Business Associations, Clusters, and Economic Liberalization in Developing Countries
- A Contextual Analysis

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Abstract

Recently, there has emerged initial research outlining the important roles business associations (BA) play in assisting the expansion of developing country clusters in the face of new international pressures. When examining the important implications resulting from cluster entry into global value chains, the trajectory of development can have significantly different outcomes dependent on the capacity of the cluster to functionally upgrade through the development of *backward, forward, and vertical linkages*. Therefore, the aim of this thesis is to ascertain the contextual circumstances that allow BAs to effectively assist in the functional upgrading of clusters within developing countries. Furthermore, this analysis concentrates on former ISI country clusters, which having embraced free trade and entered different value chains, faced economic crises that threatened their clusters survival. Resulting from these efforts, the emphasis is directed towards understanding which BA characteristics and initiatives may best assist in providing capabilities for clusters integrated within global value chains to meet and overcome market stresses.

This thesis determines the key factors necessary for BAs to best represent and advocate for their clustered firms. Case studies are utilized to draw useful information as to how BAs may facilitate a viable response within the market. Complementing the case study findings, a theoretical framework linking institutional theory, social capital theory, and transaction cost theory further elaborates and brings forth depth to the discussion. The analysis of the case studies and the theoretical framework substantiate the claim that effectively representational business associations are highly dynamic and important tools that assist in the development and strengthening of clusters.
PART I

1 Thesis Outline

1.1 Introduction

At the close the twentieth century, the role of the public institution as the purveyor of business development and the champion of industrialization was reversed with the widespread acceptance and reorientation towards economic liberalization. In its place, and not seen since the change of the twentieth century, the private sector reasserted its prominence by laying to rest large bureaucratic structures and government led import substitution development schemes. As a consequence, new forms of business relationships and structures resulted in the increased depth and breadth of global production systems. One such example that will be greatly explored throughout this thesis is the development of global-value-chains (hereinafter GVCs), that became widely used internationally. This liberalization of business also ensured that for the moment, market fundamentalism, a theory that argues against government intervention was put into practice by the world’s firms and governments. Yet, with the development of laissez-faire economic policies, intermediate institutional support mechanisms illustrated a role that could assist waning government structures that had been eclipsed by this transformation. One such category of organization that has witnessed increased importance as a result of economic and political pluralism is the private sector business association. These private sector business associations (hereinafter BAs) grew to play an ever increasing role in the leadership, development, and formation of industry - as the political controls on business loosened worldwide. Business associations may be viewed as a response to socio-political currents that through their confluence establish a ‘civil society’ in which business is represented both nationally and internationally (Moore & Hamalai, 1993, p.1895). Such representation is widely accepted by governments and multilateral organizations alike, who feel that the services offered by BAs in the form of knowledge, contacts, legal adjudication, certification, and product quality, et al. lead to greater gains within the private sector (ibid, p.1895; Nadvi, 1999). In the same vein, it is largely acknowledged that the presence of BA’s, may also smooth the growing pains faced by businesses within developing countries as they open to international trade.

This dynamism, which ushered in new practices and greater access to world markets, resulted in increased pressures on business as a whole and most notably on small and medium sized firms (hereinafter SMEs). Classically, it was believed that these firms were prone to suffer
more apparent weakness in terms of the capability and the scale to which they may respond to
the pressures of international trade. In the face of these difficulties and against the arguments for
larger firms maximizing economies of scale, policy-makers became inspired by the
competitiveness of clustered firms in Italy that provided a testament to the potential of SMEs to
achieve economies of scale and scope by relying on inter-cooperation at a local level.
Historically, these agglomerations of SMEs were once viewed as a clear illustration of weakness
and developmental stagnation (Lowe, 2006). With the example of Italy, however, the importance
of clusters as a sustainable tool to ensure economic growth and employment was largely
accepted as a modernizing option (Schmitz & Navdi, 1996, 1999; Humphrey & Smitz, 2002;

Critically, it was only until the 1990s that cluster analysis and policy prescription was
extended to the developing world. And, while there is a clear delineation between the
characteristics of developing country clusters and the Italian example, the presence of small
agglomerations of firms that illustrated the potential for inter-firm co-operation, successful
division of labor, and the opportunity to access international markets became apparent. This
transformation has led to widespread support from international organizations – World Bank,
International Labor Organization, the United Nations, et al. – and national and regional
governments alike, who all stress that countries which have well developed cluster networks
Comparatively, the importance of BAs in both settings is widely accepted but rarely researched
in the context of the developing world. To meet this void, and extend the research concerning
developing country BAs as important purveyors in the advancement of cluster depth and breadth,
case specific research must be presented.

1.2 Purpose Statement
Generally, the aim of this thesis is to contribute to the understanding of how BAs can
successfully interact with clusters that operate within global value chains. More specifically, this
thesis centers on testing contextually the efficacy of BAs as support structures for cluster
development, inquiring as to whether they may be supportive in interpreting changes and
encourage the process of upgrading so as these clusters may remain competitive within GVCs.
Attributable to the nature of their relationship, clusters within GVCs often have a limited
knowledge of relevant technological options, and are solely comfortable or encouraged to embrace new business solutions that inhabit the interests of their value chain (Gagerberg and Godinho 2005). This limited knowledge and interaction may create issues of collusion and an inability of upgrade within the cluster. In light of this possible stagnation, a specific inquiry into Porter’s Diamond theory – the role of BAs - will be explored. The presence of BAs as support structures, as outlined in the theory should be analyzed in order to judge what is beneficial in the developing country context in the pursuit of upgrading within the realities of global integration.

The longevity and historical development of a cluster governs its overall market activity and often its success. However, no cluster is immune, and failure at all levels of development poses serious repercussions to the livelihoods and development of the regions in which these clusters are situated. Porter’s underlying assumption, that the mere presence of BAs encourages the development of developing country clusters, must be broached contextually to stress that in order for them to be of benefit, the association must cultivate its own presence and respect within the cluster’s governance structure. The concept refers to the capacity, that only once the BA is respected, it may develop long term relationships which yield individualized as well as collective benefits in the form of learning, risk-sharing, and investment (Granovetter, 1985) Furthermore, these relationships develop over long-term periods exemplifying the build-up of cooperation, trust, information transfer, and overall joint-problem solving (Uzzi, 1997) Such legitimacy brings greater efficiency within the localized market (Duran, 2006). This governance structure refers to how upgrading, leadership, and growth are actualized within the firms of the cluster (Belussi and Sammarra, 2005). It is not the nature of this thesis to question the merit of successfully functioning BAs, at a global level as a means of building ties and fulfilling leadership roles within competitive clusters (Duran 2006; Puetrobelli, Rabellotti & Giuliani 2006). Instead, this thesis evaluates BAs, in a developing country context, questioning whether these clusters are sufficiently mature and malleable to embrace the promise of BAs to rectify possible pluralist miss-steps as often experienced within developing country systems. Similarly, this analysis explores whether there must be amendments to Porter’s one-size fits all theory, taking into consideration the overarching influence GVCs and the all too often reactive as opposed to preemptive role BAs play in influencing clusters. To this end, a greater understanding of the viability, significance, and developmental role that BAs play in developing country clusters that operate in GVCs will be attained.
1.3 Hypothesis and Research Question

Analyzing the capabilities of BAs to assist upgrading capabilities and increase responsiveness towards changes within the environment of the cluster can be regarded as an approach towards analyzing how BAs support SMEs in an international context. Accordingly, the claim is that of clusters which operate within GVCs, benefit from the services of BAs who successfully entrench themselves to their firms needs. Moreover, in line with possible unequal power relationships, as often seen in GVCs, we require a better understanding of how the application of a general theory may not safeguard these networks from being railroaded by their more powerful counterparts. To this end, the hypothesis of this thesis is as follows:

Hypothesis:
Business associations play an integral role in ensuring that clusters can maintain and develop their competitive capabilities to upgrade within GVCs.

In order to test this hypothesis research has been conducted through the development of the research question that will frame our understanding of the contextual roles that BAs can play in bolstering the capabilities of cluster to upgrade. As a means of evaluating the role played by these intermediate organizations one has to outline what factors – internal and external – account for their role within clusters. Consequently, this raises the research question:

Research Question:
Which contextual circumstances allow business associations that operate within developing countries to successfully assist in encouraging functional upgrading that strengthens clusters operating within global value chains?

As such, the research question investigates the efficacy of BAs within developing country clusters in order to better ascertain the contextual parameters. Insights gained by successfully analyzing this question will allow for the verification or disproval of the proposed hypothesis. Similarly, such an analysis will broaden our theoretical understanding Porter’s model, ascertaining the significance and possible success that BAs can attribute to the development of clusters.

1.4 Measuring Cluster Development and the Involvement of Successful BA Strategy

There has been a limited effort to develop a set of indicators by which to measure the success of BA presence within developing country clusters. The following section will outline an
approach by which one may be able to derive a cause-and-effect and success measure gage for such associations. Ideally, a measurement should capture both the effects of the interventions being undertaken and the development of the cluster overall. For the later it should take into consideration the different aspects of cluster development and seek to understand how each element is developing over time thanks to the involvement of a BA.

The nature and relationship of BAs working alongside clusters, requires a measurement system that should be expansive (Nadvi, 1999; Morgan, 1999). If one is to undertake a simplistic approach, critical aspects of performance will be missed. Furthermore, one must recognize that the role of BAs is not the sole assistance mechanism available towards assisting clusters. Yet, one is able to qualitatively and quantitatively measure the involvement of BAs by the nature of their efforts and the overall responses within the cluster. In the past, economic indicators have measured the overall performance of the cluster and its overall development (Larosse, Slaets, & Wauters, 2001). Such an analysis solely takes into account process and product upgrading. In spite of this, critical aspects such as network formation, social capital, and functional analyses have been left out (Schmitz, 1997; Rabellotti, 1998). As a result, this former lack of parameters has limited the understanding of the role of BAs within clusters.

To rectify this imbalance and formulate a measuring system, the different dimensions of BA success operating within clusters can be considered under the four headings which broadly encapsulate:

- The methods and means BAs develop networks and partnerships, both within the cluster and throughout the institutional setting.
- The role of functional upgrading as encourage by BAs, where clusters are producing products with higher margins, administering quality assurance, and utilizing in-house R&D.
- The advancement assisted by BAs, of multiple simultaneous value chains whereby marketshare is cultivated.
- The development of export growth.

The use of these four criteria may be used as a tool to assist in measuring and drawing conclusions as to the role of BAs operating within developing country clusters. From the application of such proxies one may assume that greater productive linkages will be cultivated within the cluster. It must be accepted, however, that not all criteria may be developed or filled by BAs. Instead, one must measure their impact holistically to the aforementioned criteria.
1.5 Delimitation

While it is noted to be a highly effective way for municipalities and firms to develop alike, it must be noted that cluster promotion and expansion is not the only way economic development can be encouraged (OECD, 1997). Issues ranging from national technology and property rights policy to anti-corruption initiatives, similarly assist in strengthening the social and business environments within developing countries (Marceau, 2000). Yet the analysis of such a dynamic and highly discussed subject lends itself to better understanding issues that face developing countries alike – employment, education, institutional development, and capacity development.

Similarly, the debate and subsequent polarization of views concerning globalization – the poor benefit from globalization or globalization has been detrimental to the poor (UNIDO, Vienna 2001) – will not be addressed in this thesis. It is the belief of the author that such views are naïve in their assessment of globalization, failing to ascertain how firms, clusters and countries have integrated globally. As stated by Kaplinsky and Readman (2001, p.33):

Thus, the key policy issue is not whether to participate in global markets, but how to do so in a way that provides for sustainable income growth. This, as we have seen, is a particular problem for poor producers and poor countries who seem to have experienced more of the downside than the upside of globalization over the past two decades. It is also a particular problem for SMEs, many of whom lack the capabilities to participate effectively in global markets.

To this end, a general acceptance that globalization through the liberalization of trade-barriers and the opening of markets has resulted in an environment with the large-scale movement of goods and services and the increased influences between countries and companies.

The unit of analysis is restricted to clusters in developing countries that operate within GVCs. Empirical analysis often illustrates that GVCs challenge clusters in a “do-or-die” fashion, whereby they require clusters to remain competitive in order to maintain market relations. Should clusters not be able to evolve through the application of innovative techniques that permit them to upgrade, they undoubtedly languish, resulting in stagnation and loss of economic gains. Furthermore, the reasons for choosing such forms of integrated clusters as unit of analysis are threefold. Firstly, these specific clusters confront the simplistic and often displaced view held by numerous academics that cluster formation innately results in economic development and innovation within firms (Bazan & Navas-Aleman, 2004; OECD, 1999, Schmitz, 1990). Secondly, this analysis questions whether the typology of these specific clusters precludes their
ability to maximize their informally acquired resources – i.e. networks, BAs, and social capital. Thirdly, this unit of analysis sharpens our understanding of Porter’s theory in how BAs – as one aspect of a cluster support system – can assist developing country clusters who operate in the global marketplace.

Due to the sheer number of BAs that exist at any one time, comprehensive data as to number and character of BAs is difficult to obtain – even for a single developing country. This occurs because of the informal and latent nature of many (smaller) BAs, whereby for long periods of time these organizations may remain inactive (Moe, 1980). Moreover, the nature and regularity in their activity might be highly irregular. BAs may only meet during times of crisis in order to confront a singular economic concern. To this end, case studies are drawn from countries that have a reasonably established form of corporatism in government-business arrangements historically encouraging long-standing BAs.

It is generally acknowledged that both developed and developing countries can in fact be impacted by their failure to upgrade at the control of GVCs. However, with regard to developed countries, the overall impact such clusters experience through their failure to upgrade is still relatively lower in terms of the overall economic impact in comparison to developing countries. As often stated, business structures within developing countries in terms of legal framework, financial systems, economic development and stability and social structure, are significantly different from those of developed countries. In utilizing these differences as a unit of restriction, the reader may ascertain the structural weaknesses of these countries, questioning whether classical cluster theory and the role of BAs can in fact be replicated to the same extent as witnessed in North America, Europe, and parts of South East Asia. This analysis is complementary to the work of Narayanan & Fahey (2005) who stress that developing countries are not homogeneous, extending our understanding of the rich variety of differences that exist within their institutional and business make-up. To this end, analysis concerning BAs working to assist clusters is centered on countries who have successfully exited government ISI policies. At the same time, the analysis explores historically entrenched BAs as tool and support structures for business development.

This thesis specifically explores the Brazilian Sinos Valley cluster; the Sialkot surgical instrument cluster; and the Guadalajaran footwear cluster. Each case, provices important success stories that contextualize the involvement of BAs within developing country cluster. Admittedly,
cluster generalizations and broad cluster development statements pertaining to a specific country and region have to be made and offered cautiously. In light that arguments are derived from case studies which are based on rather localized, firm and industry-specific outcomes. It is necessary to bear in mind Yin’s (1994) claim that the outcomes that result from the presented case studies are made to theory and not to populations. The crux of this work aspires “to generalize a particular set of results to some broader theory” ascertaining whether these specific outcomes can also be found to occur in comparable cases (Yin, 1994, p.36). As such, the identification of influences that impact the success or failure of BAs in conjunction to assisting clusters operating within GVCs will allow us to examine the relevance of such structures as continuing to be applicable and in which way it might have to be adjusted to suit the developing world.

1.6 Research Design

The nature of this thesis is to explore the underpinnings of BAs by outlining both success stories and areas of weakness that may contribute to the development or weakening of the cluster. Ascertaining whether BAs do play an integral role with respect to a clusters capacity to upgrade in the face of constant demands from GVCs ultimately measures the relevance of such institutions as conduits for change. The hypothesis is explored through an established research structure.

Critically, because the quantity and quality of literature on the role of BAs within integrated GVC clusters is relatively scarce, this necessitates the presentation of major theoretical concepts involved in the analysis. Part I of the presented thesis is designed to provide a solid understanding concerning the fundamental concepts that have been adjoined for the analysis of thesis.

Following the theoretical framework, the thesis enters Part II of the analysis that provides the necessary information concerning developing country clusters that operate within GVCs. This section of the analysis provides depth with respect to the research question assisting in validating or disproving the hypothesis – and furthermore adds necessary information so as to contextualize the circumstances for BA involvement within clusters. Furthermore, integral to the framework is the presentation of the three cases that run in conjunction to the research question. This question is directed towards interpreting the role of BAs as a viable structure that may
successfully interpret GVC demands with respect to their cluster relationships. The analysis of these cases will further verify or disprove the proposed hypothesis.

Finally, in Part III, the theoretical framework – analyzing Transaction Cost Theory, Institutional Theory, and Social Capital Theory - will provide understanding into BA strategies and capabilities to assist in the development of clusters operating within GVCs. The intention of applying these theories is to analyze whether the theoretical aspects developed within Porter’s Diamond Matrix can provide useful insights into firm strategies and capability development when opting for BAs to be cluster advocates. It is examined whether the overarching support of BAs is well founded, and whether requirements to the definition of their interaction within developing country clusters must create some form of accounting measure.

1.7 Research Strategy

The nature of this thesis aspires to test Michael Porter’s ‘Cluster Theory’ vis-à-vis GVCs by means of analyzing the role of BAs in a developing country context. Through the examination of the role that BAs can play within clusters, an analysis of how viable a supportive role these instructions can play can be made. Such conclusions will ultimately lend themselves to better understanding the dynamics found within clusters and determine the feasibility of the aforementioned hypothesis.

Concurrently, this thesis lends itself to employing a comparative analytic structure, whereby, as Yin (1994, p.139) states, “A comparative structure repeats the same case study two or more times comparing alternative descriptions or explanations of the same case... The purpose of the repetition is to show the degree to which the facts fit each model, and the repetitions... illustrate a pattern-matching technique at work.” This is not to preclude that other structural formats cannot be used in terms of analyzing clusters (i.e. linear-analytic structures, chronological structures, theory building structures, suspense structures, and unsequenced structures), yet because three case studies will be analyzed, and that cluster development is continually evolving and complex, these other formats are best suited for other academic works (Yin, 1994; Saunders et al., 2003; Creswell, 1998).

Moreover, in light that research within the area of BAs operating as assistive bodies within clusters has yet to be studied thoroughly, this thesis aspires to encourage the development of further ideas, concepts and establish priorities for further research (Yin, 1994). To this end,
the research strategy that underpins this thesis is directed towards testing the aforementioned hypothesis rather than undertaking an exploratory approach. Such an approach will take shape through the literature review section of the thesis whereby cluster development is considered. The research question will consider the role of BAs within developing country clusters drawing conclusions on the hypothesis presented (Yin, 1994).

A qualitative study is undertaken in the collection of research for this thesis. As stipulated by Creswell (1998, p.15) “a qualitative study is defined as an inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting.” The consequence of using formal quantitative research designs as a means of testing hypotheses is that they often render concrete findings, yet have short-comings with respect to details on behavior, attitudes and motivations that are of overall interest for this thesis (Saunders et al., 2003). To this end, while the replicability of findings as founded in quantitative studies does permit the derivation of generalizations and theories, in consideration to this thesis, the act of performing a qualitative study permits a richness of exploration in terms of outlining implicit assumptions, and variables. Furthermore, in light of the generalized lack of knowledge concerning BAs and their overarching participation within clusters, which in itself denotes a behavioral interaction that is better understood through a qualitative research method (Creswell, 1998).

There exists a plethora of methods when undertaking qualitative research, e.g. surveys, experiments, case studies or grounded theory. It is the opinion of the author, as seconded by Yin (1994), that a case-study research strategy is most appropriate. Yin furthers this conviction by stressing that “when investigating a contemporary phenomenon within its real-life context, when the boundaries between phenomenon and context are not clear and in which multiple sources of evidence are used” (1994, p.13). Further to this statement is the reality that case study research can be bifurcated to include both explanatory as well as exploratory approaches. This research paper will undertake both approaches when exploring the research question. Moreover, because this subject encapsulates multiple players undertaking a complex developmental problem that has lasting repercussions and no clear boundaries in its context, this further necessitates the use of the qualitative approach in the use of case studies (Yin, 1994).

Critically, the selection of an applicable case is bounded by the necessity to produce insights into the human and social processes (Yin, 1994). With proper application, the specific
case may defend, supplant, and if necessary, revolutionize the previously studied environment. At the onset, as Yin states, “the case study must be significant, [whereby] the individual case or cases are unusual and of general public interest. [furthermore] The underlying issues are nationally important, either in theoretical terms or in political or practical terms” (1994, p.147).

In upholding the merits of academic research the investigator must ensure that the case study be “complete” (Yin, 1994). The investigator must firstly, distinguish between the phenomenon and the context, providing sufficient evidence concerning the boundaries with regard to the application of the case. Secondly, as forwarded by Yin (1994, p.147), “The complete case study should demonstrate convincingly that the investigator expended exhaustive effort in collecting the relevant evidence. The overall goals, nevertheless, are to convince the reader that very little relevant evidence remained untouched by the investigator, given the boundaries of the case study.” Thirdly, the investigator must ensure that accuracy of the case is not influenced by artificial conditions such as the end of a semester, the exhaustion of funds, or any other nonresearch constraints (Yin, 1994).

While conclusions will be formed in the discussion section of this thesis, alternative perspectives and rationales for the specific outcomes will similarly be presented. As encouraged by Yin (1994, p.149), “To represent different perspectives adequately, an investigator must seek those alternatives that most seriously challenge the design of the case study”, resulting in a more vigorous academic outcome. This may be uncovered in alternate “cultural views, different theories, variation among the people or decision makers who are part of the case study, or some similar contrast. Offer[ing] alternative interpretations of the facts” (Yin, 1994, p.149). In line with this analytical process, the case study must present sufficient evidence in order to supports its claims. Successful cases rigorously analyze whether the information presented is not biased, neutral, offering both supporting and challenging data (Yin, 1994). While ensuring the accuracy of the findings, this method of inquiry also ensures that the investigator upholds the validity of the evidence (Yin, 1994).

Yet, the application of a case study, as per Yin (1994), is not without its weaknesses. Critically, one must firstly acknowledge that the data collection and deductions render biased findings in line with the researcher’s view. Secondly, this lack of rigorousness does not permit for a sufficient depth of understanding in order to contribute to scientific generalizations.
Thirdly, this method of research is regularly criticized due to that when carefully administered, the process is extremely time-consuming.

1.8 Data Collection

As a means of testing the research question undertaken within this thesis, different kinds of data have been collected. As often distinguished, there is both primary and secondary data collection. These two methods may be compared with primary data being directly collected by the researcher. As stated by Saunders et al., (2003) these first-hand sources collected by means of surveys, observations or experimentation aspire to provide original material for the researcher. In the context of this thesis, only a bounded quantity of primary data was collected and analyzed. Of these sources, market research reports, public reports, conference proceedings were used to interpret market sizes, BA internal mandates, and productive innovations that transpired.

Secondary data is a form of information that has already been processed by researchers and academics who publish their work, in texts (e.g. journals, newspapers, books, etc.) internet, published statistics and media (Saunders et al., 2003). These works include both quantitative and qualitative data, and for the sake of this thesis, the application of secondary data is primarily used. The logic behind such a decision is due to the fact that first-hand information concerning clusters operating in GVCs is extremely difficult to obtain as governance initiatives by global firms are often not disclosed. Further, to relying on secondary data, it is often accepted that the clusters within developing countries generally do not have themselves an in depth academic understanding, as to how, and in which way they are affected by GVCs. This lack of internalized understanding makes for the clusters less likely to divulge pertinent information that may be viewed as possibly weakening their present position. Furthermore, reliable data at the firm-level is seldom available within developing countries, impacting the empirical analysis at the cluster level. Therefore, as Belussi and Sammarra (2005, p.5) state, “the empirical analysis has to rely on the available quantitative evidence complemented by careful qualitative assessments. Given its qualitative content, the aim should not be to identify causal relationships but rather explore the rich and newly gathered empirical evidence on … clustered SMEs.”

From a practical point of view, the case studies selected analyze three different countries that inhabit two different continents. This ultimately renders field research not feasible and moreover places strain on the individual to locate additional funds (Saunders et al., 2003). As
witnessed throughout this text, secondary data is strongly utilized in the form of academic journals, newspapers, books, internet databases, and statistical institutes who each in themselves provide critically important data that valuably illuminates the research question. And as Saunders et al. (2003) would stipulate, the strong reliance on secondary data will limit the researchers control over the data, and warrants concern over the misinterpretation may increase in likelihood due to usage or manipulation of data that was never intended for those exact purposes. To paré such concerns, the overall worthiness of secondary data must be strongly evaluated by the author as well as the works critics so as to ensure validity and reliability.

This past chapter has been worked in a complementary fashion to add structure to the introductory material first presented in this thesis. Through proper definition of the thesis’ purpose, and ensuring the clear presentation of the underlying hypothesis and research question, the reader is conscious of the direct of this academic work. The following chapter will law the theoretical groundwork, providing academic breadth surrounding clusters, GVCs, and BAs.

2. Introduction of a Theoretical Framework

Principally, the role of creating a theoretical framework is to provide a clear academic boundary of analysis that will help evaluate Porter’s Cluster theory, and the overall interaction BAs hold with developing country cluster. This interaction deserves to be measured with respect to whether there exists efficacy in BAs operating as tools to bolster innovation and upgrading and rendering clusters more competitive overall in the GVCs context. To this end, three leading theories within the field of management research—social capital theory, institutional theory, transaction cost theory—have been selected. Through the presentation and application of these theories, an overall theoretical framework will be presented in the preceding chapter. These theories will be related to each other, and used later in the discussion section of this thesis. Interestingly, the formation of these theories has been primarily undertaken in a first world context. In the framework of this thesis, however, they will be applied to analyze upgrading strategies within clusters in developing countries. This chapter is concluded by showing how the three theories can be combined in one theoretical framework to provide a thorough analysis of the role of BAs in clusters within a developing world context.
2.1 Institutional Theory

Institutional theory focuses on societies more resilient and entrenched structures. Analyzing the structures, rules, norms and routines established within societies as governing bodies, it explores how these guidelines are formed, adapted, accepted, and dispelled throughout society (Scott, 2004; 1995). This definition, as per Scott (1995, p.33) states that:

Institutions are social structures that have attained a high degree of resilience. [They] are composed of cultural-cognitive, normative, and regulative elements that, together with associated activities and resources, provide stability and meaning to social life. Institutions are transmitted by various types of carriers, including symbolic systems, relational systems, routines, and artifacts. Institutions operate at different levels of jurisdiction, from the world system to localized interpersonal relationships. Institutions by definition connote stability but are subject to change processes, both incremental and discontinuous…

For the purpose of this analysis, the institutional context refers to rules, norms, and beliefs surrounding economic activity (Scott, 1995). This theory has been widely accepted within the fields of economics, political science, sociology, and business studies analyzing institutions as a collective (or ‘supra-individual’) response to societies needs (North, 1990, Powell and DiMaggio, 1991; Scott, 1995).

Spawning from a sociological discourse, resulting from the insights of Marx, Weber Cooley, and Mead, institutional theory legitimates institutions as a definition and a result of collective cultural and political systems (Meyer and Rowan, 1977; Scott, 1995; Peng and Heath, 1996). Such a rationalization, analyzes “the positions, policies, programs, and procedures of modern organizations” stating that their outcome acts as a blue-print shaping the way people in society think and behave (Meyer and Rowan 1977, p.343; Powell & Dimaggio, 1991).

North’s (1990) seminal work, in which he approached the theory economically stressed that institutions establish the rules of the game. These rules bind the individuals who participate within a framework of formal rules (such as laws and constitutions) and informal rules (such as norms of behavior, conventions, and self-imposed codes of conduct) and their methods of overall enforcement. These frameworks reinforce societal norms and provide constancy, whereby individuals are encouraged to recognize which choices are acceptable and tolerable – which in the end provide certainty within economic activity (North, 1990). The theoretical framework set forth by North, is furthered by Scott (1995) who states that institutional theory outlines sociological and economic standards that are complementary and reinforcing. To this end, a combination of both approaches seems necessary and will be used throughout this thesis.
Further to this analysis is the underlying assumption that institutional theory denotes a certain aspired – and latent progression - homogeneity both behaviorally and structurally (Baum and Oliver, 1991; Powell and DiMaggio, 1991). In the context of the cluster, institutional forms often dictate their development. For those firms that succeed in the market, other firms subsequently copy and mimic them in order to ensure survival and organizational success (Oliver, 1997).

Such isomorphism’s, are not without their critics who emphasize the happenstance, and long-term and passive attributes of this theory (Covaleski and Dismirth, 1988; Perrow, 1985; Powell, 1985). Further to this initial criticism is a question concerning the removal of individual agency, and the self-interest imposed by members in the market. Questioning this drawn aspiration towards conformity, Oliver (1991, Powell and DiMaggio, 1991) stresses that within parameters firms have operated unilaterally resisting institutional pressures in the hopes of employing strategic behavior in order to lead within markets, or shore up weakened states. This argument strongly dissents with the determinist arguments that stress that firms solely interact to environmental pressures through structural and procedural compliance (Powell and DiMaggio, 1991).

Yet, in the context of developing countries the governing institutions may house unstable institutional environments where weak and ambiguous regulatory regimes are often politically and economically unstable. Furthermore, institutional and infrastructural weaknesses may diminish the overall performance of the institution (Farashahi & Molz, 2005). This instability of public institutions may also necessitate firms to act defensively and offensively with respect to their own self interest and overall strategic behavior. As a result, one must analyze in detail the institutional forces that influence BA involvement on behalf of developing country cluster.

Rationally, in countries that exhibit a strong public sector, BAs recognize that their survival is best guaranteed through their efforts to conform and submit to the structures established by the state or the political force (Farashahi et al., 2005). This is not to state, however, that this presiding force is not without challenge. Under certain circumstances, lobbying and possible joint action may assist in improving business environments that can support cluster development. Within this context, the nature of the institution may evolve in order to adapt to the firms needs within the cluster.
Further yet, one could expect that institutional conditions could remain stagnant and disfavor firms to the extent that they act counter beneficially to the state (Farashahi et al., 2005). Such lack of institutional representation could create a void in which firms may shift to the informal sector. As a result, governments may aspire to take actions that bring firms from the informal sector back within institutional control. Depending on the nature and structure of the action, firms may wish to return to the formal sector, or consequently take steps to remain outside the purview of the institutional setting. In this context, however, the nature, the strength and the capacity of a BAs operating within such an environment will be highly limited. From the aforementioned statement, one could argue that a disjointed business environment may emerge where firms and the BAs that represent them would develop insular tactics, idiosyncratic to their organization or market specialization.

On the other hand, the nature of this thesis analyzes former ISI countries that through trade liberalization encouraging the formalization of firms and institutional structures. Importantly, transformation in world economic structures has unleashed competition between local clusters (Nadvi and Schmitz, 1999), city regions (Schoot 2001), and global value chains (Gereffi, 1994; 1999) where national borders no longer limit the flows of influence between these factors. The world economy’s governance patterns have shifted from those within the purview of the domestic institutional leaders, to instead being governed by global regimes like the WTO, EU, FDA, IMF and World Bank. In line with this logic, it would be permissible to suppose that multinational organizations complying (and at times influencing) the international rules and norms by such non-governmental institutions, could in themselves hold greater institutional control over firms through the establishment of GVCs. This idea may be best illustrated by Friedman who likens it to a golden straitjacket.

> As your country puts on the Global Straitjacket... two things tend to happen: your economy grows and your politics shrink... [The] Golden Straitjacket narrows the political and economic policy choices of those in power to relatively tight parameters. That is why it is increasingly difficult these days to find any real differences between ruling and opposition parties in those countries that have put on the Gold Straitjacket, its political choices get reduced to Pepsi and Coke - to slight nuances of tastes, slight nuances of policy, slight alterations in design to account for local traditions, some loosening here or there, but never any major deviations from the core golden rules (Friedman, 1999, 87)

> At its core, the study of institutional theory dovetails strategically into the examination of National Innovation Systems (NIS). This system analyzes the method and mechanisms of firm
based learning, knowledge creation and innovation (Ernst, 2002). As aforementioned and further complemented by this theory, concepts of innovation at the firm level are believed to be conditional to the role of the state and the industrializations of firms. Further to this analysis, NIS delves into the study of how national organizations establish institutions as support mechanisms to transmit technological and economic learning (Freeman, 1995). These arguments are furthered by Ernst (2002, p.498):

> The economic structure determines specialization (i.e. product mix) and learning requirements (the breadth and depth of the knowledge base). Institutions on the other hand shape learning efficiency: they define how things are done and how learning takes place. An important concern is ‘congruence’ of different subsystems, which is necessary to create a virtuous rather than a vicious circle.

To this end, while the former criticisms are heeded, the application of institutional theory draws useful insight into the role of BAs that assist in cluster development. This claim is further supported by Bjorck, who states, “that a cognitively oriented view is that a given institution may be encoded into an actor through a socialization process. When internalized, it [the actor] transforms to a script (or patterned behavior)” (Bjorck, 2004, p.48). Thus, by understanding the institution that operates and assists the cluster within the GVC, the researcher is able to understand the dynamics and flows of knowledge that may or may not successfully assist this cluster (Meyer and Rowan, 1977). This rationalization will, furthermore, place emphasis on whether BAs should be accepted and expanded as viable institutions.

### 2.2 Social Capital Theory

Intrinsic to cluster development is the examination of the value-generating potential of social capital. As a dynamic concept within the field of development studies (Coleman, 1990; Halpern, 2004; Field, 2002; Putnam, 2001 & 2004) Social Capital Theory is a concept that is unlike the economic interpretation of human action (*labor*) that simply measures resources that can be manipulated in conjunction to environmental factors. Being first presented by Pierre Bourdieu in 1977, his theory refers to knowledge that is embedded within the organizational relationships and routines of individuals (Burt, 1992; Bourdieu, 1977 & 1986), organizations (Nahapiet & Ghoshal, 1998), and societies (Putnam, 1993; Serageldin & Dasgupta, 2001). As stated by Bourdieu and Wacquant, (1992) SC is the agglomeration of resources – actual and virtual – that are developed and collected by individuals and shaped by societal factors. Such resources create networks of agents whose relationships can convert acquired forms of capital...
(i.e. financial, economic, and cultural) into other forms of capital that develop their position within society (Bourdieu, 1991). This frame of interaction is located in the field:

\[
\text{[that] can be described as a multi-dimensional space of positions such that each actual position can be defined in terms of a multi-dimensional system of co-ordinates whose values correspond to the values of the first pertinent variables. Agents are thus distributed, in the first dimension, according to the overall volume of the capital they posses and, in the second dimension, according to the composition of their capital—in other words, according to the relative weight of the different kinds of capital in the total set of their assets. (Bourdieu, 1991, p. 231)}
\]

Bourdieu’s arguments state that these agents are not the primary benefactors of social capital and do not comprise its primary unit of analysis (Bourdieu, 1977). Instead, social capital is dependent on cultural logic that creates as an outcome a hierarchical structure within society. This argument stresses that individuals with different social capital may better position themselves within society in order to reap the benefits of networks at the expense of those who do not themselves have access (Bourdieu, 1977).

In contrast, Robert Putnam (1993) repositions Bourdieu’s arguments at the individual level. He claims that individuals benefit collectively through social capital with knowledge and different forms of capital moving through societal networks. In line with the development of countries, democracy and economic growth encourages the formation of networks which assists the well-being of individuals overall. As put forward by Robert Putnam, social capital exhibits “features of social organization, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions” (1993, p.167). This argument is further developed by proposing that with the formation of networks, a common set of values and a sense of community with ‘moral resources’ are formed - creating a social framework that is reinforcing and supportive for the community (Potapchuk, Crocker, and Schechter, 1997). At the heart of this argument, trust becomes an operating and necessary term, creating a sense of commonality and direction when a society “confronts individualism as in the ‘tragedy of the commons’” (Putnam, 1993; p.172).

In light of this possibly reinforcing support structure, international organizations such as the World Bank acknowledged that social capital was a necessary ingredient for development. As stated on their website:

Social capital refers to the institutions, relationships, and norms that shape the quality and quantity of a society’s social interactions. Increasing evidence shows
that social cohesion is critical for societies to prosper economically and for
development to be sustainable. Social capital is not just the sum of the
institutions which underpin a society – it is the glue that holds them
together.(World Bank, 2001).

As a natural progression of the theory, scholars have exported this concept to the ‘upgrading
milieu’ analyzing how social capital affects the upgrading capabilities of firms both locally and
regionally. As outlined by Maillat, “upgrading milieus” are characterized by intensive
interactions among local firms as well as by other characteristics such as physical and
institutional elements, the local labor market and a willingness to learn” (Maillat and Lecoq,
1992; Maillat, 1995; Mitchell, 1999). The ability to draw from high-quality associations amongst
the local scientific, operational and financial systems encourages innovation to take place within
the milieu. Successful milieus are able to encourage innovation by drawing from their ability to
encourage cooperation between high-quality relationships. One of the leading academics in the
field, Storper (1995, p.203) states that, “the milieu is essentially a context for development,
which empowers and guides innovative agents to be able to innovate and to co-ordinate with
other innovating agents.”

There has emerged recently an extension to this theory entitled “linking” social capital
(Woolcock, 1999, World Bank 2001). This third concept prescribes that the different links
individuals hold to positions of authority strengthens or weakens their social capital. For
example, links to public administration (police, political authorities) and private (banks) may
expand or contract an individuals social capital ‘portfolio’ (World Bank, 2000).

Critically, social capital is plagued as being somewhat elusive academically. Throughout
the established research, there is a high degree of vagueness, with academics such as Durlauf
(2002, p.22) stipulating that, “The empirical social capital literature seems to be particularly
plagued by vague definition of concepts, poorly measured data, absence of appropriate
exchangeability conditions, and lack of information necessary to make identification claims
plausible.” This opinion is supported by Solow (1995, p.36), who in a response to a position
piece presented by Fukuyama, wrote: “If ‘social capital’ is to be more than a buzzword,
something more than mere relevance or even importance is required. ... The stock of social
capital should somehow be measurable, even inexactly.” Similarly, it is argued that no direct
causal effects have been documented, putting forward the question “does upgrading occur
because of the existence of a milieu, or does a milieu develop when there is upgrading”
A possible account for the possible weakness centers on the aforementioned concept of ‘trust’. Trust between individuals and firms in interorganizational settings as in the case of clusters, firstly, lessens the necessity to have rigid controls within the marketplace that bind innovation. As proposed by Quinn and Coleman (1979; 1990), rigid controls limit creative thinking and idea generation. Secondly, social capital theory within the upgrading milieu encourages the freer movement of new technological capabilities to permeate throughout the clusters (Quinn, 1979; Dosi, 1988). Clearly, a cause and effect argument may be formed whereby a clusters capacity to ensure the constant flow of innovation through knowledge acquired by dealing with the global marketplace, and R&D - at the regional level - may only be achieved through trust. This trust in turn offers the opportunity to clusters to innovate and develop economically.

This thesis will rely solely on the assessments on the objective measurements taken within the cluster. The clusters own assessment social capital strength will be weighed, in conjunction to the BA success proxies presented earlier.

2.3 **Transaction Cost Theory**

Principally, Transaction Cost Theory (hereinafter TCT) is a tool principally developed to analyze the “comparative costs of planning adapting, and monitoring task completion under alternative governance structures” (Williamson 1985, p.2). In questioning whether to insource or outsource certain productive processes, the unit of measure is a ‘transaction’ occurring when, “a good or service is transferred across a technologically separate interface” (Williamson 1985, p1). The weighing of costs arises due to the propensity for ex ante and ex post reasons. Ex ante reasons entail measuring the costs of drafting, negotiating, and safeguarding agreements between the parties to a transaction, while ex post reasons refer to maladaptation, haggling, establishment, operational and bonding costs (Williamson, 1979). To this end, producers must weigh the overarching costs attributed to executing this transaction inhouse, or with a transactually linked outside firm.

Influenced originally from Coase’s (1937) proposition that markets offer two different methods of organization, this theory was further extended by Williamson (1979) who stressed that there are certain costs that must be measured when investigating whether to undertake
different transactions. Williamson (1985) outlined two human behavioral factors and three environmental factors that would influence the decision process.

The human factors include bounded rationality which entails the incapacity of measure or perceive alternative outcomes (van der Steen, 2005). This inability to measure every state-contingent outcome results in a higher propensity for costs. Secondly, opportunism which is considered as an extension of self-interest that as Williamson (1985) expresses is self-interest with deceitfulness. While opportunism may not solely prove problematic for the functioning of a firm, its combination with bounded-rationality may compound the problem resulting in a diffusion of added costs and contracts.

Further to the human factors, the environmental factors include market uncertainty, the depth and break of the industrial structure (i.e. small numbers trading), and overall asset specificity (whereby certain transactions require specific assets) (Williamson 1979). These three forms of added costs are interrelated to the aforementioned human factors possibly aggravating these transactional outcomes. Decision makers often respond to increased uncertainty, asset specificity, and overall opportunism by integrating business processes within a hierarchical governance structure. This shoring-up of business practices may be decreased as greater familiarity and amortization of practices will dispel misperceptions and provide greater understanding of transactions that are taking place (Williamson, 1985).

While providing a useful theoretical framework, TCT is not without its criticism. It is useful to recognize some important weaknesses in the theory. Firstly, it must be noted that it is not possible to neatly compartmentalize productive processes, nor ascertain the direct influences or weaknesses of the specific transaction (Silverman, 2002). Secondly, allowances must be made concerning the rationality of the participants. While discussing bounded-rationality, there is little mention of other factors that influence decision-making processes (Perrow, 1985). Finally, as per Granovetter, (1985), little attention is paid to reputation and the trust held amongst participants in the transaction. Clearly, trust, reputation, and other forms of social relations, while not measured within this theory; do provide further consideration for participating firms.

Further to these criticisms, and in line with Roberts & Greenwood (1985), TCT does not take into consideration the market pressures that often dictate market relationships. Clearly, under conditions whereby perfect-competition is not possible, maximal decision processes are not possible thus directing decision making processes. Moreover, the institutional framework is
often neglected when ascertaining the governance choices of firms under TCT (Roberts & Greenwood, 1997).

In the face of such shortcomings, clusters operating within GVCs, must determine whether to internalize or externalize specific transactions. Specific to this thesis at hand, the nature of the transactions are sufficiently complex that such a theoretical framework can be better used to understand the factors that influence the costs of transactions. Critical to measuring the governance structures of clusters operating within GVC’s is the influence of socially representational BAs and the control they hold in further adding efficiencies to this system. While, TCT has been primarily applied to the developed world, necessary extensions must be made to the developing world. Such considerations include the fact that legal protocols and enforcement, along with social norms are sufficiently different, and that they may overarchingly influence the particular governance structures chosen by the firm. Clearly, market structures, will pose as a strong determining factor when allocating the appropriate governance structure.

2.4 Building a Theoretical Framework

This past chapter has attempted to amalgamate the aforementioned theoretical standpoints, linking these concepts which are at times in conflict with each other, through their complementary lines so as to elucidate the importance and impact BAs hold on the development of clusters in developing countries.

Critical to this thesis is the understanding of the role of BAs as purveyors of change within the complex environment of clusters operating within GVCs. Ultimately, their capacity to embed themselves in an effective manner is paramount to not only acting as a supporting mechanism but also creating dialogue between public and private sectors. Therefore, it is logical to lead with the institutional framework as an influential pillar that not only governs the actions of BAs, but also establishes the setting whereby these organizations may
wish to exact change on behalf of their participants (figure 1). As stated previously, the institutional framework establishes the rules of the game and dictates the interactions that govern professional business and economic activity (Scott, 1995). As a result, social capital theory, and TC Theory have been selected not only for how they respond to the norms established by institutional theory, but also in how they may exact change throughout the overarching model. Throughout this next section, the components brought together within the theoretical framework are assembled and related to each other.

As its *modus operendi*, institutional theory stresses that organizations are embedded – both socially and economically – within environments that reward those who comply with these pressures (Granovetter, 1985). This conformity, that often ensures the success of these firms to operate skillfully within the predominant structure, however, also creates environments where homogeneity and collusion may burden the business evolution (Oliver, 1997, Powell and DiMaggio, 1991).

In a divergent line of reasoning, social capital theory encompasses the “norms and networks facilitating collective actions for mutual benefits” (Woolcock, 1998, p 155). This social activism, collected through the compilation of social, circumstantial, and hierarchical norms establishes in itself an organizational behavior that is less formal and more difficult to map (Potapchuk, Crocker, and Schechter, 1997). While different in terms of the structures that are incumbent from the formation of such collectives, it would be permissible to propose that the institutional configuration that creates parentheses of action and participation with respect to business activities is also dependent on the social norms that are willfully chosen to be obeyed (Putnam, 1993; White, 2002). Accordingly, by linking institutional theory and social capital theory, these theories are able to complement each other and make up for their shortcomings. In light that social capital theory has been criticized for its vagueness and lack of scientific rigor, when combined with the institutional framework, which for example establishes bureaucratic structures, clearly shores up this theoretical perspective (Durlauf, 2002; Solow, 1995). Moreover, in terms of social capital theory, this thesis contends that the social norms can limit and/or support the bureaucratic structures that govern them, providing the possibility for dialogue and the encouragement for institutional evolution.

With this underlying structure, it then follows to investigate the application of TC theory in this developing market context. By placing TC theory as a node that interacts with the
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institutional framework and further complemented by social capital theory, such an addition will facilitate our understanding of MNCs and their interaction with clusters in developing countries. The introduction of TC theory may be viewed as complementary to the institutional perspective, due to that under both theories firms are considered as efficiency seeking while at the same time conceding the influence of institutional structures (Robert & Greenwood, 1997). Moreover, by placing TC theory within this framework, this alleviates some of the criticism faced by theorists who have been accused of viewing business organization solely in terms of efficiency optimizing. This philosophy has in many ways sidelined the role of organizations as influencing structures on businesses (Powell & DiMaggio, 1991). Yet in conjunction with institutional theory, one is able to focus the proposed framework that both accepts the role of the firm as an efficiency-seeking entity and that cohabitates within the institutional playing field (Roberts & Greenwood, 1997).

It has often been documented that the relationships between clusters and GVCs is highly competitive and at times one sided. In order to rectify this power imbalance, support structures that are capable of transforming business practices while at the same time monitoring work production trends should only be better able to serve the developing country cluster. Further yet, it is reasonable to suppose that any agent that is capable of change will lead to improvements and innovative practices that will permit competition and greater facility to operate within complex business system (Grossack, 1989; Schumpeter, 1961). This does not presuppose, however, that there exists the possibility for change that may be counter productive for the cluster itself, and that the BA may not always be operating in the best interest of the represented firms.

Further to this argument, it must also be recognized that this is an adaptive model, whereby the institutional and social structures of the cluster do benefit from the role of agents who act in the benefit of their interaction with GVCs. The opposite could also be stated that the increased presence of such agents (BAs) also encourages an increased set of expectations on the side of the GVC. The application of Schumpeterian creative destruction is also apt in light that his model presupposes a non-perfectly competitive model. Similar to clusters operating within GVCs the competitive advantage is located within the MNC (Winter, 2006; Schumpeter, 1950). What is novel by this approach is that while the system is non-competitive, the capacity for clusters to gain greater innovative capabilities through associations, may level the playing field and ensure that it is not solely a win-lose outcome.
In conclusion, the aforementioned theoretical models may be considered in combination, each providing a valuable node for measuring and documenting the innovative practices of clusters operating with GVCs. The nature of BAs who are themselves able to enact change through creative destruction on the side of the clusters may ensure the opportunity for continued competitiveness within the GVC.
Part II

3. At the Origin of the Concept of Clusters – Competitiveness and Locality

Vast numbers of empirical studies have been produced in the hopes of better understanding cluster success stories; such as the American Hi-Tech industry in Silicon Valley and Route 128 (Saxenian, 1994; 1996). Other notable cases may be found in the Cambridge and Oxford biotech industry clusters in the UK, and the Sophia-Antipolis science cluster in France (Raines, 2005; Owen-Smith and Powel, 2004; Feldman, 2002). Yet, out of all known cases, the textile industry of Prato, Italy spearheaded the world’s interest in the competitive performance of localized firms in the global market. Interestingly, this particular cluster managed to simultaneously maintain a control over design and production while also developing its own productive technology. This was a highly unique feature in that it enabled the cluster to maintain its specialization and sustain its strength in production (Belussi and Sammarra, 2005; Raines, 2005; Pietrobelli and Rabellotti, 2004; Humphrey, 1995; Humphrey and Schmitz, 2002a, Kaplinsky and Readman, 2001).

The Italian experience concluded that these groupings of firms represent networks that may result in a strong diversified private sector that ensures employment growth and poverty alleviation. As an extension to their local and regional development SMEs may benefit from participating in global markets, providing economic growth through the establishment of greater economies of scale (Pietrobelli and Rabellotti, 2004). A further benefit emerges through the prospect for greater learning opportunities, leading as Sengenberger and Pyke (1991) refer to as the “high-road” of competitiveness rather than the traditional “race to the bottom” or “low-road” approach (Nadvi, 1998; Humphrey, 1995; Robalotti, 1995). The key difference between the “high” and the “low-road” to competitiveness is often explained by the degree of possibility of firms to upgrade through the process of innovation (Pietrobelli and Rabellotti, 2004; Humphrey and Schmitz, 2002a, Kaplinsky and Readman, 2001; Porter, 1990). The comparisons between the “low-road” and the “high-road” can be illustrated in Stiglitz’s (2000) flow chart. Critically, the “low-road” has important impacts on the development of labor, production and capital markets. This leads to what many economists believe to be stagnation in the production process due to their inability to evolve and develop their productive competencies (Stiglitz, 2000, p.16). Various factors that influence employment as a result of the ‘low’ and ‘high’ road are illustrated in Figure #2².
At a theoretical level, public interest in cluster theory emerged with the rediscovery of Alfred Marshall’s *Principles of Economics*, which concentrated on the English textile industry and its capacity for firms to form economies of scale in uneven geographic concentrations (Bortagaray and Tiffin, 2000). As Marshall stated (1920, p.271-272) in his seminal work:

> When an industry has thus chosen a locality for itself, it is likely to stay there long: so great are the advantages which people following the same skilled trade get from near neighborhood to one another…. A localized industry gains a great advantage from the fact that it offers a constant market for skill. Employers are apt to resort to any place where they are likely to find a good choice of workers….; while men seeking employment naturally go to places where there are many employers who need such skill as theirs. The advantages of a variety of employment are combined with those of localized industries in some of our manufacturing towns, and this is a chief cause of their continued growth.

Clearly, the benefits of firms operating in close proximity to each other cultivates a form of common productive specialization, whereby a supply-chain of highly specialized workers within the localized environment provide for a more efficient division of labor (Belussi and Sammarra, 2005; Marshall, 1920). Through this specialization, firms are able to operate as leaders within industries, accessing intermediate inputs through local suppliers and cultivating business relationships based on intercommunication and knowledge-sharing as a means of improving production techniques and organization (Bortagaray and Tiffin, 2000; Altenburg and Meyer-Stamer, 1999; David and Rosenbloom, 1990, Marshall, 1920).

To date, however, no other academic has blended these two concepts of competitiveness and locality as successfully as Michael Porter, whose work on firm strategy proposed a theory in
which countries could sustain their large number of SMEs and at the same time successfully enter global markets (Porter, 1990).

3.1 The Textbook model – à la Porter

Starting from the work of Marshall, Porter worked towards finding a correlation between the spatial dynamics of firms and their overall productivity. In his work, Porter (1998, p.199) defines a cluster as, “a geographically proximate group of interconnected companies and associated institutions in a particular field, linked by commonalities and complementarities.” As a synthesis from his work analyzing the Italian experience, Porter emerged with four key factors characterizing clusters (Bortagaray and Tiffin, 2000; Altenburg and Meyer-Stamer, 1998; Rabellotti, 1995; Porter 1990):

- Clusters of mainly small and medium-sized enterprises spatially concentrated and sectorially specialized;
- A set of forward and backward linkages, based both on market and non-market exchanges of goods, information and people;
- A common cultural and social background linking economic agents and creating a behavioral code, sometimes explicit but often implicit;
- A network of public and private local institutions supporting the economic agents acting within the cluster.

These above-mentioned factors form the nodes of Porter’s famous above illustrated Diamond – Figure #3 establishing forms of competitive advantage to firms inhabiting a specific geographic area (Porter, 1990). Later, Porter expanded these points to include the role of government and the supportive role it can play to enhance, shore-up, and encourage cluster development – of which BAs play an integral part. The concept of chance was the final node added to Porter’s Diamond, whereby unknown and unpredictable circumstances can affect the
cluster. There was such a wide-acceptance of this theory to the point that it is now the primary theoretical model most generally used by academics within the fields of cluster analysis, industrial organizational theory, innovation, and localized firm strategies.

Capitalizing on the work of Porter and Marshall, Schmitz, in his seminal [1990] work, advanced the concept of Collective Efficiency (CE) which became readily applied in a macroeconomic context. This concept explains how networking and collaboration provides added competitive advantages of small firms within specific nations. This idea expanded onto the external economies’ explains that collectivism amongst the firms accounted for their competitiveness. Still further yet, Schmitz stated that (1999, p.73), “there is also a deliberate force at work, namely consciously pursued joint action. Such joint action can be within vertical and horizontal linkages.” Nadvi (1999, p.84) outlines these forms of linkages by stating:

(i) Joint action within vertical linkages including backward ties with suppliers and subcontractors and forward ties with traders and buyers;
(ii) Joint action within bilateral horizontal linkages between two or more local producers. This can include joint marketing of products, joint purchase of input, order sharing, common use of specialized equipment, joint product development and exchange of know-how and market information;
(iii) Joint action within multilateral horizontal linkages among a large number of local producers.

Accordingly, the concept of joint action may also be extended theoretically to BAs that assist in the development of clusters. This permits - as seen in the Italian industrial districts – the cluster to operate in many ways as a “complete” (or almost complete) productive organism (Beccatini and Rullani, 1996. p.164-165).

This is not to state, however, that Porter’s model and theory is entirely free from conceptual confusion. For instance, Porter does not limit the spatial boundaries of his system, going as far to stipulate that there can emerge “regional clusters” as in the Californian cluster of wine, and “national clusters” as the Italian cluster of fashion.

Clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutes (for example, universities, standards agencies, trade associations) in a particular field that compete but also cooperate. Clusters or critical masses of unusually competitive success in particular business areas are a striking feature of virtually every national, regional, state and even metropolitan economy, especially in more advanced nations (Porter 1998, p.197).

Under these circumstances, the frame of analysis can be expanded from sectoral, to spatial, to regional, and finally to national sphere of influence. However, in the hopes of remaining true to
Porter’s theories and at the same time permitting a clearer understanding of the case, sectoral clusters will be solely analyzed within this thesis.

3.2 Developing Country Clusters and their Evolution

It has been argued that there appears to be a clear path undertaken by all existing clusters: development, expansion, maturation, and transition (Belussi and Sammarra, 2005; Altenburg, 2000; Altenburg and Meyer-Stamer, 1999; David and Rosenbloom, 1990; Knorringa, 1999; Rabellotti, 1995). Taken from the industrial European example, the case of the Italian cluster formed a linkage in which SME clusters could develop, as stated by Humphrey, “arm’s-length relationships between end-used and a cluster of firms that contains both key manufacturing activities and the information-generating and information-processing capabilities needed to sustain innovation and competitiveness” (Humphrey: 2003 p.6). At the onset, locational conditions are the primary attracting force for cluster development, primarily centering around a lead firm that inhabits and environment that permits for greater growth within a sector. Accordingly, acting as a hub, a lead firm begins attracting other firms to the area and similarly spawns further firm creation, simultaneously developing support institutions that aid and enforce growth and greater cooperation within the cluster (Altenburg, 2000).

Concurrently, negative externalities emerge which include as Belussi and Sammarra affirm (2005, p.37), “congestion, cut-throat competition in final markets among local firms, increased prices for inputs and property, too much embeddedness of the institutional context, and locking in of obsolete and/or ineffective management practices and business models.” In spite of such externalities, clusters may rationalize and solve these problems through inter-organizational collaborative interaction; competition and rivalry amongst firms; and through spillovers attributed to social structures within the cluster (Malmberg & Power, 2005). Such reorganization and realignment to the necessities and demands of the market lead possibly to greater economic gains and an overall strengthening of the cluster within the country and market. The rationalization for this argument relies on microeconomic theories of perfectly competitive firms\(^4\) in which stragglers and free-riders who are unable to compete to the new demands of the market will be forced out of the cluster, making room for more competitive and economically viable firms.
Following the 1990s, studies of clusters in developing countries were widely undertaken. Interestingly, while these clusters were not identical to those of the Italian industrial districts – in terms of history, depth of market, and overall autonomy - they often held a number of the same characteristics as the Italian districts (Humphrey, 2003 p.7). Of the listed differences, historically the impact of government through policy, legislation, and support structures greatly influenced the overall performance of these districts.

These policies originated following World War II, whereby industrial policy in Latin America and Asia could be defined as having experimented in import substitution industrialization (ISI) between the 1950s and 1970s. While their exit from these specific policies can be noted as having occurred sequentially in different decades, the policies administered were the same (Barber, 2005; Amsden, 2001; Nelson 1993). Theoretically, ISI policies are founded upon the prominent Singer-Prebisch thesis, rooted in Keynesian economics, which places emphasis on the infant industry argument⁵. From these influences, such policies commonly include the subsidization and orchestration of the production of core products limiting the effect on the balance of payments (Singer, 1998). Such limitations are managed through barriers to trade, the overvaluation of currency, and the discouragement of foreign direct investment. The former protectionist policies were implemented in order to allow the industries of these countries to develop manufacturing experience and become more established, yet what resulted was a failure to employ innovative practices and upgrading at the firm level. Both regions were not forced to compete with foreign producers, resulting in firms failing to upgrade and innovate (Barber, 2005; Amsden, 2001). This resulted in limited industry growth and an overall failure of businesses to invest in innovative initiatives such as Research and Development (R&D) (Gereffi, 1999; Rabellotti, 2000; Fernandez, 2000; Furman and Hayes, 2004).

The remaining countries which held onto ISI policies reversed their development policies by the 1980s, initiating openness to international competition as well as investor scrutiny in the hopes of increasing capacity for upgrading and innovation within the region (Barber, 2005, Fernandez, 2000, Cooke and Gomez-Uranga, 1997).

Some of the irregularities within developing country clusters in comparison to the Italian district example are the following four cases:

Survival clusters of micro and small-scale enterprises are the most readily observed form of cluster, where the firm produces low-quality consumer goods for local markets. Entry and exit
barriers within this market are high, with firms operating primarily within the informal sector (Gereffi, 1994). As commonly seen, these clustered firms experience lower levels of productivity and offer lower wages than those enterprises of medium- and large-scale. Specific to this cluster sub-group, inter-firm specialization, cooperation and networking is low, illustrating a lack of local business and labor knowledge sharing (Gereffi, 1994, 1999).

**Advanced and differentiated mass producers** were the clusters which originally emerged during the era of import substitution. Firms varying in size from small- to large-scale producers centered their production activities in the domestic market (Cooke and Gomez-Uranga, 1997). With the ensuing trade liberalization and financial restructuring following the financial crises experienced in Latin America and South East Asia, these companies were required to enact structural changes in order to compete (Gereffi, 1994, 1999; Furman and Hayes, 2004). Among these requirements was the adoption of modern business practices, the entry into international business markets, the increase in spending on R&D, and the better sourcing of inputs. Similarly, successful firms who remained within the market after liberalization understood that in the place of their once insulatory governmental relationships, increased inter-firm relationships within the cluster would have to develop. Examples of such structural changes may be found when firms in both Asia and Latin America could no longer rely on government subsidies and preferential trade agreements to facilitate their business practices (Leonard, 2006). In their place joint action through the collectivization of business needs proved to hold greater results.

**Clusters of Transnational Corporations** (TNCs) produce and operate within technologically more complex environments, such as in the productions of electronics and automotive products. In these clusters there are lead firms which are usually large branch plants of world-class manufacturers’ producing products for both local and international consumption (Gu, 1999). Such clusters, typically isolated in their emergence, never form inter-linkages with other SMEs and institutions (Humphrey and Schmitz, 2002; Gereffi, 1994, 1999). The establishment of such clusters is a direct result of the lead firm maximizing the competitive advantages (i.e. labor, resources, and location) of the local market. This lead firm - which is often a non-national firm – undertakes directive control of the cluster and manages the productive process under very tight transaction cost guidelines. This structure is often seen in the automotive industry in Mexico, which operates under strict guidelines from foreign automotive firms (Sturgeon, Van Biesebroeck & Gereffi, 2008).
Spin-off Clusters are typically groups of SMEs which through previous professional experiences learned from their interaction with one of the three above-mentioned types of clusters. They accordingly branched-out and developed clusters of their own as a means of meeting recognized market potential both domestically and internationally (Furman and Hayes, 2004). Such a structure emerges and competes successfully in the market care of a domestically cultivated management force who maintains valuable educational and technological networks (Gereffi, 1994, 1999).

The first three above-mentioned clusters represent as what Mead would call supply-driven manufacturers, while the final structure represents a demand-driven agglomeration of firms who are able to maximize on their own innovative skills. They consequently control areas of the market that had not been previously filled (Mead, 1994; Bortagaray and Tiffin 2000). In conjunction, the nature and form of the above mentioned developing country clusters dictates the interaction these clusters hold with world production markets.

3.3 The Global Value Chain Approach

In line with the movement away from ISI policies and the decreased prominence of the state as the purveyor of development, changes have emerged in the global production, distribution, and financial channels and markets (Duran, 2006). Consequently, by analyzing Global Value Chains (GVCs), one is able to take into account activities taking place outside the cluster, and more particularly understand the fundamental role of these relationships (Gereffi, 1999; Arndt and Kierzkowski, 2001). As extended by Feenstra (1998) the “integration of trade” has developed with the “disintegration of production”, whereby, in order to experience greater returns of scale, companies are finding it more advantageous to outsource non-core manufacturing and service activities (Yeats, 2001). Arndt and Kierzkowski (2001, p.4) further this line of reasoning by stating: “The separability of ownership is an important determinant of the organizational structure of cross-border production sharing. Where separation of ownership is not feasible, multinational corporations and foreign direct investment are likely to play a dominant role. Where it is feasible, arm’s-length relationships are possible and foreign direct investment is less important.” Through measuring of trust, reputation, mutual dependence, and technological capitalization, GVCs decide which methods of investment and relationships they wish to form with the production environment (Gereffi, 2003).
Furthermore, Penrose (1959) rationalizes that the main reason why firms are prepared to develop complete inter-firm relationships is dependent onto what extent the lead firm in the GVC is able to retain their core competencies. These competencies represent resources that the firm can leverage in the global production market, which are difficult for competing firms to replicate. Such perceptions ultimately dictate how firms and clusters are to integrate with a GVC stressing a power relationship with the lead firm who is continuously trying to defend its core competencies. Similarly, there is value in analyzing the influence of GVCs on the development of clusters, because GVCs are primarily concerned with the efficient supply of goods and services, including the distribution and marketing (Gerlaffi, 2001; 2003).

While these factors contribute to the total value added within a GVC and a possible value actualized by the cluster, they also dictate the production possibilities experienced by clusters (Humphrey and Schmitz, 2002; Kaplinsky, 2000; Wood, 2001). As previously stated, the nature of a firm’s core competency is related to its capacity to innovation and upgrading. These capabilities are a result whereby R&D may be transformed into profits. Rarely do firms outsource their knowledge or educational capabilities, because these represent both present and future profits. Instead, firms outsource factors within their value chain that pose the least transaction losses for themselves as well as the lead firm (Kaplinsky, 2000). Such relationships are of critical concern for clusters that operate within value chains. Critically, governance is fundamental to the analysis, due to that it can dictate the relationships formed between the lead firms and participating firms and clusters. More specifically, it outlines the possibilities for innovation and upgrading by the contributing firms. As a complement to the various governance structures employed within value chains, the role that Bas play in supporting clusters within value chains is of key importance. According to Sturgeon, GVCs are governed by one of the five different typologies (as illustrated in Figure #46).

Markets. This concept is most closely related to perfect competition model, where transactions are carried out by firms based on price specification. Such linkages can result in repeat business and the strengthening of relationships however, transaction costs of ending a relationship in this model is relatively low for both parties (Gerlaffi, 1998; Rabellotti, 1999).

Modular value chains. Within the structure of value chains, suppliers produce products based on consumer specifications. Such specifications can be extremely detailed, yet the supplier takes full responsibility of the competencies and requirements in the manufacturing of the product. Within
this relationship, a supplier undertakes the processes of technology upgrading, innovation and the capital outlay for components and materials on behalf of the customer (Gereffi, 1998; Rabellotti, 1999; Humphrey and Schmitz, 1997).

Relational value chains. Quite possibly the most complex form of governance structure, business and sellers interact extensively, creating a mutual dependence and high levels of asset specificity. Such relationships are developed primarily through reputation or family and ethnic ties. Moreover, they cultivate lasting opportunities for the coordination of greater diversification and depth within the production process as a means of benefiting all firms involved (Schmitz and Knorringa, 2000).

Captive value chains. Within these structures, smaller suppliers become transactionally dependent on a much larger buyer. Traditionally, one of the more pervasive types of relationships found in the developing world, suppliers constantly have to ensure that they are providing the product at the lowest price, being “captive” in terms of their firms’ operations and development. Similarly, there is a high degree of monitoring undertaken by the lead firm who aspires to receive its product at the lowest cost (Humphrey and Schmitz, 2002; Powell, 1990).

Hierarchy. Characterized by a complete vertical integration of the firms, the primary form of control is managerial with the lead firm’s headquarters dictating the direction of its subsidiaries and affiliates (Powell, 1990).

Clearly, from the aforementioned typology this furthers and dictates the structure of the developing country cluster. These interactions, run parallel and often dictate the mode through which these groupings of firms interact both within themselves and the export market.

3.4 Sectoral Dimensions to SME Cluster Upgrading

Innate to the concept of cluster development and influenced by the governance structures established in GVCs, the concept of upgrading – the act of making better products, more effectively, or moving into more skilled activities is relevant (Porter, 1990; Kaplinsky, 2000). To
a large degree, the concept of upgrading is directly related to innovation where Gerrefi (2003, p.12) defines “upgrading as innovating to increase value added. Enterprises may achieve through different means, as for example by entering higher unit value market niches, by entering new sectors, or by undertaking new productive (or service) functions.” Innovation can be classified as an incremental evolutionary process, where improvements are enacted in the firm in order to keep up with changing international specifications (Gerrefi, 1999, 1994; Dicken, 2005). Yet, for the nature of this thesis and in the context of developing cluster firms operating within quasihierarchicval value chains, the concept of upgrading will be soley interpreted. This does not dismiss the importance, not relationship innovation has to this discourse, but merely centeres the thesis towards one analyzed factor.

Five specific forms of upgrading can be identified (as illustrated in Figure #5) from academic literature. **Process Upgrading** (as denoted in the Sinon Valley footwear industry, Schmitz, 1996, 1999) where the process of more efficiently producing outputs is governed by improvements in input manipulation. Often, such upgrading is assisted by the adoption of superior technological capabilities. **Product Upgrading** denotes the expansion of production lines by firms who work towards seizing greater market share. Gereffi (1999) provides the example of Asian upgrading in the apparel industry, where firms start producing for discount chains and department stores. **Functional Upgrading** is achieved by obtaining new and superior functions within the value chain. This usually occurs when one acquires superior functions in the GVC whereby low-value added functions are disbanded and high-value activities are encouraged by the cluster. The blue-jean industry in Torreon Mexico is a regularly sited case, where presently, the maquiladora firms are undertaking full-package manufacturing within the apparel industry (Gerrefi, 2001). Taiwan’s experience in the production of TV monitors encouraged their growth into the computer sector and this consists of an example of **Intersectoral Upgrading**. Such upgrading encourages firms to place preestablished competencies within a new sector permitting for greater development within the
national economy (Humphrey and Schmitz, 2002; Petrobelli, 2004). A further option is Marketing Upgrading which refers to a shift within the GVC, whereby one is producing products with higher-value added (Humphrey and Schmitz, 2000; Gerreffi, 1999; Giddon, 2003).

In the face of this new current of open markets, the added benefits of external economies of scale and the possibility of spillovers permit small firms within developing countries to not be relegated to the informal sector. This necessitates a more competitive stance within the market as all firms are required to compete on quality, price, and worldwide delivery of goods (Gereffi, 2001). To this end, not all developing country firms and clusters are able to successfully compete in the global division of labor and specialization. Instead, this draws the readers attention to the understanding that in the global market there is a clear distinction between the concept of internationalization and globalization of trade. As emphasized by Dicken (1992), globalization does not solely denote the expansion of trade. In comparison:

‘Internationalization’ refers to simply to the increasing geographical spread of economic activities across national boundaries; as such it is not a new phenomenon. ‘Globalization’ of economic activity is qualitatively different. It is a more advanced and complex form of internationalization which implies a degree of functional integration between internationally dispersed economic activities (Dicken, 1992: 1).

Furthermore, in GVC literature, the main differentiation is between buyer-driven versus producer-driven chains, and sectors usually fit in either form.” In light that global buyers often originate from developed countries, quasi hierarchical relationships classically form with clusters in developing countries. This relationship dictates the methods through which the cluster may upgrade in ‘order’ to maintain their position within the market. Thus, the relationships prescribed by the internal governance of the value chain can hold important implications in terms of the scope of local cluster upgrading (Humphrey and Schmitz, 2000).

In response to these new pressures, and in line with Porter’s theory, greater emphasis on the role of joint action has emerged analyzing the role played by these firms in internationally-dispersed but functionally-integrated economic relationships. And as these firms most definitely collide with the stresses of international trade and the ever expanding quality standards, BAs are viewed as one of the primary sources of business support for these developing business structures.

3.5 The Business Association – A Pluralist Tool for Change
Local BAs are often viewed as key members of the business community voicing the collective interests of the firms they represent. In line with the classic examples of cluster theory, Nadvi (1999) states that BAs offer highly varied services, providing important assistance to local firms in terms of navigating regulatory requirements and establishing collectivism within the cluster. Best (1990), using the example of the Italian confederation of artisans (CNS), stresses how the BAs were able to provide local producers with guidance concerning managerial, financial and technical problems. Similarly, Schmitz (1992) analyzes the Baden Wurttemberg industrial district, emphasizing the assistance that BAs played in offering legal, technical, and strategic advice to German SMEs. In yet another case, Albaladejo (1998) outlines the positive benefits accrued by firms working in conjunction with business and technical association in the Spanish region of Valencia. Often times, these associations were established in union with local and regional government bodies. (Best, 1992; Schmitz and Musyek, 1993; Nadvi 1999).

At its core, the term “business association” includes a plethora of membership forms where businesspeople or firms are brought together with like business concerns (Moore & Hamalai, 1993). Moore and Hamalai (1993, 1896-1897) state:

That business organizations encompass an enormous variety of organizations: big or small; national or local; encompassing or (sub) sector-specific; individual membership associations, federations of smaller associations and mixtures of the two; voluntary or statutory; closely associated with government agencies or independent; wealthy or penniless; institutionalized or ephemeral; run by professional staff or by a single officeholder; exclusive and discriminating over membership or open to all comers; and politically vocal or quiescent.

Taken from his comprehensive study concerning political organizations in the United States, Wilson (1973, p.144) cites three principal reasons as to why BAs are relatively numerous in comparison to labor and farm associations:

1. Firms do not face resistance from workers when forming associations; workers may face resistance from employers.
2. Firms have higher incomes, and the financial cost of supporting associations is thus relatively lower.
3. The smaller numbers involved make it much easier for firms to organize: the costs of communication among (potential) members are low relative to income, and the “demonstration effect” of a single large firm joining an association is more visible.

While providing a framework for the establishment of BAs, Wilson’s aforementioned points are by no means exhaustive. Adding to further consideration, Moore and Hamalai (1993, 1897) state that, “BAs typically face few external “reality checks” on the legitimacy of their organizations
existence.” Their ability to always remain relevant in the face of economic woes or changes is always called into question. Providing that their services are deemed valuable, members will continue to pay membership fees for the ability to participate and be represented by the organizations (Moore and Hamalai, 1993, 1898). Secondly, and as supported by Offe (1985, chapter 7) the propensity for individual firms to join more than one BA, rationalizes the reasoning as to why these organizations are more numerous, in the face of unions – whose members (workers) are only required to join a single representative organization. In the same line, businesses thirdly, have a higher predilection towards disputing government decisions creating adversarial organizations to voice their concerns. Fourthly, the variety of shapes and sizes of BAs often denotes the specialization they wish to represent, with larger BAs taking issues to the national level, and smaller BAs defending as well as representing local issues. A coexistence, emerges that supports and complements each form of BA. The fifth reason, can be deemed as self-serving in which BAs are specialized as Moore and Hamalai, (1993, p.1898) “exist to protect and preserve an existing “rent” or privilege, and exclude others from enjoyment of it.” The final reason as to the large number of BAs in existence is that these organizations may have interests other than the firms they represent. These self-interests dictate their entry into the market (Grant, 1987, p. 97). The “organizers” of such BAs, as Moore and Hamalai (1993, 1899) state are, “senior administrative employees of the association, whose salary, status, career prospects and opportunities for supplementary remuneration are perceived to be linked to the success of the organization in terms of its financial turnover, the volume of its activities, and the extent to which it can command the attention of influential external agencies, notably government and, perhaps, aid agencies.” This aforementioned testimony does not discount the possibility, however, that such organizers may hold positions within BAs for corrupted reasons other than the benefit of the organization as a whole.

To date, limited empirical research has been conducted on how clusters can actually develop strategies and capabilities that enable them to simultaneously maintain their position within global value chains, and ensure further expansive ‘upgrading’ and development within their home economy (Humphrey & Schmitz, 1999). In light that there has been little research it does not preclude the fact the above mentioned cases outline the possible role that BAs on the development of industrial clusters. The organizations may support their members through “market-complementing” and “market-enhancing” activities. As presented by Doner and
Schneider (1998, p.11), “These include: horizontal coordination amongst producers; vertical coordination of upstream and downstream linkages; the setting and enforcement of product standards; and the provision of information and technical training.” However, the nature, benefit, and overarching efficacy of the BA is not always questioned or thoroughly analyzed. As such, the reader must accept that BAs are not always unanimous or magnanimous in their actions. Instead, their viability for continued presence within the market depends on their ability to compete with other such organizations, which does not always ensure overarching firm cooperation and development (Moore and Hamalai, 1993). In the same line, this lack of coordination may hinder the efficiency and/or development of clusters operating within GVCs, failing to react strategically to the altering changes within the market. Such weaknesses may correspondingly impact the efficiency and upgrading capabilities of these firms, overarchingly impacting the economic growth of the firms within the cluster and the overall development of the region and country.


As illustrated in the aforementioned section, it is often clear that BAs play a significant role assisting industrial clusters to update and improve their position within the global economy and their value chains. Critical to this understanding is the necessity for an in-depth analysis of specific cases that may highlight and broaden our understanding of their role within BAs and overarchingly test the hypothesis presented within this paper. The remaining sections of this thesis provide a detailed analysis of the specific functions undertaken by each BA within the three case studies. Following the analysis of the case studies, Part III of this thesis, applies the theoretical model in order to draw conclusions. Only through this in-depth analysis may conclusions and recommendations be drawn so as to broaden our understanding of the supportive roles played by BAs.

4.1 Business associations and the opportunity for upgrading in Brazil’s Sinos Valley shoe Cluster
The term “supercluster” has often been used to describe the Sinos Valley shoe cluster (Schmitz, 1995). Comprising 693 firms, employing 101,000+ employees the cluster is the amalgamation of 25 cities, within the Southern State of Rio Grade do Sul, in Brazil (refer to Table #1) (ACI, 2000). As of 2000, the entire Brazilian footwear market produced 580 million pairs with 163 million pairs sent to export. Interestingly, of the above mentioned exported quantities, 84 percent originated from the Sinos Valley (Bazan & Navas-Aleman, 2004). There documented sales were upwards of US$ 2 billion in worldwide footwear sales (Abicalçados, 2002). Globally, it is the third largest shoe manufacturer, holding 12 percent of market share. The Sinos Valley differs from other shoe manufacturing districts in Brazil, in that it holds a large number of supplier inputs, machinery, and shoe-components producers. The act of subcontracting is widely used, and resulting in widespread economies of scale and scope (Schmitz, 1999). Furthermore, as a number of academics have noted (Schmitz, 1999, 997; Bazan, 1997, Klein, 1991) the Sinos Valley represents a rich environment where business associations and public-private technology and training centers interact. The majority of these centers were developed in the 1960 sand 70s.

<table>
<thead>
<tr>
<th>Region</th>
<th>Rio Grande do Sul</th>
<th>Sinos Valley</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sector</strong></td>
<td><strong>Firms</strong></td>
<td><strong>Workers</strong></td>
</tr>
<tr>
<td>Footwear Producers</td>
<td>367</td>
<td>88083</td>
</tr>
<tr>
<td>Tanneries</td>
<td>91</td>
<td>15181</td>
</tr>
<tr>
<td>Machinery Producers</td>
<td>90</td>
<td>5935</td>
</tr>
<tr>
<td>Input Suppliers</td>
<td>222</td>
<td>23132</td>
</tr>
<tr>
<td>Export Agents and</td>
<td>93</td>
<td>1296</td>
</tr>
<tr>
<td>Transportation firms</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>863</td>
<td>133677</td>
</tr>
</tbody>
</table>

ACI (2000)

US ex-producers and buyers for international markets recognized the strong possibilities that were held at this location. Not only was it a strong sourcing location, Bazan & Navas-Aleman (2004, p.113) state “[that] First, it was a well-established cluster, with a long experience in serving the huge Brazilian market. Second, it had already consolidated an extensive network of input suppliers. Finally, it had specialized support institutions.” Following the 1960’s, the insertion of the Sinos Valley into the footwear value chain incurred a remarkable trajectory into international export market with local producers experiencing record growth rates.
In the face of such promise, it is worth noting that there is unmet potential within the Sinos Valley cluster. Principally, Brazilian footwear is a commodity, as opposed to a design or a label, in which the majority of shoes reach a price of between US $10-11 (Bazan & Navas-Aleman, 2004; Abicalçados, 2002). And while, according to Schmitz (1998), the nature of upgrading in their productive processes was notable, it is worth noting that the cluster has failed to functionally upgrade in the areas of for example marketing and branding. Accordingly, they have failed to reposition itself within higher value-added products. Certain academics (Schmitz 1998, Humphrey 1997; Himalai & Moore, 1999) would stress that this is a result of where and how the cluster was inserted into the value chain. While this claim is often correct, in the case of the Sinos Valley, the consolidated power of few large firms resisting change may account for how the cluster in many ways stagnated. Essentially, one US buyer was purchasing close to 100% of all export direct production, which accounted for to 50% of the clusters total production (Schmitz, 1998). These large firms were more concerned in upsetting their principal buyers than searching for means to improve and develop their cluster. To this end, it may be concluded that the Sinos Valley was inserted into a quasi-hierarchical value chain.

4.2 The Value Chain for the US Market– a Hierarchical Structure

The US has long held and important position with the Sinos Valley, controlling roughly 69 percent of total Brazilian footwear exports in 2000 (Abicalçados, 2002). The nature of governance within this value chain will illustrate the capacity for upgrading faced by firms within the cluster. As stated previously, the US value chain is a prime example of quasi-hierarchy. As stated by Bazan & Navas-Aleman (2004, p.114), “The US is the largest importer of footwear in the world, buying more than 23 per cent of all the world’s trade and is also the host location of the majority of branded retailers that source their products from the developing world.” With this position, the US governs the value chain and dictates much of the clusters performance activities. This has resulted, principally, in the US buyers who pressure Sinos Valley producers to continually lower production costs. To this end, the US buyers exude the principal examples of a quasi-hierarchical value chain, in which the buyers are in control over the productive agents that is often described as ‘convening power’ (Bazan & Navas-Aleman, 2004).9
There are multiple examples of this power imbalance. Firstly, a limited number of agents are closely related to the US retailers. These US retailers control a large market share of exports produced in the Sinos Valley. As outlined by Bazan & Navas-Aleman, (2004, p.115):

Throughout most of the 1980s and until 1998-99, the main export agent in the cluster (closely linked to one US retailer) accounted for between 40 per cent and 50 per cent of the clusters’ exports. Other agents (10 in total), when added together were responsible for another 30 per cent to 40 per cent and the remainder was in the hands of the smaller agents in the cluster.

Secondly, there is large scale resistance towards knowledge sharing on higher value added activities. Limited producers who have been able to foray into more advanced design, branding, marketing and chain coordination do not choose to share their information and knowledge with other producers, in fear that there may be further competition (Bazan & Navas-Aleman, 2004). Thirdly, buyers in the US market hold the advantage of different sourcing options with producers in China, Spain, and Portugal. Should the Sinos Valley producers fail to meet the terms dictated by the US buyers they could always easily exit Brazilian contracts and access other international producers (Schmitz, 1999). Fourthly, the aforementioned flexibility held by the buyers was not held by Sinos Valley producers, due to that the cluster failed to initiate widespread original design and marketing channels in different markets of the US. Finally, the shear size of US contracts was far larger than any other markets, coupled with the small number of importers negotiating for product. Clearly, for these reasons the US value chains had a dramatic bargaining power towards its Brazilian suppliers.

A key benefit in analyzing this weakened high-yielding cluster is to analyze the nature and the type of upgrading as dictated by the US buyers. The principal line of concentration for the US value chain emphasizes cost cutting initiatives. A primary technique is to limit the number of rejected pairs of shoes in terms of quality. Moreover, there is a heavy concentration on the reduction of wasted materials so as to
lower overall costs. A useful diagram (*Figure #6*), developed by Bazan and Navas-Aleman (2004, p.117), outlines the core investment areas undertaken by the US chain. These pressures have resulted in the Sinos Valley developing highly competent footwear producers, who are often considered just as efficient as their Italian counterparts. Obviously, the main consideration is on price, while at the same time demanding ever better quality from the producers. This is complemented by Bazan and Navas-Aleman, (2004, p. 121) who state that, “what US buyers want is a better quality for the lowest price possible and this expectation makes it difficult for them to sustain trustful relationships within their footwear producers.” Clearly, the presence of numerous possible suppliers places increased pressure on price-cutting initiatives decreasing the transaction costs incurred by changing supplier. This limits the nature of relationships between the US and the Sinos Valley with the later primarily concerned with process and product upgrading and at times neglecting functional upgrading. Such forms of relationship hamper the ability of the cluster to develop and functionally upgrade.

### 4.3 Sinos Valley BAs - A Reorienting Entity in Parts

In line with the specialized nature of this cluster, is the important presence of BAs that have long operated within the productive environment. In total there are six associations, each representing specialized and differentiated needs of the industry – two professional associations, four technical and training institutes, and a trade fair body (FENAC). These associations work towards representing the interests of the Sinos Valley both nationally and abroad.

In order to best measure the efficacy of BAs, it is obvious that one must analyze their actions within clusters when conflict and increased competition emerge. This form of analysis allows for greater understanding in how threatened clusters are able to remain in the market and refrain from suffering further losses. In the case of the Sinos Valley, their prolonged dependence on US buyers limited their capacity to functionally upgrade and often solely permitted productive process upgrading alone. Clearly, this is a limited economic position that holds no great efficiency for the cluster. Moreover, with the increased openness of Brazil and the more global nature of the market, a number of economic shocks have placed increased pressure on the manufacturers of this cluster, resulting in a lapsed decade questioning the relevance of the representational BAs.
Historically having a number of well-established support mechanisms assisting the development of the cluster, Geriffi’s buyer driven commodity chain can best describe the footwear industry (Geriffi, 1999). As outlined by de Souza (2005, p.2):

A buyer-driven commodity chain refer to those industries in which large retailers, branded marketers and branded manufacturers play pivotal roles in setting up decentralized production networks in a variety of exporting countries. Buyer-driven chains are closely tied to relational rents, which refer to several families of inter-firm relationship, including techniques of supply-chain management that link large assemblers with small and medium size enterprises, the construction of strategic alliances, and small firms clustered together in a particular place and displaying elements of collective efficiency.

Critical to the Geriffi argument is the fact that buyers will often shift their imports from one zone to another when they believe they can reduce costs (Geriffi, 1999). In the case of the Sinos Valley, US buyers eventually shifted their orders to the price competitive Chinese market. This resulted in a significant decrease in export sales for the Brazilian cluster. When comparing 1997 export figures to 1993, the Sinos Valley witnessed a 30% decrease in market share (Nadvi, 1999). The ever present strength of the Chinese manufacturers remains a permanent challenge to the Sinos Valley, requiring a rigorous effort in order to remain competitive.

On the side of the global buyers, the possibility for purchasing from the China offered an option to diversify their portfolio of sourcing options. As a means of insulating their operations from sudden rises in prices and overall economic and policies crises, such a move would also alleviate possible sourcing dilemmas. Such precautions, were especially deemed as well founded between 1994 to 1998, where the new Brazilian currency (the real) gained relative strength – most notably in comparison to the weakened Euro (Bazan & Navas-Aleman, 2004).

Traditionally, practitioners would recommend for the Sinos Valley to reorganize production and upgrade in order to maintain and reorient market share (Schmitz, 1995; Nadvi, 1999; Ilias, 2005). As recommended previously, the process of upgrading will require improved productive capabilities, the capacity to adapt to shipping and delivery standards and at the same time the capacity to seek greater value added markets (Geriffi, 1999; Schmitz, 1996). Key to this analysis is the expected increase in multilateral joint action through participation with BAs that often result during such economic difficulties. As concluded by Schmitz, (1999, p.21) “multilateral cooperation (participation in the Business Association) increased only slightly but showed a significant positive relationship with performance.” Yet, upon closer analysis, while
there was increased activity, qualitatively this decade failed to produce a collective response to the new competition, resulting in uneven upgrading and innovation within the cluster (Nadvi, 1999). To date, while still remaining a major market competitor, the failure of joint action in terms of response, continues to hinder the perception and overall efficiency of the cluster worldwide.

4.4 History of BA participation

Prior to substantiating the aforementioned statement through an in-depth discussion as to the actions of the Sinos Valley BAs, it is first beneficial to better understand the historical role played by these BAs in the development of the cluster. Since initial entry into the export market, Schmitz (1999, 1996) documents the important role played by BAs in the development of the Sinos Valley cluster. Working initially to establish trading links between local producers and global and local shoe traders, such work started in earnest in the mid-1960’s with the development of the umbrella association, Business Association of Novo Hamburgo (ACI-NH) in collaboration with the trade fair association FENAC. As stated by Schmitz, ACI with “FENAC played a major role in the late 1960s/ early 1970s in bringing foreign buyers to the Sinos Valley and taking local manufactures to fairs abroad” (Schmitz, 1995, p.19). These efforts on the side of the BAs resulted in the establishment of export networks that linked local producers to global markets, census data was regularly taken in order to gage the export markets, coupled with public sector advocacy within the federal and local governments (Nadvi, 1999).

The success of these initiatives resulted in the extensive export growth of the cluster, but also led to increased conflict between the various interests of the cluster. As a result, a number of new associations emerged representing the interests of the local tanners, the component producers, the machinery suppliers, the export agents and the large shoe producers (Nadvi, 1999). Critically, in the 90s, there emerged from advocacy a cluster wide shift increasing attention to sub-sectors within the cluster. In a pronounced fashion, this emergence of sub-sectors coincided with the increased competitive pressures faced worldwide by the Brazilian footwear industry. As stated by Nadvi (1999, p.13) “The growing fragmentation within the cluster prompted a process of “collective failure in the face of the new demands. Institutional joint action has taken place, particularly in some of the sub-sectors, however, conflicts between specific sub-sector associations have effectively weakened cluster-wide upgrading.”
With the continued stresses of China’s involvement in key market areas, and with the failure of sub-sector advocacy, an attempt to establish an umbrella organization in 1991, named the Industrial Chamber, was initiated (Schmitz, 1998). This market initiated response failed, and was later taken up by the Brazilian Federal government, in 1992, which aspired to establish an upgrading program. The program entitled ‘The Quality and Productivity Programme’ aspired to mediate present internal stresses within the cluster and establish collaboration between various interest groups in the sector, similarly failed (Nadvi, 1999).

Still further, the Association of Shoe Producers (ABICALÇADOS) undertook an elaborate and large-scale approach towards consolidating this failure in joint action. In organizing a seminar “Partnership in Footwear Supply Chain”, with over large sub-sector associations, the seminar was well attended resulting in a policy initiative been formulated in 1994, entitled “Shoes for Brazil Programme”. As its primary focus, the policy and directive aspired to bolster the Sinos Valley’s footwear supply chain, through improved vertical cooperation between firms. This seminar, as stated by Schmitz, was “formally endorsed and actively supported by all the relevant association. It proceeded by setting up six working groups each with a brief to diagnose, make proposals for action in specific areas such as marketing abroad, marketing in Brazil, reorganization within the firm level, relationships within the supply chain” (1998, p.34). Critically, this initiative was very well received, “Precisely because the main stakeholders participated in the diagnosis and prescript that was a good basis for proceeding to the next stage of implementing some of the ideas put forward” (Schmitz, 1998, p.36).

In the end, this initiative also failed to produce a collective response to the various weakening elements of the Sinos Valley footwear supply chain. And while initiatives to revive in the following years were undertaken by other BAs such as ASSINTECAL (Component Manufacturers Association) the sub sector interests were and are scattered between the sub-sector interest groups. While Schmitz is very quick to stress that, “one key element in the decline of the supply chain upgrading initiative was the inability of the State to intervene and mediate between the conflicting interests of specific elements of the shoe sector supply chain” (1998, p.38). It is believed that should this have been done, the prospective for an effective upgrading initiative for the sector as a whole could have been more greatly supported. Yet, in light that outside mediation was not offered, such recommendations should only be considered postscript. Instead, greater emphasis must be placed on analyzing the conflict between various sub-sector
interest groups, which illustrates the evolution of the cluster, as particular members entrenched themselves with external interests not in-line with the cluster as a whole.

4.5 The Warring BAs of Sinos Valley

Principally, it would seem that the failure to mediate the internal conflicts of the cluster and ensure cumulative functional upgrading within the supply chain was a result of divergent BAs – ASSINTECAL and ABRICALÇADOS, who as per Schmitz, operated with very different governance and ‘mental models’ (1998). ASSINTECAL views the wellbeing of its members (primarily suppliers and component producers) as being intrinsically tied to the development of the cluster as a whole. While, ABICALÇADOS, in a different vein, openly states that it no longer considers the welfare of its members as wholly associated to the development of the cluster (Nadvi, 1999).

Furthering our understanding is the realization that the Sinos Valley is a highly differentiated cluster with a large variety of shoe-related activities directed to both local and international markets. Moreover, the scope of firm sizes is exceptionally distinctive. Of the total, 55 percent of all firms operating with the Sinos Valley employ a maximum number of 50 persons. Large firms with a total of 200 or more employees make up 23 percent of the market (Schmitz, 1998, p.16). Most interestingly, of these firms the five largest accounted for 25% of exports to (Schmitz, 1998, 36). Principally, exports were directed through the Unied States, with for example, one US buyer purchasing 40% of yearly exports from the Sinos Valley. Clearly, this one US buyer and the five largest firms have a disproportionately large sway on the outcome of the cluster. As stated by Schmitz (1998. p.36), “these firms were ‘both admired and feared’ locally. They were also able to exercise a great deal of power and influence in the shoe manufacturer’s association.”

Of related interest, these five firms have subjugated ABICALÇADOS, and as per Schmitz (1998) and Nadvi (1999), controlled the sector as opposed to promoting or developing it. Moreover, the presidency of the association was dominated and controlled by these firms who openly chose the candidates at the close of each term (Nadvi, 1999). The associations President critically held a significant amount of power, undertaking initiatives that reflected the directed willed by the large firms.
In order to add to our understanding of the cluster, what were the interests of the large firms? As per Nadvi (1999, p.15):

They themselves were originally small enterprises as early as the 1970s. Their rapid growth, however, has changed the nature of their ties within the cluster. As these firms expanded they began to increasingly integrate activities and to rely less on local suppliers. Backward integration led to most firms acquiring their own dedicated tanneries, and in some cases even cattle ranches. Their almost complete reliance on the leading US buyer, providing guaranteed markets for their products, limited incentives to promote new marketing initiatives and develop their own design capabilities.

Comparatively, the component producers’ association (ASSINTECAL) undertook a much more holistic approach to the development of the Sinos Valley. Outlining the comparisons between the two major associations, Schmitz (1998, p.38) fashioned the illustrated table #2 below.

<table>
<thead>
<tr>
<th>Table #2</th>
<th>Association of Shoe Producers (ABICALÇADOS)</th>
<th>Association of Component Manufactures (ASSINTECAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMBITION OF LEADERS</td>
<td>Control Cluster</td>
<td>Promote Cluster</td>
</tr>
<tr>
<td>MEMBERSHIP</td>
<td>Exclusive</td>
<td>Inclusive</td>
</tr>
<tr>
<td>MAIN PURPOSE OF ASSOCIATION</td>
<td>Defend</td>
<td>Provide Services</td>
</tr>
<tr>
<td>MARKETING SUPPORT</td>
<td>Passive</td>
<td>Active</td>
</tr>
<tr>
<td>TECHNOLOGY SUPPORT</td>
<td>Ignores technology institutes</td>
<td>Partnership with technology institute</td>
</tr>
</tbody>
</table>

Source: Schmitz, 1998, p.38

As outlined by the table, ASSINTECAL is a BA that is far more participatory within the development of the Sinos Valley cluster. In branching out into marketing through their trade fairs (both physical and virtual), members are encouraged to participate both nationally and internationally. Members are also represented by both ASSEINTECAL in conjunction with SEBRAE (the Brazilian Small Enterprise Service) to negotiate on behalf for financial support to show their wears at trade fair. Furthermore, they provide technological support through their partnerships with various institutes. In comparison, ABICALÇADOS has never actively encouraged its members to participate in trade fairs. This has resulted in relatively no representation abroad of shoe producers.

When analyzing these two BAs membership numbers can be a clear illustration of efficacy and representation. In comparison, ASSINTECAL, specifically during the initial period of disaccord and sub-sectorization witnessed an increase in number membership from 40 firms in 1993-94 to 80 firms in 1997-98. In comparison, ABICALÇADOS membership numbers showed decreasing confidence within the organization and dipped below 100 represented firms of a total
of 400 footwear producers in Brazil. In analyzing such trends, ABICALÇADOS’s weaknesses lay in the control exercised by its few monopolizing firms.

While having very different mandates and overall market interest, the sub-sectorization between ABICALÇADOS and ASSEINTECAL not only influenced the “Shoes for Brazil Programme” but also impacted each others initiatives for their respective members. As ABICALÇADOS’ members grew in size, they ran into conflict with the clusters raw material and component suppliers. As shown by Nadvi, (1999, p. 16), “instead of supporting actions that improve the quality of the cluster’s key raw material, leather, the ABICALÇADOS has effectively promoted a strategy that lowers value added.” This case involved the defeated proposal by ASSEINTECAL to establish an export tax on semi-processed leather. The aim of this tariff was towards allowing greater export equality between Brazilian finished leather manufacturers and European semi-processed leather manufactures. However, as illustrated by Schmitz (1998, p.40), “leading members of ABICALÇADOS were exporters of semi-processed leather and stood to lose from the proposal.” This has greatly impacted the tanning membership of the cluster who were accordingly required to take on lower value-added production in order to compete and ultimately shift primary production to semi-processed leather.

4.6 A Shift in Advocacy – A Correction in Trajectory

The overall efficacy and advocacy of the Sinos Valley associations was all but absent throughout the 80s and 90s (Nadvi, 1999). Yet, there emerged a critical shift in the millennium, in which the infighting and sub-sectorization of interests was put aside in order to work towards the overall benefit of the cluster. The overall catalyst for change resulted when the former US buyer who previously controlled over 50% of all purchases in the Sinos Valley sold his stake (Bazan and Navas-Aleman, 2004). Accordingly, the stagnating relationship between the major buyer and the top leading firms was no-longer intact, resulting in a shift of representation and overall direction within the BAs. This argument was further elaborated upon by Bazan and Navas-Aleman (2004, p.133), who stated “This change in ownership, as well as the increased sourcing from China, resulted in a declining commitment to purchasing from the Sinos Valley. As a result, local lead firms realized that some of the initiatives they had blocked in the past would now be advantageous.” This change in philosophy, however, did not create a complete reversal in tactics nor initiatives for all firms within the Sinos Valley. For many of the larger
firms, who still maintained strong ties to the United States, they preferred maintaining the quasi-hierarchical relationships. Yet, for SMEs wishing to diversify this transformation brought forth necessary ‘breathing space’ that permitted changes in cluster dynamics.

What later became heralded as the ‘underground revolution’, can be described as the deliberate diversification of Sinos Valley cluster SME firms (Bazan and Navas-Aleman, 2004). The firms that were previously harnessed to the quasi-hierarchical US chain, diversified their market concentration to include domestic and Latin American markets. Quite simply, with insertion into different value chains, Sinos Valley firms were able to experience greater likelihood of functional upgrading.

Importantly, the majority of Sinos Valley studies (Schmitz, 1998; Knorringa and Schmitz, 2000) have solely concentrated on global value chains, and failed to analyze the importance of Latin and national chains. This philosophy, which is imbued with the concept that firms are better able to learn through the exporting of ideas, neglects the important opportunities acquired by Sinos Valley firms within their home market. The strengthening of the cluster can be characterized by the support and directed encouragement of Sinos Valley BAs to work collaboratively to increased market share of Sinos Valley firms operating in more than one value chain. This investment has paid off with greater functional upgrading occurring with domestic-oriented producers than with US or European-oriented producers (Bazan & Navas-Aleman, 2004). Critical to analyzing the importance of the domestic market and the success BAs offered in supporting such initiatives, one must understand the nature of investment within the footwear industry. Testimonies by firms collected by Bazan & Navas-Aleman (2004) state that the increased assistance of BAs encouraged Sinos Valley firms to bifurcate domestic market initiatives (such as internal market research, branding and design) while at the same time remain within the US or European value chain. In order to maintain such an initiative, local firms had to shore up their presence in the market by developing their own brands. Importantly, in the context of the domestic market, the firms did not take their cues from export agents. Instead, they relied on the alliances they had formulated with their BAs, principally with the newly acquired presence within the domestic market. Moreover, Sinos Valley BAs were also responsible in remarketing Brazilian footwear in the domestic market. Stressing the overall quality, and the newly initiated functional upgrading, important inroads to regaining market share were acquired. As a result, while US exports continued, higher markets and greater use of in-house R&D was
more greatly witnessed in production for domestic consumption. To this end, BAs through their documented assistance encouraged a shift of amongst many firms within the Sinos Valley to diversify their export production with a returned presence in the domestic market (Bazan & Navas-Aleman, 2004). As a result, the cluster is in a much stronger position than for the two decades previously.

5 Sialkot – A BA Facing External Pressures

5.1 The Sialkot Cluster

The surgical instrument industry is a classic example of a developing industrial cluster facing external regulations that governs their actions within their value chain. Located in the city of Sialkot, Pakistan, and comprised of roughly 3000 privately held family firms, this cluster has been in operation for nearly hundred years (SMEDA, 2008, Ghani, 1996). Of these firms, only 200 specialize in both manufacturing and export, while 600 firms specialize in trading the finished products abroad. The remaining firms could be described as stage production firms, where they offer specialized vendor skills to manufactures. These skills include as per Ghani (1996, p.9), “filing and grinding, in forging and diemaking, in milling and box fitting, in polishing, in electroplating, and in heat treatment. Providers of ancillary services and inputs include suppliers of steel and machinery; travel agents, communication couriers, cargo handlers, legal and accounting services, and repair workshops.” Initially producing at low levels of output and with limited technological sophistication, this cluster grew in 1990’s as an industrial developing cluster that produced over 10,000 differentiated surgical instruments for worldwide export (Ilias, 2005; SMEDA, 2008). Critically, the United States plays an important role specifying quality controls and controlling exports within the industry. Such an illustration may be witnessed below, in which Figure #7 illustrates Pakistani country exports for Standards International Trade Classification (SITC) 87219 (Dental Instruments) and 87229 (Medical Instruments) (SMEDA, 2008, p.3). Clearly, the US consumes that largest amount of exports originating from the Sialkot Cluster.
The Sialkot cluster is primarily composed of family run SMEs that lie in close geographic proximity to each other. The nature of the firm is governed in this fashion because of the productive realities of the market, where espionage is common place. As stated by Ilias, (2005, p.330) “There is an intense competition among the exports as they tend to poach each other’s clients and to undercut each other’s prices. This practice has created a deeply rooted feeling of mutual mistrust among the firms.” The hiring of kin is a likely circumvention of loosing clients, but critically limits the capacity of firms to grow or place sufficiently talented management within all positions of power. To this end, there has been found to be a positive correlation between firm size and the family size of the firm founder (Ilias, 2005; Tailor, 2002). While this is at times believed to be a productive structure, it is not as efficient as non-family run organizations. Yet, in the face of such an argument, considerable data has been presented in which family-controlled networks that are sufficiently diversified can and do outperform the alternative (McConaughy, 1998; Khanna & Palepu, 2000). Intuitively, it may be assumed that bilateral co-operation throughout the sector is rare.

In order to better differentiate their export market, further delineations can be drawn between the disposable surgical instruments that are primarily consumed by the United States and theatre instruments that are reusable and chiefly consumed by the European market (Nadvi & Halder, 2005). These two forms of products follow definite distribution channels through which the local firms that make up this cluster export to the rest of the world. These channels as illustrated by Nadvi & Halder (2005, p.345) are:
• foreign buyers … who purchase complete instruments from Sialkot and supply wholesalers, retailers and end-users in specific markets;
• … producers who sub-contract all or part of particular instruments to Sialkot, or use Sialkoti firms as OEM suppliers;
• expatriate Pakistani traders who supply (usually lower quality) instruments in various markets, especially in the USA; and
• foreign sales outlets (or subsidiaries) of Sialkot manufacturers.

Up until 1992, the Sialkot Surgical Instrument industry was a model example of a developing country cluster that was able to consistently perform well within a GVC and export products worth over a US$ 100 million (Nadvi & Halder, 2005; Nadvi, 1999a, b). Critical to the development of this cluster, however, was the role played by the Food and Drug Administration (FDA) of the United States. This regulatory body stressed that the surgical products manufactured in Pakistan did not meet the quality assurance and control standards recently enacted, in 1994. This in many ways placed the industry in chaos with many export receiving countries following suit with the enactment of these quality assurance standards. Critical to the cluster, and with severe repercussions throughout, Sialkot witnessed the cancellation of orders and the stranding of shipments at docks worldwide. As furthered by Nadvi (1999, p.17) “With mounting costs and increasing competition amongst local producers for sales in the European market, a number of firms and ancillary units were forced to cease operation, in the process laying off workers.”

5.2 The Role of Sima

From one day to the next, the Sialkot surgical instrument cluster was deemed sub-standard, with a US led decision that did not target individual firms, but the Sialkot cluster as a whole. As seen in Figure #8, by late 1997, the export volumes of the Sialkot cluster had rebounded by 25% above the quantities exported in 1992-93 (Smeda, 2008; Nadvi, Smeda, 2008, p. 2
1999a). This response to the FDA decision is a remarkable illustration of the power joint action, whereby a cluster, that is normally hesitant to cooperate via bilateral or multilateral collaboration was able to meet and respond to the challenges of the FDA and more specifically the expectations of the GVCs.

The Surgical Instrument Manufacturer’s Association (SIMA) is recognized as having played a fundamental role in assisting in this turnaround. As a result of the productive structure that was in place prior to 1994, knowledge transfer and the capacity to innovate productive processes in line with international regulations was primarily controlled by larger firms within the cluster. Smaller firms who were required to upgrade, depended upon the trickling down of information from these larger firms. Prior to this crisis, SIMA did not view its role as the purveyor of information on quality assurance and technical training. Having first been established in the 1940s, all firms operating within Sialkot were required to be members. In many ways it was viewed as a hapless association incapable of enacting widespread change. This perception was seconded by a survey undertaken by Nadvi in 1994 (1999, p. 108), “that the association was ill-informed with regards to technical developments, its marketing information was considered woefully out of date, it was unable to provide technical guidance to its members, and was an ineffective “voice” of the cluster’s collective interest.” Furthering this opinion, it was believed that the BA was dominated by large firms who governed the management of the association and ultimately directed the initiatives and advocacy of the association (Nadvi, 1999).

Yet, when the crisis hit in May 1994, SIMA rose to the challenge and became more responsive and advocated for all firms. From the start, the association coordinated its efforts and staged discussion groups to explore the challenges faced by all firms due to the FDA ruling. Importantly, a joint response was finalized one month following the crisis. This involved a delegation of SIMA representatives, democratically selected firm, and government officials who traveled to the United States in order to negotiate directly with the regulatory authorities. Following these meetings, an initiative to roll-off the trade restrictions with the establishment of quality assurance certification failed to be jointly established. Following this breakdown in negotiations in the US, SIMA lobbied the Pakistani government successfully in order to support the cluster and provide the necessary know-how in quality assurance standards. Specifically, the Pakistani government hired foreign consultants to assist in transitioning local firms towards adopting upgraded quality management practices under ISO 900010. Furthermore, the
government established a metallurgy testing facility in order to insure that all products produced in Sialkot conformed to international standards.

As an interesting shift, while previously criticized for having been primarily advocating the wellbeing of large firms, the members of SIMA recognized the importance of the large firms in terms of their capacity to lobby local and national government bodies. And while the role of government can be stated as being important, Nadvi (1999, p.18) stresses, “[that at] closer analysis indicates that of the steps initiated by the association, the most important was seeking technical knowledge on quality management. While the government subsidized this, it was the association that recognized that external know-how was required and undertook to coordinate the provisioning of such expertise.” This is not to state, however, that the compositional make-up of SIMA has not changed since 1994.

In fact, in 1995 SMEs were sufficiently displeased with the progress undertaken by the BA to instill representational change in which only five large firms were represented with the remaining representatives being SMEs. This new board was again requested to continue its mandate in 1996. As expressed by a member, “SIMA is now more active as a consequence of the FDA issue. Before the big firms would hinder the activity of SIMA and of smaller firms. Now, through SIMA, all firms in the cluster, big and small, can get the help they need to get through this (quality assurance) problem” (Nadvi, 1999, p.1576).

5.3 Upgrading in the Sialkot Cluster

Principally, the economic stresses faced by the Sialkot surgical instrument industry were threefold, in which they were expected to adopt global standards, to continually reduce costs, and to develop new products. With the assistance of SIMA, the process for upgrading and conforming to exterior expectations governed by foreign governmental bodies and GVCs, created a dynamic push within the cluster. Humphrey and Schmitz (2002) have long stressed the importance of governance and institutional leadership as the primary factors that influence the possibility of upgrading within GVCs. The following discussion will relate the three aforementioned considerations of the case to the role SIMA as the purveyor for change within Sialkot.
5.4 Quality Assurance

Extensive literature has been produced outlining the growth of global standards and the impact they have played on the globalization of SMEs and GVCs (O’Riordan, 2000; O’Rourke, 2003; Nadvi and Waltring, 2004; Barrientos and Smith, 2007). The international surgical instrument industry has radically changed over the past twenty-five years. With the recognition and concern surrounding HIV/AIDS and Creutzfeldt-Jakob disease (CJD) – to list but a few - an overarching fear of contamination has emerged concerning the reuse of surgical instruments (Nadvi, 2008). These pressures along with the mounting liability faced by hospitals world-wide to stem the possibility for transmission and likelihood of sepsis, required that greater initiatives be taken to improve the overall quality of the instruments along with witnessing the growth of one-time-use instruments during such procedures. Such demands have required the compliance of international quality controls that alleviate the liabilities faced by buyers when purchasing from their suppliers. To this end, the structure of the GVC and inter-firm relationships has greatly changed dictating the standards of consumption at the hands of the buyers. Suppliers of surgical instruments are now in less of a negotiating position, required to meet the requisites of the foreign firms.

The administration of international quality standards is a lengthy and highly bureaucratic and documented process. The procedure requires, as stated by Nadvi & Halder (2005, p.349) “the documentation of procedures, training of personnel, and constant monitoring of quality-related management practices through internal and external audits. Implementing standards can imply changes in production organization and management practices.” Clearly, by accounting for, and correcting productive weaknesses, the adopting of quality assurance practices will require a shift in the relationships between producers, subcontractors, and suppliers. As a cost is born by the producer, SMEs may not have the required knowledge or resources in order to enact such quality controls, moreover should they even have the initial capacity, continual audits and appraisals are required in order to maintain the international standard (Cysneiros & Leite, 2000).

With the involvement of the BA coupled with government support, the compliance to international quality standards has been widespread. As of 2000, two thirds of all Sialkot manufacturers have enacted the ISO 9000 global quality controls (Nadvi & Halder, 2005; Clapp, 1999). It is no longer viewed as a challenge and specifically because of the role played – and continued to be played by SIMA –compliance to this standard is maintained. The capacity of
Sialkot to adapt to international standards is a clear illustration of the important role played by BAs. Without their assistance, further complications arising because of GVC expectations would have continued to be widespread. In a different vein, however, the capacity of Sialkot to adapt as quickly to market expectations has resulted in new found skepticism concerning whether in fact global standards do result in overall better productive quality.12

5.5 Cost Cutting and New Product Development

With having resolved the issues concerning quality assurance, the Sialkot cluster was free to address two further issues that affected their global demand. The surgical instrument industry is pressured by both suppliers and buyers to lower cost and remain competitive. On the side of hospitals and large medical organizations, that are primarily funded through publicly provided healthcare providers, greater demands are being placed on such industries to be cost-effective (Knappe et al. 2000). This is also a result due to the changing demographics and overall nature of diseases faced by medical establishments worldwide (Nadvi & Halder, 2005).

Presently, SIMA and the Sialkot cluster are actively working to maintain market share. Clearly, as specified earlier, with the present manufacturing of over 10,000 different models, the cluster is critically working to ensure that its buyers worldwide continue to look to Sialkot as a market where production yield high products.

6. Guadalajara – A Footwear Cluster Facing Liberalizing Pressures

Historically, Mexico has been a strongly protectionist economy, until free market initiatives were introduced in 1988. The entry of Mexico into the North American Free Trade Agreement (NAFTA) in 1994 further solidified the country’s commitment to trade. While it is generally accepted that NAFTA has encouraged huge inflows of foreign direct investment (FDI) into the country, the trade agreement has not necessarily resulted in widespread upgrading (from increased investment and knowledge spillovers) and economic growth. This said, it is often stressed that trade liberalization leads to efficiency gains resulting from the capacity of increased upgrading. There emerged an opportunity for specialization and the overall ability to efficiently use technologies that will enhance learning and overall product development (Rabellotti, 1999).

A statement that is illustrative of such a sentiment may be taken from Balassa (1988, p.45):

The carrot and stick of competition gives inducement for technological change.
For one thing, in creating competition for domestic products in home markets,
imports provide incentives for firms to improve their operations. For another thing, in response to competition in foreign markets, exporting firms try to keep up with the modern technology in order to maintain or improve their market position.

The capacity to isolate the NAFTA factor has been particularly difficult to ascertain. Overall, the opening up of the Mexican market to international competition, the role-back of tariffs, and subsidies – as negotiated by the US, Canada, and Mexico – has witnessed a growth in international competition. Critically, as of 2008, Mexico is experiencing a trade deficit in which foreign competitors are successfully underbidding Mexican exports entering the US. Thus, international trade does not presuppose overall gains.

In further detail, the effects of trade have impacted the Mexican footwear industry. This industry previously experienced both favorable government protection under the previous economic regime, and external macroeconomic factors that insulated the market. This disproportionate protection provided a supportive structure insulated the cluster from correcting weaknesses (Rabellotti, 1997). As a result, the cluster went through pronounced growing pains that were resolved through the assistance of their BAs.

6.1 The Industry in Detail

The city of Guadalajara, is the capital of the state of Jalisco. Located to the north-west of Mexico City, it is presently the second largest city in the country. Traditionally, Guadalajara’s economy has been primarily comprised of small and medium sized firms, who have primarily specialized in food, textiles and shoes (Arias, 1985). To date, Guadalajara’s footwear sector is comprised of roughly 2,300 firms (Rabellotti, 1997). Historically, the industry has received substantial government support, with its most dramatic growth occurring throughout the 60s and 70s. The main government support body is known as SEPROE – which refers to the Jalisco’s Secretary of Economic Development and Promotion. During the protectionist era, export initiatives to the United States – through the local BAs and SEPROE - solidified important export contracts. This, along with increased domestic consumption due to greater purchasing power of the population and the overall protectionist stance of the government led to further growth.

Guadalajaran industry has historically been comprised substantially of small and medium-sized firms. This reality is supported by Rabellotti and Schmitz (1998, p.99) who fount
that: “96% of them employ less than 100 people; 3% between 100 and 250 people; and only 1% more than 251.” Yet, devoid of this large presence of SMEs, the government has historically misplaced its emphasis concerning the development of these firms, and concentrated primarily on larger firm development. This runs contrary to the initial effort of the public sector to offer state level assistance of all member of the traditional-sector firms, but since the 1940s to the mid-1990s priorities shifted significantly. Major studies (Arias, 1983; Rabellotti, 1999; Spener & Pozas, 1996) found that throughout this period the majority of resources were primarily made available to large-scale firms, export-driven firms, and start-ups that were directed to be more capital intensive. Critically, larger firms were granted easier access to high-ranking bureaucrats, who controlled the shaping of economic policy state-wide. In comparison smaller firms were granted access to low to mid-level bureaucrats who were less likely to exact changes in favor of their concerns (Lowe, 2006). In light that the majority of firms are SMEs, it is obvious that there was a definite bottleneck – imposed bureaucratically - which impacted the development and overall capacity for SMEs within the Guadalajaran footwear industry to development and innovate.

This limited facility of SMEs to lobby and witness change on their behalf, consequently weakened their capacity to react to the principal crisis that afflicted this cluster in the 1980s. Starting from period and leading into the early 1990s, the Guadalajara footwear industry witnessed an overall decrease in domestic consumption. This was a response to the opening of the market in 1988, when overall tariffs were eliminated or cut and the import licenses were eradicated (Rabellotti and Schmitz, 1998; Rominguez-Villalobos and Grossman, 1992). Highly influential to the Guadalajara footwear industry was the impact that imports placed on their market. Where prior to 1987, imports of foreign footwear accounted for only 0.1% of the domestic market consumption, it significantly grew to a third of overall domestic consumption in 1991 (Rabellotti & Schmitz, 1999). Over the course of a decade, the domestic markets core component that supported the cluster eroded, initiating persistent decreases in employment and overall stales for the cluster. This critical decrease may be seen in Figure #9 whereby imports significantly increased until 1994.
6.2 Guadalajara’s Link to Two Value Chains

Essentially, Guadalajara was historically bifurcated between a US driven quasi-hierarchical chain and a domestic network-driven chain. The US quasi-hierarchical chain is characterized by a significant degree of control held by buyers that dictate design and overall product development. In comparison, the network-driven domestic chain developed more democratic relationships with firms of more or less power. Moreover, the transactional conditions are often more loosely established which provides greater risk-taking initiatives that assist in developing the firms within the cluster. These initiatives are commonplace, whereby clusters are able to explore export opportunities while at the same time shore up their positions through domestic sales (Rabellotti, 1999).

### Table # 3 Key Sectoral Business Associations in Jalisco

<table>
<thead>
<tr>
<th>Name</th>
<th>Industry</th>
<th>Year Established</th>
<th>Independent or Regional office of National Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camara de la Industria Del Calzado de Jalisco</td>
<td>Footwear</td>
<td>1940s</td>
<td>Independent</td>
</tr>
<tr>
<td>Consejo de Camaras industriales (before 1979, known as Junta de presdentes de las Camaras industriales)</td>
<td>Federation of all industrial business associations in Jalisco</td>
<td>1965/1979 (formal)</td>
<td>Independent</td>
</tr>
<tr>
<td>Camara regional de La industria de Curtiduria</td>
<td>Leather goods/tannery</td>
<td>N/A</td>
<td>Independent</td>
</tr>
<tr>
<td>Camara nacional de Comercio, Tlaquepaque and Tonola delegacion (artisan division)</td>
<td>Artisan goods</td>
<td>N/A</td>
<td>Regional</td>
</tr>
</tbody>
</table>
Interestingly, this case is different than the previous Brazilian case, due to the fact that in the Sinos Valley firms developed their domestic markets so as to disentrench themselves from their hierarchical US value-chains. Consequently, in the case of the Guadalajara footwear industry, the opportunity for domestic growth dwindled for a period of time as illustrated in figure #8. This ultimately started to infringe on their performance within the export market.

While the above mentioned realities illustrate weaknesses in the dialogue between firms and governments, the transformation of Guadalajara’s footwear BAs assisted in resurrecting the industry. Table #3 outlines the major footwear BAs that have operated as advocates on behalf of their industry. Of the four BAs illustrated, Camara de la Industria Del Calzado de Jalisco is the largest and most successful. Their success, in enacting change and working along side government bodies will be further analyzed in the proceeding section of this case. Interestingly, the necessity to remain relevant within the industry – through the reliance on memberships – resulted in the transformation of this sector.

6.3  A shift in the Political Tides

The gradual weakening of the industry continued until the mid-90s whereby firms were again reeling from the impact of the fiscal and banking crisis of the 1995 (Rabellotti, 1999). Furthermore, there resulted an important shift occurred in Guadalajara, where a PAN Governor – Governor Alberto Cardenas - seized power from his former PRI (pro President Salinas) counterpart. The incumbent was locally supported for his criticism of President Salinas’ economic and industrial policy, recognizing that formerly disenfranchised SMEs who were struggling from the economic transformations needed to be supported (Lowe, 2006). Governor Alberto Cardenas, appointed Secretary Garcia de Alba, himself a former businessman to head up SEPROE. Accordingly, this ushered in a bureaucratic initiative, in which top economic positions within Mexico where held by experienced businessmen and not life-long bureaucratic members of a specific political party. From the start, Secretary Garcia de Alba gave direct access to the presidents of all BAs operating within the state. Brainstorming sessions were established that helped coordinate government initiatives with BAs. As stated by Lowe (2006, p.334), “their approach to development planning enabled smaller firms in the states traditional industries to have greater access to much-needed support services, training programs, and other public
resources, both financial and bureaucratic.” Accordingly, this transformation provided much needed assistance in the face of continuing pressures experienced by Asian imports.

6.4 The Role of Associations in the Guadalajara Footwear Industry

The resulting change in bureaucratic endeavor was in direct response to BA involvement. Throughout the course of the late 1980s and 1990s, the associations themselves witnessed changes in their internal structures that led not only to greater representation but improved bureaucratic linkages (Lowe, 2006, Rabellotti, 1999). Much can be said for the period between 1988 and 1995. This was the key period in which the economic woes for the industry were most widely felt, witnessing the loss of nearly 50 percent of firm enrollment within footwear BAs in Guadalajara. Enrollment dropped from 500-600 different firms linked to the footwear BAs in the late 1980s to 280 registered firms in 1994 (Lowe, 2006). It is worth noting that similar trends were reported for traditional centers of production.

The transformation in association make-up can be mapped according to specific market conditions that affected the traditional sector. Initially, having lost continued domestic market-share; medium-sized firms were experiencing greater debt-burdens coupled with cost-cutting directives from their US Chain buyers (Lowe, 2006). This greatly weakened and witnessed the exit of a number of firms throughout the first half of the 1990s. This situation was further aggravated by the banking crisis in 1995. These firms, bearing the brunt of these different factors exited the market to often resurface as manufacturers within the informal sector (Rabellotti, 1997).

What is noteworthy about this economic crisis within the footwear industry is that primarily it afflicted the large to medium-sized firms who depended upon bank-credits. Interestingly, smaller-sized firms, who were often ineligible for credit, remained in the market and witnessed for many of them a doubling of production. These smaller sized firms, comprised of between 30 to 80 employees captured the unmet demand remaining in the market due to the exiting of larger firms (Lowe, 2006). They were able to take up newly freed skilled labor and strengthen access to raw materials and equipment. Clearly, SMEs began to thrive within the market, seizing the opportunity to upgrade their skills where previously they were unable to gain sufficient market share and overall industry respect.
Importantly, the economic crisis and the collapse of larger firms within the Guadalajara footwear industry created a market environment in which SME footwear manufacturers could seize an important position. This was achieved because local BAs had lost a large number of representative firms, and in order to not become redundant they decided to support their enrollment by placing SMEs within vacant positions in their organizations (Rabellotti, 1999). Where, previously, larger firms were considered solely as important members due to their political clout, smaller firms were able to seize an important opportunity in order to have their particular concerns represented.

What transpired from this shift in representation was a movement away from traditional bureaucratic lobbying, to greater emphasis on training and developing support services. This call for greater support originated from the BAs and resulted in the transformation of business perceptions and practices with respect to SEPROE and the State of Jalisco. This is not to state, however, that BAs abandoned known lobbying initiatives, but rather greater emphasis was directed towards assisting SMEs to better meet the challenges by the import of cheaper products. Clearly, the impetus for change started when the domestic market for Guadalajaran shoes began to slow. This transformative event, however, coincided with the Mexican Financial crisis in 1995. One can say that this event cleared the playing field, reorienting business concerns and led to the development of greater extent of joint action. Subsequently these transformations completed and cemented by the proposed initiatives advanced by the state government at the hands of Sergio Garcia de Alba. In many ways, the joint action between BAs and the government of Jalisco illustrated to local firms that they were ‘open for business’ (Lowe, 2006).

On the national scale, the imprint of two financial crises pushed forward the negations of NAFTA. It was believed that the benefits could be shared not only within the machiladoras of the northern states, but throughout the economy as a whole. With the

![Figure # 10 Mexican Peso Real Exchange Rate](image-url)
preferential North American agreement, the Mexican government with the backing of the states and BAs returned to protect their once highly subsidized and insulated non-machilador firms. Initially starting in 1993, and gaining full strength in 1995, the Mexican government placed important tariffs on non-North American (specifically Chinese) footwear producers (Rabellotti, 1999). These efforts were undertaken to regain the domestic market and protect the Mexican footwear manufacturers from export shocks. Coupled with this increased protection was the pesos devaluation in 1994 that rendered Mexican exports more attractive for the international market, as well as assisted in regaining domestic market share. Such findings may also be substantiated by Figure# 10 that illustrates the increased rate of Mexican exports in comparison to foreign imports. Critically, Mexico’s economic turnaround, and more specifically the revitalization of the Guadalajaran footwear industry is all too often linked to these two aforementioned points. However, such arguments solely rely on the logic of short term economic arguments that fail to consider and rationalize the continued long term presence and success of the Guadalajaran footwear industry. While remaining in quasi-hierarchical value chains, and not having fully rebounded in terms of labor and strategic position, the role of BAs as an insulating force with the industry must be recognized.

Part III

7. Final Discussion and the Application of the Theoretical Framework

The three previous case studies identify instances of BA participation within economically distressed or challenged developing country clusters. The case analyses provide an expanded awareness with respect to the different roles BAs may play to help develop and encourage upgrading within the clusters. Critically, in light that the productive methods of clusters are to a large extent influenced by the types and nature of value chains – the capacity for upgrading is influenced. This is a fundamental issue, because above and beyond product and process methods, the application of functional upgrading is necessary for the livelihoods of cluster. In an attempt to contextualize the successful role that BAs play within the development of such clusters, a brief reference to the theoretical framework – linking institutional theory, social capital theory, and transaction cost theory – will be revisited (see figure #1). In the same vein, the four proxies for measuring BA success will be applied to the case studies. Overall, this
approach will ascertain as to whether the conventional beliefs concerning joint action as facilitated by BAs will result in better cluster development. As a result of the theoretical discussion, it will be possible to formulate valuable conclusions and contextualize Porter’s of BAs in the development of clusters and their opportunities to upgrade within GVCs.

At its core, the framework centers on institutional parameters that frame BA strategies and overall cluster development through formal and informal constraints. As presented in Part I the institutional considerations often create social norms within BAs and the cluster as a whole. In the case of BAs the compliance with externally imposed pressures in the form of domestic and international (GVC) legal regulations, predominant norms, traditions and social attitudes has the tendency to create an environment where structural and behavioral homogeneity is commonplace (Oliver, 1997). Theoretically, it is then argued that association success is attributable to the conformity or isomorphism that is governed by social expectations (Powell DiMaggio, 1991). Such participation by BAs, assumes that there is a discourse between the institutional setting and the BAs. In the context of GVCs, process and product upgrading is often stressed upon. Yet, while a possible collusive nature is predictable and often witnessed, BAs may also act as agents that encourage change within a system that is not always representing the clusters best interests. In the case of upgrading, clusters through the encouragement of BAs break free and establish functional upgrading initiatives.

Importantly, SC theory and institutional theory are linked. Institutional theory centers on the analysis of rational-action institutionalism outlining that individual action is governed by laws and the structures of organizations (Nielsen, 2007). In line with SC theory the idea of social-constructivist institutionalism that furthers the institutional construct, stresses that actors, interests, and preferences are endogenous to the model (Theret, 2000). To this end, by combining institutional theory and social capital theory, a form of hybrid is developed whereby the structured norms and hierarchies that are developed, socially mimic and take on a likened form to the more finite institutional establishment. Interestingly, Putnam (2000) would argue that the informal institutions established within SC theory may through their collectivism transform rational-action institutionalism.

Thirdly, transaction cost theory is relevant because it rationalizes the nature of agreements between cluster and GVCs Specific to this thesis; the role of BAs as support mechanisms within quasi-hierarchical value chains is interpreted, understanding how certain
forms of transactions may be detrimental to the development of clusters and looking at ways of assisting firms to overcome such difficulties. More, specifically, as Williamson purports, the application of TCT develops a framework for measuring which economic tasks are performed through which firms, and when and how intermediate forms of production may be applied to the market (1979). The frequency these transactions occur and the uncertainty within the market dictates the governance structure applied (Williamson, 1985). This complements the idea that the theory is influenced by the asset specificity of the transaction; taking into account the organizational assets held by firms within the transaction (Williamson, 1979).

Importantly, the strength of Social Capital is fundamental to this analysis. Developing country clusters are placed between, and often locked into, international and domestic institutions that govern their actions from one side, and influences the nature of their upgrading through transaction costs on the other side. Theoretically, this model sets the stage, whereby the role of BAs can be interpreted to find successful strategies that are used to support cluster development. To this end, the four proxies of success in measuring BA involvement within clusters will be revisited in the subsequent sections. Clearly, the role of social capital through the establishment of an intermediate organization whereby information flows, lobbying, training, and the diversification of marketshare and value chain is a direct result. Importantly, an accurate gage when interpreting the role of BAs must ascertain how effective it is in responding to formal institutional conditions and transaction costs that limit the overall firms growth to develop and functionally upgrade.

7.1 Backward, Forward, and Horizontal Linkages in the Sinos Valley Footwear Cluster

The capacity of the Sinos Valley Footwear cluster to surmount their economic woes as a result of cheaper imports is an excellent example of the role that BAs can play to assist in the development of clusters. Large-scale studies on the Sinos Valley (Schmitz, 1999, Knorriga and Schmitz, 2000) have primarily concentrated on global value chains and failed to analyze the important developments occurring domestically and within Latin America. The large-scale infighting between ASSINTECAL and ABICALCADOs has been resolved assisting firms with varying forms of market-diversification. Strategically, the cluster participated within a quasi-hierarchical value chain that transactionally bound the process of upgrading to a large degree. Process and product upgrading were of primary concern for the US Buyers who dominated the
market. As a result, the failure to functionally upgrade resulted in economic weaknesses within the cluster.

Important in the transformation of the cluster was the development of forward linkages that illustrate a depth in productive methods that aspires to gain widespread marketshare. Resulting, with the sale of the major US-Buyer, two important strategies emerged. Firstly, the newly formed export agents, operating within BAs, started creating brands, and utilizing Brazilian producers to manufacture the product (Bazan & Navas-Aleman, 2004). While this initiative resembles a quasi-hierarchical value chain, an important difference is that varying requirements for functional upgrading were encapsulated within the manufacturing process, thus providing greater development for the cluster (Bazan & Navas-Aleman, 2004). A further strategy, was developed whereby producers started selling footwear without a brand to Latin American importers/Shops, who themselves put their own brand on the shoes (Schmitz, 1999). What is noteworthy about this case is that the buyers do not have a stake nor offer assistance in the production process. While the US lead firms remain important, the role of BAs assisted in offering new forms of production processes sheltering the cluster from outside export shocks. These new developments may be witnessed in the proceeding table # 4 that maps the governance structures and the opportunity to upgrade within the cluster.

<table>
<thead>
<tr>
<th>Table #4</th>
<th>Quasi-hierarchies</th>
<th>Market relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions of governance and implications for upgrading</td>
<td>US</td>
<td>Europe</td>
</tr>
<tr>
<td>Market Share</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Buyers concentration</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Dependence on intermediaries</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Unequal division of essential activities in the chain</td>
<td>High</td>
<td>Medium to high</td>
</tr>
<tr>
<td>Upgrading Product and Process Upgrading</td>
<td>High</td>
<td>High to medium</td>
</tr>
<tr>
<td>Functional upgrading</td>
<td>Low</td>
<td>Low to medium</td>
</tr>
</tbody>
</table>

Bazan & Navas-Aleman, 2004, p14

Thus, by developing a more diversified vertical integration, the lessons acquired in the domestic market were built upon and transposed to the export markets, creating greater strength within the cluster.
Horizontally, the market transformed considerably with the sale of the single largest US-buyer and the increased sourcing of imports from China. The relationships between firms and accordingly formerly warring sub-sectors were resolved. No longer did the lead firms of ABICALVADOS limit the capacity for functional upgrading by insisting on remaining with quasi-hierarchical value chains (Schmitz, 1997). Greater coordination throughout the cluster occurred, lead by the expectations placed on the local BAs. Furthermore, increased linkages with the Brazilian Federal Government through APEX, (the Brazilian export promotion programme) have witnessed national footwear initiatives linking producers, export agents and government representatives in financially beneficial deals that have reinvigorated the cluster. One such deal, signed in December 1999, witnessed the investment of US$2.8 million to be shared between the two major BAs to assist in the development of functional upgrading within the cluster (Bazan & Navas-Aleman, 2004,). The transformation in horizon and vertical linkages may be illustrated in the table # 5 below.

<table>
<thead>
<tr>
<th>Table # 5</th>
<th>Bilateral</th>
<th>Multilateral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal</td>
<td>No Change</td>
<td>Varies with association – Strong</td>
</tr>
<tr>
<td></td>
<td></td>
<td>with ASSINTECAL and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ABICALCADOs</td>
</tr>
<tr>
<td>Vertical</td>
<td>Substantial Increase</td>
<td>First increase, then decline</td>
</tr>
</tbody>
</table>

Source: Schmitz, 1999, p.1645

The developments in forward and horizontal linkages have made important inroads into the development of backward linkages in the Sinos Valley cluster. Where previously the various production processes of the cluster were sub-sectorized resulting in limited exchanges between the diverse members, new joint BA initiatives are resolving many of the former weaknesses of the cluster. As a result, of coordinated joint action through the BAs, access to information and monetary resources are reaching larger numbers within the cluster. Moreover, by BAs collectively establishing a brand, entitled “By Brazil”, a total of 90 firms from across the sector are involved in presenting and transferring Sinos Valley footwear products and knowledge worldwide (Bazan & Navas-Aleman, 2004,). The BAs have developed important linkages with technological institutes. Two important relationships include IBTeC from Brazil and SATRA from the United Kingdom (ABICAOLCADOS, 2008). Through this ‘leveraging of competencies’ this footwear cluster is diversifying its markets and customers, differentiating its productive processes to more greatly use subcontracting and the experience of its BAs.
Thus, the significant transformation of the Sinos Valley is a response to the coordinated efforts of the cluster BAs to develop new initiatives that have reinvigorated the market. Consequently, as of 2007, Sinos Valley products experienced a 3% increase to US$ 191 million, with an increased in margin per pair of shoes of 5% (ABICALDOS, 2008).

7.2 Backward, Forward, and Horizontal Linkages in the Sialkot Cluster

The principal development with respect to the Sialkot Surgical Instrument clusters response to the FDA ruling that greatly affected their overall sales was the role of the trade association SIMA. Through the organizations capacity to mobilize firms and the state a response and recovery the shock was quickly enacted.

Evidence of horizontal cooperation emerged almost instantaneously following the FDA ruling in May 1994. As outlined by Nadvi (1999, p.1611), “Exchange of information was the one arena where the majority of firms sampled reported an increased in cooperation with other producers. Much of this discussion took place in the trade association.” As a result of failing to lift the ban on Sialkot products from the United States regulators, SIMA coordinated government initiatives to hire foreign consultants to introduce ISO 9000 regulations and assisted in establishing a metallurgy testing laboratory. In a survey conducted by Nadvi, it was fond that of 60 firms sampled, 61.6% using the services offered by the BAs more greatly following the crisis than before (Nadvi, 1999). Furthermore, a reorientation of membership in 1995 ensured that the BA was more representational to the needs of SMEs. As sated by an SME owner:

SIMA is now more active as a consequence of the GMP and FDA. Before the big firms would hinder the activity of SIMA and of smaller firms. Now, through SIMA, all firms in the cluster big and small, can get the help they need to get through this [quality assurance] problem (Rashid, January 21, 1997) (Nadvi, 1999, p.1612).

Accordingly, it could be stated that individual agency for the cluster was put aside and a mobilization surrounding collective concerns became paramount.

Some of the most important transformations occurred within the vertical linkages of the value chain. The nature of quality assurance requires greater coordination between horizontal and vertical linkages, because at the different of the chain, quality must be ensured. This requires greater information flows within the supply chain, and furthered monitoring. Importantly, while certification is a considerable expense to be born by the firm, the transaction costs are declining,
and encourage a movement towards ‘arms-length’ contracts (Foss, 1996). Prior to the crisis the Sialkot Cluster used extensively subcontractors to complete tasks. Moreover, firms dealt directly with foreign buyers and ties between firms in the form of knowledge sharing and financial resources were often strong (Nadvi, 1999). As a result of the crisis, two important changes in the ways firms dealt with their subcontractors emerged. As per Nadvi (1999 p.1613), “The first response was of producers internalizing quality-critical stages in production, where transaction costs of monitoring and ensuring that quality assurance requirements had been met outweighed the benefits of subcontracting.” The second response involved maintaining the already established subcontracting practices, and possibly extending them (Ilias, 2005). Those firms undertaking this process believed that the larger number of firms vertically integrated would result in larger gains in upgrading. While the first response was primarily undertaken by larger firms, the second response was much more common. The ties between subcontractors increased out of the simple fact that FDA action was already integrated within vertical ties. As stated by Nadvi (1999, 1615), “Maintaining quality standards and ensuring that product specification were met was the central aspect of interaction between manufactures and subcontractors. Assistance and even supervision was regularly provided to subcontractors…:” The sole difference was that the new requirements necessitated greater systemic and formularized documentation.

In the case of backward linkages there have been some transformations. While agreements and negotiations between suppliers have remained roughly same prior to and following the crisis, there has been documented increases in information sharing between clustered firms. As illustrated in Table # 6 information exchanges have increased specifically on issues of quality. Nadvi has noted a 30% increase in discussions concerning quality management following the crisis (Nadvi, 1999). Central to the debate are discussions concerning the quality of stainless steel. Resulting from greater exchanges in information, pressures have been placed by local producers and trade associations to improve the standards and manufacturing processes in scrap-based stainless steel re-rolling from the neighboring town of Gujranwala. As a result, local stainless steel is now considered on par with imported raw materials.

<table>
<thead>
<tr>
<th>Table #6 Improvements in Cooperation with Suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Firms N=60 (%)</td>
</tr>
<tr>
<td>Increase in exchange of information and</td>
</tr>
</tbody>
</table>
experiences

| Increase in cooperation to improve quality | 30.0 | 23.8 | 31.8 | 35.3 |
| Change suppliers less often than before FDA crisis | 16.7 | 23.8 | 0 | 23.5 |


As a result of BA involvement, the Sialkot cluster has successful met the challenges brought forth by the FDA quality assurance crisis. Important, the involvement of this association increased horizontal, forward and backward linkages within the cluster allowing exports to rebound significantly to levels above those achieved prior to the crisis.

7.3 Backward, Forward, and Horizontal Linkages in Guadalajara Footwear

In the Guadalajara footwear cluster, BAs have been instrumental in the development of more entrenched backward linkages amongst firms within the cluster. In comparison to the Italian and Brazilian footwear clusters, Guadalajara experienced poor division of labor leading up to the financial crisis (Schmitz, 1995; Rabellotti, 1999). As found in a study administered in 1995, Rabellotti (1999, p.1576), “60% of the firms do not externalize any stage of the production process, 19% externalize upper stitching, 18% sole cutting, 14% hand stitching and 12% heel covering. The majority of firms which externalize some of their production have more than 70 employees.” In further studies, while Guadalajara footwear industries continued to remain less differentiated, and use less backward linkages, it was noted that the same surveyed firms increased their use of subcontracting as a viable complement to their own production. Through their greater representation of SMEs, BAs offered an environment where the exchange of information was more accessible to all firms within the cluster. Of the total firms surveyed, 80 per cent - regardless of size – more regularly used subcontracting.

The same can be said for the absence of forward linkages established within the Guadalajara footwear cluster prior to the financial crisis. Domestically, the cluster primarily dealt with Mexican retailers who outlined their product specification, and in many ways controlled the development of the cluster. It is worth noting that prior to trade liberalization; the incentive to innovate was particularly low because Mexican producers were themselves responsible for regulating their own internal quality controls (Rabellotti, 1999). This led to a highly fragmented development path, whereby should firms meet the minimum production requirements they were
able to remain in the market. Trade liberalization, opened the domestic market, placing greater demands by retailers on the suppliers. This reversal in control, witnessed the transformative influx of imported footwear products. As outlined by Woodruff (1997, p.19) “Trade liberalization also had the effect of replacing the quality standard set by the manufacturers' coalition with one determined by world markets.” As a response to this shift, the incentive for greater coordination emerged in which the BAs and SEPROE encouraged greater discourse between firms and buyers. Furthermore, increased joint action was required so that the cluster could better exchange information to meet these new challenges. Rabellotti, in her 1997 study, table #7, found that following liberalization an important transformative direction emerged in which greater exchanges of information occurred benefiting the cluster.

<table>
<thead>
<tr>
<th></th>
<th>Domestic Market (%)</th>
<th>International Market (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information exchange</td>
<td>67.2 (N=61)</td>
<td>80.0 (N=25)</td>
</tr>
<tr>
<td>Negotiation of payment and delivery conditions</td>
<td>60.7 (N=61)</td>
<td>60.0 (N=25)</td>
</tr>
<tr>
<td>Technological assistance</td>
<td>18.0 (N=61)</td>
<td>28.0 (N=25)</td>
</tr>
<tr>
<td>Quality Control</td>
<td>63.9 (N=61)</td>
<td>80.0 (N=25)</td>
</tr>
<tr>
<td>Setting of product specifications</td>
<td>42.6 (N=61)</td>
<td>60.0 (N=25)</td>
</tr>
<tr>
<td>Production organization</td>
<td>13.6 (N=59)</td>
<td>20.0 (N=25)</td>
</tr>
</tbody>
</table>

Rabellotti (1999), p.1577

SEPROE was instrumental in this circumstance, brokering negotiations between the BAs and the Mexican retailers. Following the crisis, greater information exchange occurred between Mexican retailers and manufacturers, allowing certain retailers to go as far as to provide specifications and raw materials to producers coordinating production.

On the international stage, prior to the second Mexican financial crises, Guadalajara was manufacturing 5 million pairs of shoes. Following the currency devaluation, export grew to 10 million pairs per year (Rabellotti, 1999). Importantly, between 1990 to 1995 Camara de la Industria Del Calzado de Jalisco, one of the largest BAs has successfully worked to increase its number of exporting firms from five to forty. BAs strongly lobbied and assisted developing firms throughout the cluster to greatly concentrate on the export market. This increased emphasis on exporting throughout this period was common place throughout the cluster. On the side of the BAs the emphasis was used to lift overall competitiveness, in terms of processes and overall efficiency. Furthermore, as found by Rabellotti, the cluster aligned itself to the specification of its end buyers achieving greater economies of scale. Furthermore, larger numbers of exports
were reaching Latin America, thanks in part to the efforts cultivated by BAs establishing trade fairs in Guadalajara.

Horizontal linkages were quite possibly the most improved development resulting from the financial crisis. As a response to the crisis, the make-up of BAs resulted in a philosophical transformation of the cluster. Where previously, SME footwear manufacturers had a limited survival rate, due to their inability to specialize and establish joint initiatives. The recovery permitted the establishment of new networks and professional relationships that were often brokered within the offices of the BAs. These initiatives permitted the greater exchange of information and technology that lead to the overall development of the cluster.

The role of BAs as an innovating force is not as concrete as in the other cases. At the onset of the crisis, BAs such as Camara del Calzado primarily took defensive stances towards the development in the market. Lobbying extensively to increase tariffs on foreign made footwear, it was only after such tariffs were reached and the overall benefits of the peso devaluation were established that worked towards transforming the overall culture of joint action within the cluster commenced. In their defense, however, the BAs of Guadalajara have mounted intense promotional initiatives that have grown from solely representing up 70 firms as of 1995 to encompassing more than 400 (Camara del Calzado, 2008). Furthermore, stronger relationships with foreign buyers were cultivated so as to offer greater markets and opportunities to the firms. Still further, greater linkages were cultivated with the establishment of a Ciatec Bureau in Guadalajara. The Mexican national science and technological council (Ciatec), offers important technological innovations to the local firms that have been acquired within other footwear industries such as Leon and Mexico City. The establishment was a result of cultivated lobbying on the side of BAs that were well received and acted upon by the office of SEPROE.

As a whole, it was only after large scale bankruptcies and the prolonged economic strife experienced by their cluster that the local BAs within the Guadalajara footwear industry responded in a active fashion for the betterment of the cluster as a whole. Culturally, and in response to the geographical proximity of Mexico the United States, the cluster is itself more prone towards cultivating quasi-hierarchical value chain relationships. The capacity to produce footwear, whereby the may maximize economies of scale is directly in line with the product and process upgrading that is all too often witnessed within these relationships. Responsively, however, it appears that local retailers are requiring greater upgrading processes that are slowly
shaping the industry. These new found demands are processed by the BAs, resulting in greater awareness of industry direction and future productive requirements. To date, the Guadalajara footwear industry, while having lost some market-share, is producing upwards of $US 300 million worth of footwear.

7.4 Final Discussion – the use of the Success Criteria

In returning to the previously established success criteria, a pattern has emerged whereby clusters facing external shocks were assisted by BAs. The shocks within all three cases limited the clusters dependence on the lead firms within the GVC. This thereby lessened the bargaining power of the lead firm - within the quasi-hierarchical value chain - and allowed the BAs to take an increasing role in repositioning the cluster. Furthermore, the primary processes of product and process upgrading were complemented with increased functional upgrading as seen through greater backward, forward and vertical linkages facilitated by the BAs – as illustrated in the Success Criteria Table #8.

### Table #8 BA Success Operating within Clusters in HVCs

<table>
<thead>
<tr>
<th></th>
<th>Sinos Valley Cluster</th>
<th>Sialkot Cluster</th>
<th>Guadalajara Cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>The methods and means BAs develop networks and partnerships within the cluster and throughout the institutional setting</td>
<td>Medium to High</td>
<td>Medium</td>
<td>Medium to High</td>
</tr>
<tr>
<td>The role of functional upgrading as encouraged by BAs, where clusters are producing products with higher margins, administering quality assurance, and utilizing in-house R&amp;D</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>The advancement assisted by BAs, of multiple simultaneous value chains whereby marketshare is cultivated.</td>
<td>High</td>
<td>Medium</td>
<td>Medium to High</td>
</tr>
<tr>
<td>The development of export growth</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

Information on Table Developed by Author

The three cases illustrate the capacity of BAs to successfully meet new forms of competitions and international standards. Not only did the firms involved benefit from the increased push to upgrade, but the BAs themselves developed and upgraded their skills of representation and support offered to the cluster (Nadvi, 1999). As exemplified, BAs in the Guadalajara and the Sialkot clusters radically changed their roles to better represent and complement the development of the cluster. This may be illustrated more accurately in the capacity of the BA to better articulate the concerns and identify and locate the root causes of problems within the cluster (Nadvi, 1999; Schmitz, 1996). Importantly, the changes in representation throughout the BAs resulted in improvements within the cluster. Principally, the democratization of BA membership, whereby SMEs were more widely represented, illustrated
the important benefits that BAs could attain through greater social representation. As a result, and in line with the concept, important information about the nature of both the domestic and export markets increased the capacity for firms within the cluster to upgrade. Moreover, the representation of greater SME members, fostered trust that encouraged firms to enact the necessary changes in order to upgrade and remain relevant within the market. As a result, all analyzed clusters experienced a deepening in markeshare and an overall increase in exports.

As a result, a call for additional case studies and continued empirical analysis would be valuable in extending the results of this thesis. Further research must continue to explore the internal workings of BAs. Whereby greater efforts must be made to interpret the negative impacts placed upon the development of BAs from quasi-hierarchical value chains. In pursuing this line of research, a greater understanding of the role of BAs that support clusters within GVCs will be achieved.

Principal to this thesis and the aforementioned cases is a duality, between the incentives to upgrade and the ability to upgrade, where certain contextual realities have emerged that further Porter’s perception of the role of BAs. In Porters construct, the assumption is that the incentive and the ability of clusters can be encouraged through the institutional presence of a BA structure. Through observation, it has been shown that the nature of the BAs varied over time. Principally, as seen in all three cases, the BAs changed their overall approach shifting outcomes within the market structure (Nadvi, 1999). This furthermore encouraged functional upgrading to occur where the diversification of their value-creating processes and the differentiation of their markets rendered the clusters less dependent on the quasi-hierarchical value chain.

Yet in each case, the BAs had remained latent within the business environment, expressing quite possibly one of the most controversial realities of this study. It must be recognized that there are two forces at play within the formation of a BA. While often analyzed, the top down perspectives provides accounts for the effects of political institutions and legal frameworks that may weaken the overall cluster development. The bottom up response emphasizes an important reality that may not be as obvious when concerned with the formation of groups. This reality, as substantiated by Olson, would require that the clustered firms seeking a solution for their weakened state would first have to overcome the problems of joint action (Olson, 1965). Individual firms would have to rationalize their interest in participating within the cluster, whereby they would otherwise not wish to participate. The above illustrated cases
outline approaches where the individual firms abstained at times from participating in the BAs - unless there was significant reason for their presence.

If following the logic of the above mentioned argument holds, the success achieved by BAs operating within developing country clusters only took shape when the market conditions worsened and conventional productive methods were no longer working. Thus, the BA was substantiated by the social capital awarded to its institution, affirming its role as a legitimate leader for the represented firms (Olson, 1965). More precisely, a BA may be legitimized through its membership should there not be too much to lose or little choice but to cooperate in sharing of their social capital (Olson, 1982). Such realities question the ever present importance of BAs operating within developing country clusters. More specifically, the role of BAs as the fourth proxy of Porter’s Diamond Model, may not always be witnessed or appreciated within the model.

The pathology of this argument, however, is not complete. The ideas expressed are too deterministic in its efforts to rationalize the successful role of BAs within clusters. Perhaps a better lesson that may be gained is that should their develop an overarching dependency on lead firms as often illustrated within quasi-hierarchical value chains – and accordingly substantiated in our cases - there develops not only problems concerning functional upgrading within clusters but overall limited BA efficiency. Consequently, such environments weaken the initial role of the BA placing it within a straightjacket that limits its capacity to assist in functional upgrading. Accordingly, it was only in the face of the illustrated economic crises that the BAs analyzed in this thesis regained momentum and enacted important changes to the cluster. Thus, in order to better contextualize the outcomes of this thesis, it may be concluded that the hypothesis is in fact correct, complemented by the reality that BA capabilities may be bounded by specific institutional structures (quasi-hierarchical value chains). There limiting parameters hinder the presence and overall efficacy of BAs to enact more preemptive upgrading and support within the cluster. This would strengthen their presence within Porter’s Diamond and necessitate a certain form of permanence. Within this specific format, the role of social capital, and the different economic crises, reinvigorated the BA to mount important changes within the cluster. To this end, should market structures be more conducive for BA involvement, the success of Bas will be more widespread permitting the enactment of functional upgrading more consistently.
8. Bibliography


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9. Notes

1 As defined by Metcalfe (1995, p.37):

NIS is a 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, skills and artifacts which define new technologies.

2 Figure #2

3 Figure #3 - http://nvk.multilink.hr/english/images/graf-1.gif Last verified location: 28/11/08

4 Perfect competition is defined as a business environment, where there are a large number of small firms producing uniform products. This is environment where entry and exit of firms us commonplace.

5 infant industry argument – This argument encourages the protection of recently established firms within countries, through defensive trading practices, and subsidies. Further information may be acquire at http://gias.snu.ac.kr/whong/course/relation/re17.pdf Last verified 28/11/08


7 As stated by Moore & Hamalai, 1993, “This precludes organizations such as (a) the Rotary club that draw people business people together who are interested in charitable work; and (b) associations where members work in the private sector, however, are brought together on the basis of their professional status rather than pursuing a company or cluster specific end – e.g., an Association of Chemical Engineers.”

8 These corrupted motives may witness “organizers” holding positions within BAs, as seconded by Moore and Hamalai, (1993) in order to increase individual status; to strengthen political ties and or careers; and champion individualized causes that they deem as important.

9 The concept of ‘convening power’ describes the nature of authority within GVCs. When firms are selling to quasi-hierarchical value chains, it is reported that the firms must meet the demands from the global buyers and not the local producer’s demands. As a result, firms who enter these relationships are required to continually lower prices. For further information refer to Bazan & Navas-Alaman, 2004.

10 ISO 9000 Certification - Established in 1947, the ISO is a non-profit and non-governmental international organization and monitors international and national standards worldwide. Based in Geneva, this organization can be described as institution that correlates the standards maintained by 138 national bodies into an internationally recognized norm. Of these participating members, ISO is not responsible for the regulatory tasks involved with respect to the maintenance of standards, but instead is responsible to dispel the necessary information and assist firms in the fulfilling these requirements.

Firms aspiring to achieve ISO 9000 certification, wish to confirm to industry established and specified requirements. This form of assurance that firms comply with illustrates their dedication towards maintaining the appropriate quality standards as accepted as industry norms. One dominant reason for the application of such norms is that it assists in quality control throughout international supply chains and works to alleviate problems of transparency and transaction costs that are born by contracts worldwide. The ISO 9000 is a quality management system that may be applied widely to manufacturing, services, and the public sector. This is a highly accepted form of quality
management, with 26 per cent annual growth and over 400,000 firms holding certificates to date (ISO, 2000). While primarily held by EU firms, strong growth areas are seen in USA, Australia, Japan, and China.

Critically, while this standard is a voluntary process, the popularity of the ISO 9000 standard is often pressured both publicly and privately upon firms. This standard is often required when working with the public sector. One such example, as elaborated upon by Wilson (1999), discusses the EU’s adoption of compulsory standards in line with their ‘Global Approach to Testing and Certification’, whereby this standard outlines how firms must meet certain assessment criteria. In terms of the private sector, ISO 9000 certification as presented by Seddon (2000) is often used as a filtering mechanism that enhances the competitiveness of firms who are able to meet this form of quality management system. This certification is often viewed by developing country firms and clusters as permitting greater access to export markets – illustrated by the Sialkot case presented within the body of this thesis.

11 A form of quality assurance requested by the US Food and Drugs Administration (FDA). This requested documentation requires that all products meet international quality assurance standards. The ISO 9000 is an example of such a quality standard.

12 The speed with which ISO 9000 standards have been adopted in Sialkot has also raised concerns on the reliability of the certification process (Nadvi 2004).

13 Critically, since the 1980s, the majority of Latin American economies have worked to establish comprehensive free market reforms. They have worked prodigiously to liberalize markets, and accept international competition in the hopes of drawing greater efficiency to their economies. The reforms that were undertaken were often painful and without controversy. They are to a large extent complete, and the emergence of ignored as well as new problems have come to the public eye, illustrating that further development is required. Stiglitz (2002, p.25) has stressed, “that imperfect markets, poor infrastructure, deficient educational systems, and weak governments are making the transition to open and competitive economies very painful.” For further reading on this matter, refer to Casaburi, 1999; Gereffi et al. 2002; Pietrobelli, 1998 who each outline a number of cases that illustrate the problems of neoliberal Latin American policies.

14 The above listed shoe firms are members of Camara de la Industria del Calzado, 1999. To date, the presence of the informal sector in the Mexican footwear industry, results in inaccurate statistical data.