opportunistic conducts are identified as the main constraints to associativeness. These firms operate on the basis of more flexible production systems, but often without becoming involved in practices of the division of labour among firms. Geographical proximity does not matter for firm competitiveness. They rely upon 'distanced' or 'de-territorialised' forms of learning.

The evidence reveals that firm-institution relationships are fragile and fragmented. Limited institutional attention aimed at local SMEs, 'top-down' policy instruments and inadequate development of local 'institutional thickness' characterise the nature of firm-institution relationships within the region studied. Firms do not recognise the local institutional set up

as a strategic facilitator in promoting their competitive strategies. The nature of firm-institution relationships observed is nevertheless not neutral regarding IP implications. This negatively affects entrepreneurial attitudes towards the few IP instruments operating in the region. The national state is elevated as the only agency able to recognise and represent the firms. However, the findings show that the institutions have began to change their patterns of institutional functioning by opening-up towards interactive learning processes and more collective policy decision-making practices. Face-to-face contacts with the firms on the basis of an offer of specialised and/or customised technical services and interactivity in policy design were identified as key issues in encouraging institutional innovation and activating networking.

My evidence suggests that the lack of institutional density observed regarding the relationships between the public and private sector (and between these sectors and the firms) is unlikely to facilitate the development of a political network capable of mobilising the region to promote local IP initiatives. The private sector constitutes a fragmented, if not fractured, collage of interests and institutions which carry out neither formal nor informal collective actions. The role played by the local government as an intermediary has had negative affects by blocking some emerging processes of institutional building concerned with local firm competitiveness. In contrast, the local government is far from being a passive actor with respect to the competitive performance of local firms. Good governance has contributed to the creation of a business friendly environment helping firms to reduce transaction costs and uncertainty. However, public/private collaboration is unlikely to happen under the neoliberal approach forwarded by the local government. Evidence of this is that the local government has not taken part in the emerging processes of institutional building observed. This is true in spite of the region succeeding in establishing a local power for policy decision-making.

9.3. IP implications and re-conceptualisation of the NIP theory

What can we conclude from the evidence above is that the NIP theory presents serious deficiencies as a valid analytical tool in the context of developing countries. The learning

and innovation economy is far from being considered a critical and/or realistic competitive strategy by firms, particularly in the context of macroeconomic uncertainty and volatility of markets. The power of economies of association, though recognised by some firms, is only marginally exploited. Finally, the power of place barely forms part of the concept of competitiveness portrayed by firms. However, my research reveals that some elements observed in individual cases of successful firms and in institutions undertaking innovative processes of change seem to be moving in the direction forwarded by the NIP theory.

The findings suggest that the improvement of efficiency at the level of the firm, the broadening of the relational sources of learning, and the setting up of cluster- and geographical proximity-based policies are the three main IP areas that could be tackled to boost firm competitiveness in developing countries from a micro-economic standpoint. Firstly, there is a prime need for IP instruments that seek to transform 'craft-based' firms into 'industrially-organised' firms. This need is mostly evident in SMEs operating in low-tech industries. A 'context-sensitive' strategy of provision of real services in areas of management (i.e. marketing, cost control, personnel, and post-sell services), technological upgrading and training (i.e. in issues such as quality control, plant lay out and stock control) could enable the firms to overcome internal inefficiencies and generate the business intelligence necessary for activating dynamic learning. I argue that the firm transformation as mentioned above becomes the 'entry point' for policy agendas forwarded by the NIP thinking. Therefore, an IP framework inspired by the NIP theory should place special emphasis on the conceptualisation of the transformation of the firm. A theoretical 'adjustment' in this sense implies that an IP framework should assume a higher level of sensitivity to the context and circumstances under which learning takes place. I argue that contextual sensitivity in this case also implies the understanding that without access to financial supporting by the SMEs the NIP agenda lacks a key ingredient for its realisation. This leads us to re-considering the NIP agenda (in which 'real services' play a key role) in light of the importance of key IP instruments forwarded by the old IP agenda, namely, public financial support to firms. As learnt from the Asian experiences, selectivity in resource allocation and strategic guidance by the state could be two key aspects for the necessary complementarity of the old and the new IP agendas in the context of developing countries.

Secondly, there exists a need to 'expose' the firms to new sources of information and various types of knowledge (including tacit and codified) in order to accelerate their process of accumulating experience. The generation of conditions for 'access' to new sources of learning (for instance through direct observation and interchange of practical knowledge among peers) becomes the second IP implication. Specifically, the exploration and exploitation of 'external' sources of learning (whether through visits to trade fairs and leading firms or through the establishing joint ventures internationally) should be a priority within a new IP framework. The emphasis on 'distanced' and 'de-territorialised' forms of learning should however be understood within the context of a fundamental need that SMEs have for locally-based (and often institutionalised) relationships in order to be able to access distanced sources of learning.

Finally, there exists a need for cluster or (geographical) proximity-based policies aimed at the development of ('triggering') economies of association between firms and other economic agents. In developing countries networking often develops as a result of planned IP actions and rarely as a spontaneous conduct of firms. Projects of collective action especially in policy areas in which economies of scale are relevant (such as the provision of real services, specialised information, training programmes and travel to international trade fairs) could become the starting point for collective learning. The evidence suggests that dialogue-oriented strategies, inclusiveness and effective participation helps to build up trust between economic agents so that the strong cultural barriers existing towards association and collective action can be overcome in developing countries.

However, a new IP framework should also pay special attention to evaluating what is the minimal threshold of critical mass 'necessary' (in terms of number of firms, institutions, resources and capabilities) before arriving at a conclusion on IP in localities or regions. Without a critical mass of firms it is likely that IP will not achieve the scale economies necessary for their operability and cost-effectiveness. A critical mass could be gained through the development of firm networks (i.e. through supply chains) beyond localities regionally, nationally or internationally. In which case 'relational' proximity, rather than geographical proximity (with its history and features of cultural identity), is what really matters for policy design. Furthermore, a new IP framework should carefully *ex-ante* evaluate socio-political, cultural and historical features to be fully informed of

local/regional path dependencies. Although these features, as seen, do not determine path dependencies that are impossible to 'alter' by an IP framework.

Therefore, a more realistic IP framework for developing countries could move in line with the factors discussed below. Let me start my final reflections by addressing two key issues concerning the microeconomic aspects of an IP. Then I will address the meso- and macro-economic factors that need to be reconsidered. Firstly, the priority of 'distanced' rather than 'localised' forms of learning and innovation is one of the recent claims in economic geography in contrast to the emphasis placed on the powers of geographical proximity as a key source of learning (see Amin and Cohendet, 1999, 2002; Blanc and Sierra, 1999; Oinas, 2000). This is slowly changing, Amin and Cohendet argue, "as evidence comes to be offered of innovation and learning based in distant networks and communities linked through cultural ties, travel, and sophisticated communications, in the travel of ideas and knowledge, in the links of localized clusters with sites many thousands of miles away" (2002:143). Though the emphasis of this claim is placed on 'corporate learning' rather than learning in small firms in developing countries, the IP implications toward the promotion of learning practices based on a distant network of relationships is critical for smaller firms to be able to adapt to and to anticipate future business settings. As Oinas argues "the creation and maintenance of non-local connections ... play a significant role in sustaining competitiveness. Such relationships allow centrally for the incorporation of new ideas into place-specific processes of technological learning" (2000:57-58). For geographically isolated small firms, distanced business relationships are even more critical since they perhaps are the only type of business relation to which these firms can access. The claim regarding the need for distanced learning strategies is particularly critical in developing economies (like Argentina) exposed to increasing international competition. In these countries economic decline has devalued the importance of the learning and knowledge economy, while simultaneously these countries are being severely affected by international competition where the learning and knowledge economy has helped to change the sources of firms' competitiveness. Avoiding enlarging the gap in relation to the more developed economies should be a prime IP concern in developing countries particularly with respect to those sectors considered as key for economic development.

The challenge to a new IP framework in this sense is immense. Small firms lack financial resources and time to carry out 'physical' travel (i.e. to trade fairs or to visit firms and centres of expertise internationally). The Internet for instance is identified as a key tool for developing distanced links and 'virtual' business travel. However, small firms seldom use the Internet as a source of business information or as a tool for e-commerce. In accordance with Malmberg (2002), establishing relationships at a distance requires tangible and non-tangible resources that small firms generally do not have (i.e. money and specialised external support; and time, energy, and training, respectively). IP at a regional level could become a crucial instrument by acting upon these constraints, for instance through the promotion of training programmes and collective use of ICTs. More generally, an IP framework could contribute to the transformation of a cluster, particularly where they are 'dormant', by organising trade fairs where local firms can participate (Schmitz and Humphrey, 1996). Trade fairs "can have a catalytic effect [since they provide] a clear indication of what customers want and how rival enterprises are meeting the customers' needs. Once some producers respond to these needs and receive new orders, those who do not will try harder" (ibid:1867). The region or locality could thus transform themselves in platforms for distanced learning.

Secondly, as regards the development of economies of association through proximity-based policies, I agree with those scholars that emphasise the need to assume a dynamic approach in cluster studies in developing countries by moving *'from models'*, based, in effect, on stylised ideal types of European industrial clusters, *'to trajectories'* (Humphrey, 1995; Schmitz and Nadvi, 1999). This means understanding the processes that lead to success or failure of a cluster, in a specific context and under determined circumstances, rather than assuming 'the Italian way' of doing things as 'the model' to be followed and therefore the horizon for SME policy. The strategies to overcome the deficiencies of clusters in Latin America have to differ depending upon the type of cluster. It is at this point that understanding 'trajectories' matters since, by distinguishing between 'incipient and more advanced stages of industrialization' of clusters will determine which kind of IP is more suitable for which kind of cluster (Schmitz and Nadvi, 1999:1507). Three 'ideal types' of clusters have been identified in Latin America: first, survival clusters of micro and small-scale enterprises; second, more advanced clusters of differentiated mass producers; and third, clusters of transnational corporations and co-located suppliers (Altenburg and Meyer-

Stamer, 1999). Tigre's furniture cluster portrays diverse characteristics in common with the 'survival clusters' singled out by this typology[98]. Although, differences have also been found with respect to the 'survival clusters' and cases of single firms that come closer to more developed types of clusters. Without doubt future research requires comparative analysis between clusters with different evolving trajectories.

As regards meso-economic factors, a prime question arises relating to whether decentralisation or, more specifically, 'decentralised IP' is possible in developing countries. The research shows that minimal conditions in terms of institutional capabilities are not yet given for such a policy in cases like Tigre. The question should then be whether the NIP theory is capable of dealing adequately with cases where there are weak relationships between firms and local institutions and (as a result of the latter) between firms and the national state. I have already highlighted the importance that emerging factors of institutional innovation observed in Tigre have for policy design and decision-making. What I am going to argue now is the importance that 'good governance' and 'strong local actors', capable to act as mechanisms of co-ordination, have for a new IP framework within contexts in which institutional failure (caused by bureaucratic inefficiency, corruption and/or institutional sclerosis) is a common factor throughout the state apparatus. While good governance with more proactive IP approaches (as observed in the Italian Industrial Districts or in Rafaela in Argentina) is a 'gold standard' in boosting competitiveness, this research reveals that actions of good governance in more general public affairs also matter. A simple, efficient, transparent and stable public legislation; a business friendly environment; and political stability are key aspects for achieving good governance and institutional continuity. Whether this 'first stage' in a process of institutional innovation *á la* Tigre can result in the setting up of active IP and collaborative strategies of economic

[98] Survival clusters of micro and small-scale enterprises have the following characteristics: Production of low-quality consumer goods for local markets in activities with low barriers to entry, such as the production of garments, furniture, and shoes. Firms in these clusters often display characteristics of the informal sector, such as low levels of productivity and wages. Though they are often labour-intensive, providing a significant contribution to employment and income generation. Handicraft skills are a key asset of firms in this type of cluster. Most of these firms do not master modern management techniques and new technologies. The degree of interfirm specialisation and collaboration is markedly low. Furthermore, they entail some positive externalities, such as information spillovers, availability of semi-skilled labour force, easy access to raw materials and machinery, and low search costs for customers. Positive externalities reduce the barriers to entry for new firms, thus favouring entrepreneurship. However, trade liberalisation in LA is today jeopardising the survival of many firms and perhaps entire clusters of this type, which is especially true for tradable goods that are highly price-sensitive to import competition (Altenburg and Meyer-Stamer, 1999:1695-1697).

governance is a different question to which I have answered 'not necessarily'. However, it constitutes a *sine qua non* condition to gaining the legitimacy and political consensus necessary for promoting processes of institutional building concerning local or regional IP initiatives.

A new IP framework inspired by the NIP theory should also be able cope with structural restrictions to programmes of decentralised IP arising from 'the national sphere' associated with IP decision-making issues (notably, business associations and public agencies). The predominant view portrayed by the institutions interviewed regarding both territory (as a factor in economic policy) and the case for decentralised IP schemes is rather sceptical. The national institutions claimed that solving 'the macroeconomic problem' should be the main goal for Argentine industrial competitiveness. Specifically, policy makers from national public agencies (notably, the Ministry of Economy) argued that policies targeted at firms whether by size (SME policy) or location (regional policy) would not be necessary under the context of a 'normal' or 'healthy' macroeconomy. Private institutions (linked with SMEs and with the furniture industry) instead claimed that 'to recreate the domestic market' should be the main goal. Although the majority of national institutions recognised the increasing importance of regional policies at an international level and notably in neighbouring countries like Brazil and Chile, they stressed the following problems. Firstly, they pointed out that this is a 'relatively new' debate in Argentina and nothing has been done in relation to this. Secondly, they anticipated problems of implementation and coordination associated with potential regional IPs (i.e. inter-regional conflicts arising as a result of the re-location of firms following better incentives to invest). Thirdly, they mentioned the lack of a critical mass of firms in most of the Argentine LFRs; and, finally, the fact that regional IPs are likely to fail if a strong support from the national state is not guaranteed.

The factors outlined above reflect a lack of interest, if not a discredit to regional policies which makes it difficult to pave minimal conditions for decentralisation from 'the national perspective'. The case of Rafaela in the Province of Santa Fe has however shown that good local performance is likely to influence policy decision-making spheres at a regional level. Hence, I argue that 'successful' local or regional strategies of economic development can play a role in reformulating embedded IP conceptions portrayed by national public and

private institutions, which, at the present moment, lack defined strategies for industrial development.

As regards the macro-economic issue, the main question which arose refers to the relevance of the IP agenda forwarded by the NIP thinking in developing countries, which are often affected by chronic macro-economic instability. The original works of the flexible specialisation school (Piore and Sabel, 1984; Sabel and Zeitlin, 1985) forwarded 'flexible specialisation' and 'vertical disintegration' (for manufacturing industries with divisible processes of production) as the best way to face macroeconomic instability and variability of aggregate demand (in reference to the 1970s' crises). In particular, it was argued that in developing countries (notably, Latin America) the presence of modalities of production organisation similar to those existing in industrialised countries before the mass production generalisation, may become a good starting platform to gain niche markets in an international trade characterised by the growing demand for non standardised products (Sabel, 1986). Certainly, these predictions were not (and are still not) observed in Latin America. What is more prevalent today in countries like Argentina is the production of commodities (based on the intensive use of natural resources) produced by capital-intensive industries through continuous processes of production, which, by definition, are less 'dense' in number of contracts (Donato, 1996). By contrast, goods produced by industries that operate through divisible production processes, based on a 'high contractual density', show a poorer competitive performance. According to Donato (ibid), the long periods of institutional and macroeconomic instability observed in Argentina made uncertainty and, therefore, the transactional costs of these industries, increase. This resulted in the reduced competitiveness of the manufacturing industry and increases in the levels of vertical integration of firms (obstructing potential economies of association and increasing collective efficiency). These finding are supported by recent comparative research on clusters in Latin America which conclude that: "Macroeconomic instability contributed to stimulating vertical integration through high uncertainty and transaction costs, and it in turn created a low-trust environment" (Altenburg and Meyer-Stamer, 1999:1700).

The interest of the NIP thinking on macroeconomic issues (following the 1970s crisis) seems to have declined after the works mentioned above. The paradigm of globalisation eclipsed the discussions on Post-Fordism and most of the NIP literature in developed

countries began 'to take for granted' macroeconomic stability and, consequently, to focus more on micro- and meso-economic issues. This 'turn' towards micro- and meso-economic issues has provided insightful and stimulating conceptual developments (which are discussed in this thesis). However, this happened at the moment when the NIP ideas were beginning to permeate developing countries, but under circumstances where in these countries (notably, in Argentina) the macroeconomic issue continued, and still continues, to be at the centre of the debate on economic policy.

"Always, every two or three years something happens to the Argentine economy that stops you!" was a common expression received in fieldwork, which illustrates well the 'short-term' business horizons affecting economic activity in general, and firm strategies in particular. Instability generates an additional problem for IP instruments concerned with the improvement of efficiency 'within' the firm since the main restrictions affecting competitiveness identified by the firms and business associations are 'exogenous' to the firms (notably, of a macroeconomic nature).[99] This is not to suggest that the macroeconomy issue is all that an IP framework should be about in developing countries. The East Asian experiences of industrial development have shown us that the strategic complementarity between the macroeconomy and IP (in strict sense) became a key factor of success. Specifically, the successful individual performances identified by my research (which developed under the context of the instability described) allow me to question the argument of whether the macroeconomy is the only IP framework required (or possible) to boost competitiveness. What we can conclude is that a new IP framework adapted to developing economies needs to generate theoretical alternatives to face situations of macroeconomic instability and, simultaneously, to conceive more flexible and rapidly adaptable IP instruments, which may be designed for specific purposes.

[99] Fundes-UNGS Report (1999) corroborates these finding by concluding that 'external restrictions' including: access to financing (77%); cost of the privatised utilities (54%); juridical insecurity (48%); and lack of regulation to control importations (48%), were the main problems hindering competitiveness identified by a sample of 600 SMEs at a national level.

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Appendix 1
Methodology

Three units of analysis are studied in this research. This includes: 1) A sample of small- and medium-sized manufacturing firms. As explained in Chapter 5, most of the sampled firms are located within an industrial cluster; 2) the institutional set up of the region to be studied; 3) a sample of provincial and national institutions concerned with industrial development issues. Points 1 and 2 relate directly to the case study (Tigre's region), while point 3 refers to more general issues relating the Argentine industrial economy, sectoral issues and industrial policy. Both SMEs and the different sampled institutions are here considered as 'economic agents' however the firm, whether individually or collectively, is the focal economic agent for the research. The selection of multiple units of analysis relates to the systemic research approach proposed.

1. The sample of firms:

Two main criteria were followed for selecting the firms, the size of the firms, measured by number of employees (5 to 100 employees), and their location. Namely, that the workshops were situated in the urban/central parts of the Partidos of Tigre and San Fernando or within the urban 'limits' of the wooden cluster studied (see map 5.1 in Chapter 5). Two assumptions supported the criterion of location. The first one is that 'geographical' proximity facilitates (or may facilitate) the interaction and development of associative capacities between co-located firms. The second one is that the institutional action in relation to the local manufacturing firms is (or should be) more 'visible' within those areas where the firms are mostly located. No additional data to classify firms was available (i.e. output).

Unfortunately, I was not able to conduct a randomised process of sampling due to the lack of official information relating the total number and the characteristics of the furniture firms located in the region. Hence, the rationale for selecting the final sample followed different procedures, which are explained below. My aim was to gain access to at least

twenty firms, that is, approximately 10 percent of the total number of wood furniture firms located in the region according to rough estimations by IDEB-Tigre and CIM-San Fernando.

- I firstly contacted telephonically all the wood furniture firms recorded in the database compiled by IDEB-Tigre (20 in total), which were located within the focus area. As explained in Chapter 5, this database was the only aggregated information on manufacturing firms available in Tigre and was compiled starting from the registration of the entrepreneurs in one seminar delivered by IDEB-Tigre in 2000. Six interviews were attained using this database (30 percent of the firms registered in the database). Apart from the fact that some telephone numbers were outdated, the critical economic and financial situation which the firms were going through at the time of the fieldwork was the main cause for refusing to be interviewed (in fact, some firms were in the process of closing down).
- Secondly, through one of the entrepreneurs interviewed (whose firm is located in one of the most densely populated areas of furniture firms of the cluster) I was able to gain access to three additional furniture firms that were subsequently surveyed. The same entrepreneur introduced me to some suppliers of wood and other raw materials and invited me, along with IDEB-Tigre manager, to attend an informal lunch together with a group of local furniture entrepreneurs.
- Thirdly, six entrepreneurs were contacted and surveyed following the interviews conducted with the authorities of both the Industrial Timber Centre (CIM) of San Fernando (5 firms) and IDEB-Tigre (1 firm).
- Fourthly, three firms were contacted through personal approaches following some informal visits that I carried out to different points of the locality.
- Finally, the two firms from the control group (see below) were approached through institutional contacts via the University of General Sarmiento and the ministerial Nacional Secretariat of Industry respectively.

A total of twenty-one firms made up the panel of SMEs interviewed. The panel can be divided into three groups: a) thirteen local firms, in which entrepreneurs have no political involvement in business associations; b) six local firms, in which entrepreneurs actively

participate in business associations (i.e. CIM and UIA-Tigre); and c) a control group of two 'successful' firms which are located in Greater Buenos Aires but outside the focus area.

Further sectoral information was drawn from a group of twenty wood furniture manufacturers from the northwest part of Greater Buenos Aires. They were informally interviewed at a workshop organised by the National University of General Sarmiento in June 2001 in which I participated, on the basis of ten questions relating problems of competitiveness that the firms faced.

2. The local institutional set up:

The selection process for local institutions was as follows. Firstly, I mapped all the institutions operating in Tigre that were connected with the local SMEs or that were in somehow 'relevant' to their competitive performance, either directly (i.e. through policy initiatives) or indirectly (i.e. having a role to play in the establishment of the local business atmosphere). A sectoral criterion relating the wood furniture industry was utilised as rationale for selecting the Industrial Timber Centre (CIM) of San Fernando and the Centre for Technological Innovation to the Wood Industry (CITEMA-INTI). The latter is located outside, although close to the focus area studied.

Conversations with key informants, Internet searches and analysis of local newspapers were the main sources of information utilised to map the local institutions. Drawing upon previous research conducted by the author, the institutional map was divided into a) 'public governmental'; b) 'intermediate'; c) 'private'; and d) 'techno-educational' institutions. Once identified and selected, the sampled institutions were contacted either through the IDEB-Tigre's network or personally, via phone calls and/or emails and letters on behalf of the Economic Commission For Latin America and the Caribbean (ECLAC), United Nations. The institutional backing given by IDEB-/UIA-Tigre and ECLAC-UN became a critical factor of 'access' to conduct fieldwork.

Ten of the twelve institutions selected accepted being surveyed, they comprised the following: a) four public governmental; b) one intermediate; c) three private; and d) four

techno-educational. Overall, they represent the total number of institutions concerned with the local manufacturing SMEs.

Table 1. The local institutional set up

Sector	Institutions
a. Public governmental institutions:	1. Municipality of Tigre* 2. Municipal Sub-secretariat of Tourism & Sub-secretariat of Culture 3. Municipal Office of Industrial Affairs* 4. Radical Civic Union bloc in the Local Assembly (opposition bloc)
b. Intermediate Institutions: (public, private and self-funding budget)	5. *Bonaerense* Institute of Entrepreneurial Development of Tigre (IDEB-Tigre)
c. Private institutions: (Business associations)	6. Industrial Union of Tigre (UIA-Tigre) 7. Chamber of Commerce and Industry of Tigre (CACIT) 8. Industrial Timber Centre (CIM), Partido de San Fernando
d. Techno-Educational institutions: (local and national public budget)	9. Technical School N°5 of Tigre (ETN5) 10. National Technological University of Tigre (UTN-Tigre) 11. National Institute of Agrarian Technology, Tigre Office (INTA-Tigre) 12. Centre for Technological Innovation to the Wood Industry (CITEMA-INTI) of the National Institute of Industrial Technology (INTI), Partido de Hurlingham

* Institutions that rejected being interviewed

It is important to emphasise that a small group of institutions considered as critical for business activity such as banks were not selected. Indeed, I deemed it inappropriate to include banks in this study on the basis that they have no 'local' loan policies specifically targeted at the local SMEs. In Argentina most of the local branches of national (and provincial) banks only operate as channels of transmission of top-down policy instruments and decision making, centralised at the headquarters located in the 'the city', in Buenos Aires centre. It widely differs from those cases of local banks highlighted by the NIP literature which are proactive in supporting the business strategies of local firms through customised policy instruments. Likewise, regional banks practically vanished alongside the concentration process of the financial and bank system that occurred in Argentina throughout the 1990s.

Finally, as can be noticed in Table 1 above, the Municipality of Tigre (the local government) and the Municipal Office of Industrial Affairs (the public agency in charge of local industrial policy issues) refused to become part of this study despite several attempts

to make contact. The reasons why they refused to be interviewed and the possible implications of this for the research findings and conclusions are discussed below. As for the local government, from the very beginning some key informants informed me that Tigre's Mayor and his inner circle were not easily contactable, especially in relation to 'minor' issues which *'they were not interested in'*. The local SMEs and the (potential) local IP agenda fit in with this category (see in Chapter 8). In fact, I never received any response to the several letters I sent to Tigre's Municipality requiring an audience. On occasion, an administrative secretary notified me that the Mayor and his entire inner circle were extremely busy campaigning for the coming local elections (due two months after the fieldwork).

The case of the Municipal Office of Industrial Affairs turned out to be particularly revealing with respect to the 'absent' role played by the local state on issues of local IP. In theory, the purpose of this Office is, precisely, to support the local economic and industrial activity in particular those associated with the SMEs. As discussed in chapters 7 and 8, both local firms and institutions agreed in pointing out that the Office of Industrial Affairs plays a rather 'decorative' role on issues of local IP. A key informant suggested that the Office's own inactivity was the reason for refusing to be interviewed. The fact that I approached this Office on behalf of IDEB-Tigre could have generated a negative effect on the municipal Secretary's willingness to accept the interview as he has openly been criticised by IDEB-Tigre (between other local stakeholders) for the Office's ineffectiveness.

The local state is considered as the key actor on issues of local IP. Admittedly, the fact that both Tigre's Municipality and the Office of Industrial Affairs refused to be interviewed had important implications for the research findings and conclusions. Certainly, to an extent it could have biased the reading I made on the evidence found in Tigre, i.e. in relation to the role that the local state plays in relation to the 'local IP agenda' vis a vis that played by the private and intermediate sectors. Most importantly, I consider that this issue exposed a key research finding in its own right as it helped me to realise why the rich and well-endowed institutional set up existing in the region does not work as the one in Rafaela for instance does. Indeed, an effective public and private partnership supporting local SMEs and industrial development issues has not been developed in Tigre because a key partner, the local state, is not interested in doing so. Primary information drawn upon from other public

agencies that did accept being interviewed (namely, the Municipal Sub-secretariat of Tourism & Sub-secretariat of Culture) helped me to confirm this hypothesis from the very perspective of the ruling political party (see chapter 8). Finally, I consider that the primary evidence collected from the wide range of individuals and officials in local institutions interviewed gave me a fairly complete picture of Tigre's local development agenda promoted by the local authorities.

3. The national and provincial institutions:

Thirteen institutions were selected whilst ten of them were effectively surveyed (mounting to 15 interviews in total). They were divided into two groups depending upon both the sphere, and within this the sector, to which each institution belongs to, as follows: a) national institutions, divided into public, private and sectoral-private institutions; and b) provincial institutions, divided into public and private institutions. It is important to remember that the national private institutions represent agents mostly concerned with the SMEs. Likewise, IDEB, at a provincial level, is an institution founded by the Provincial government and therefore it is a public institution.

Table 2. National and provincial institutions

Sphere	Sector	Institution
a. National:	Public:	1. National Secretariat of Industry and trade (current National Director and Ex National Sub-Director of Industry) 2. National Secretariat of the Small and Medium enterprises (ex-Secretary) 3. Guarantee Fund of Buenos Aires (FOGABA)*
	Private:	4. Argentinean Industrial Union (UIA) (SME Observatory) 5. Economic General Confederation (CGE) 6. General Confederation of Industry (CGI) 7. Association of Small and Medium Entrepreneurs (APYME)
	Sectoral-private:	8. Argentinean Federation of the Timber Industry (FAIMA) 9. Chamber of Furniture, Tapestry and related products makers (CAFYDMA) 10. Chamber of Timber entrepreneurs and related products (CEMA)
b. Provincial:	Public:	11. Ministry of Production of the Buenos Aires Province (PBA)* 12. *Bonaerense* Institute of Entrepreneurial Development (IDEB-Central)*
	Private:	13. Centre of *Bonaerense* Studies (CEB)

* Institutions not interviewed

Both provincial and national institutions were contacted on behalf of the Buenos Aires Office of ECLAC-UN. This key institutional support was provided by ECLAC-UN, without which it would have been very difficult to approach these institutions, relies on the fact that I have worked (as an external consultant) for ECLAC in different projects and due to which I maintain close personal contacts with senior members of the staff.

Finally, six key informants were interviewed in-depth, including experts in industry and local development from ECLAC-UN (2 interviewees); UNGS (2); UIA (1); and one ex-IDEB (1) manager, who informed me of IDEB's internal issues and performance. IDEB-Tigre's manager played a two-fold role, primarily as a key informant and then as part of the sample of institutions.

Table 3. Summary of interviews by groups of interviewees

Economic Agents	Number	Interviews
1. Firms	21	21
2. Local institutions	10	10
3. Provincial institutions	1	1
4. National institutions	9	11
5. Experts and key informants	6	6
Total	47	49

4. Research approach and data collecting:

A qualitative research approach has been chosen due to the evolutionary character and qualitative nature of the variables that this study attempt to grasp, understand and evaluate. Two different but comparable semi-structured questionnaires were utilised to conduct the interviews on firms and local institutions respectively. In-depth interviews were guided by a set of general themes and utilised to interview provincial and national institutions, key informants and experts. All interviews (49 in total) were conducted personally on the basis of face-to-face conversations. Likewise, in order to facilitate the interpretation and analysis of individual narratives and subjectivities, the interviews were recorded (equivalent to

1,600 minutes recording). For reasons of confidentiality, however, six interviewees did not allow this.

In order to design context- and individually-sensitive questionnaires, I discussed the themes to be tackled in the interviews as a sort of pilot test with both experts in the furniture industry and key informant connoisseurs of the local institutional and political dynamic. In this process, varied sets of secondary sources of information were utilised, including: participation in workshops and seminars and reading of specialised publications, institutional bulletins and web pages, and newspapers. All of which was crucial to avoid 'offending' individual and institutional sensibilities within the critical socio-political and economic context of the country at that moment (as explained below).

5. Fieldwork and interviewing:

The fieldwork was carried out between April and October 2001. In particular, the interviews with local firms mostly were conducted between August and October 2001. It is important to emphasise here that this was just a few months before the collapse of the Convertibility and a move into one of the worst moment of the four-year economic recession (1998-2002). Indeed, the 'timing' of the interviewing process affected the availability of entrepreneurs to participate in interviews. Some firms contacted were closing down or thinking of doing so at the time of fieldwork. But mostly, the 'timing' clearly biased the responses of entrepreneurs and institutions to questions posed in relation to medium- and long-term settings. Firms in fact were extremely pessimistic as regards issues such as training, development of innovative capacities, technological upgrading and cooperation. It was reflected in several comments received which remarked on the survey's timing, as follows: *'If you would had have come in another moment I would had have told you something different. But one has to be realistic. I don't even know what is going to happen in the country tomorrow. So... you cannot take risks at this moment'.*

Appendix 2

Photographs

1. Tigre's Railway Station and Ferry Port

2. Tigre's Delta Islands and Timber Production

3. Tigre's Tourist Attractions