

LIBERALIZATION AND THE VALUE CHAIN UPGRADING IMPERATIVE: THE CASE OF THE MARIKINA FOOTWEAR INDUSTRY

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I. INTRODUCTION

During the 1860s, the world experienced its first limited episode of globalization. Trade liberalization was confined to a few countries and many discoveries were just beginning to be commercialized, resulting in increased trade mainly between industrialized countries and their colonies. Trade flows during this time usually involved capital and durable equipment in exchange for crops and commodities.

This initial experience would be brief, as industrialized countries quickly repealed laws aimed at liberalizing trade due to the displacements free trade created in their respective economies. Trade repression quickly spread among newly industrialized countries, with trade being viewed as a means to beggar international competitors. Overall, the benefits of trade were confined to isolated pockets of producers and market intermediaries.

If the motivations to increase trade then were European in nature, globalization today, in contrast, involves the participation of many more countries through the General Agreement on Tariffs and Trade (GATT) and, subsequently, the World Trade Organization (WTO). The similarity between the two periods is that both are simultaneously driven by trade and innovation. More than anything, these influences stand to reinforce and prolong today's globalization.

But aside from spreading innovation, globalization has also resulted in worsened poverty due to massive displacement of inputs, firms, and industries. However, these problems are expected, as history has shown: Higher trade participation has always required greater emphasis on efficiency and specialization; failure to compete in the market means decline. Then and now, the benefits from trade accrue *unequally* among trading countries.

Many workers still feel that participation in globalization unfairly disadvantages them, but since the process is better understood today than before, this feeling can now be channeled to considering how the costs of adjustment can be better managed. The Philippine footwear industry, in this regard, is a good case study.

In the Philippines, footwear manufacturing is traditionally associated with Marikina. During its peak in the 1970s, the then-province's footwear was coveted by even the most discriminating consumers in major fashion cities around the world. It was a time when its workshops and craftsmen would be very busy churning out seemingly endless pairs of footwear, which would be known for outstanding quality and design. The decline of the national footwear industry was however, to quickly come with trade liberalization.

Initially limited to selected sectors of the Philippine economy during the 1980s, trade liberalization became more widespread with the country's decision to join the WTO. As a result, Philippine footwear manufacturing, which was concentrated in Marikina, would now have to contend with imported substitutes. The rapid shift in market conditions induced massive displacement and adjustments in the Marikina footwear industry.

Observing Marikina's shoe sector today, two things are clear: first, significant changes in production methods have to be introduced; second, given the presence of footwear clusters elsewhere, a different approach to pricing, marketing, and distribution has to be taken to enable the industry to survive and perhaps, even thrive. These two observations form the premise of this study.

The current view of footwear manufacturers in Marikina, especially those with smaller output capacity, is one of hopelessness and pessimism. A more helpful and constructive way of looking at the situation is asking why the Marikina footwear industry failed to evolve with the dynamics of competition in both local and export markets. Specific objectives are as follows: i) provide an assessment of the domestic footwear industry's current competitiveness; ii) consider foreign footwear production networks; and iii) identify relevant policy initiatives undertaken by the private and government sectors at the local and international levels. Section II defines the concepts and methods used for analyzing the Marikina footwear industry. Section III outlines the makeup of the Marikina footwear cluster, and Section IV describes selected footwear manufacturing clusters elsewhere in the world. Section V is a concluding discussion of the link between upgrading and governance within the context of a cluster, with implications for Marikina.

II. FRAMEWORK AND METHOD OF ANALYSIS

A. Value Chains

A "value chain" is a collective set of activities involved in bringing an output from conception stage to distribution and final disposal. As such, a firm or an industry

can be depicted as a collection of value-creating activities, such as design and development, production, marketing, and logistics.

The activities comprising a value chain can be contained in a single firm or divided among different firms. This division of a value chain among different firms occurs due to the need to seek cost efficiencies. That is, a firm will be better off outsourcing or subcontracting an activity another firm can do at a lower cost and better quality so that it can concentrate on its core business. Specialization within and among companies means that productive activities can either cover a single geographical classification or a multitude of economies so that there are global value chains or production networks. The activities that go on inside a value chain are intertwined with those of other value chains, creating sets of complex inter-value chain relations that are both complementary and dependent.

Global value chains are marked by continuous and rapid evolution. This can be attributed to processes that underpin globalization itself: massive exchange of knowledge, proliferation of technical innovations, and continuous emergence of new competitors. New technologies, if assimilated, provide opportunities to improve products and processes via new products and new value chains; old and new competitors can be sources of distinct advantage by providing insights into improving operations and identifying other strategic opportunities.

There are two types of global value chains. Buyer-driven value chains have large buyers whose core competencies involve brand management, marketing, and coordinating and controlling activities. These value chains typically require labor-intensive production methods, and are considered more appropriate for developing economies offering lower wages. Some examples of buyer-driven value chains are apparel, furniture, footwear, and toys.

In producer-driven value chains, meanwhile, are key producers that require capital and knowledge-intensive production methods. Assembly of automobiles, semiconductors, and consumer electronics can be cited as industrial examples of producer-driven value chains. These producers act as coordinators within the value chain, dictating on input suppliers to continuously strive for efficiency. Insertion into producer-driven value chains are considered better suited to more advanced developing economies.

Whether buyer- or producer-driven, sustainable participation into value chains requires exploitation of scale economies to minimize cost per unit produced. In both types of value chains international fragmentation of vital processes involved in a value chain is a plausible option. Distribution of vital processes this way heralds growing inter-firm links on a micro level, and mutual dependence among economies on an international level.

Opportunities to exploit greater economies of scale should never be overlooked, because this, coupled with greater specialization in the use of inputs, should result in bigger gains from trade and fewer anti-competitive, pro-import substitution views. Exploiting scale economies can often be achieved through reliance on available export markets.

Any improvement by a firm in its value chain or firms within a cluster is referred to as “upgrading” in the literature. The main incentive for firms to upgrade is to receive better returns. There are several forms of upgrading that can be undertaken: process (an improvement in the internal processes within firms), product (an improvement in the product itself in terms of quality, price, or branding), functional (an improvement in the relative share of a firm in an output’s gross value added), and inter-chain (improving economic rents by moving into a more profitable value chain). These forms of upgrading provide firms and clusters different alternatives to receive better returns from productive activities.

Equally important to understand is the concept of “governance” in the value chain and production cluster literature. Here, governance refers to the market agent who performs the role of coordinator and recognizes the heterogeneous relationships that exist within a chain or cluster. Several relationships can be identified: market-based (characterized by interpersonal trading relations which are primarily dictated by market forces), network (occurs when market agents are engaged in a variety of network relations), and hierarchical (two or more vertically related market agents with different ownership structures). A consideration of these relations is important in view of its effect on the resulting distribution of economic returns.

Markets are considered the simplest form of global chain governance. In this set-up, firms and individuals merely buy and sell products to one another with little interaction beyond exchanging goods and services for money. The central governance mechanism is price. Market linkages are sometimes transitory, but can endure with repeated transactions. Since the cost of switching to new partners is relatively low, transactions can be easily consummated with new parties.

Modular value chains are the most market-like of three network style global value chains governance patterns. Typically, suppliers in modular value chains make products or provide services to a customer’s specifications. While these instructions may be more or less detailed, suppliers in modular value chains tend to be highly competent, they take full responsibility for process technology and often use generic machinery that spreads investments across a wide customer base. This keeps switching costs and limits transaction-specific investments even though buyer-seller interactions can be very complex.

Under modular value chains, relations would have to be thicker due to the higher volume of information that has to be processed and required codification schemes. The relations can become increasingly compartmentalized with the need to internalize knowledge of design and production.

Relational value chains are the second network-style global value chain, where mutual dependence is regulated through reputation and social and spatial proximity. The presence of established family and ethnic ties is considered a strong element in this form of governance. Participation is usually limited to a small number of firms, and the cost of switching to new partners is relatively high. Dense interactions and knowledge sharing are supported by the deep understanding value chain partners have of one another, but unlike codification schemes that enable modular networks, these “short-cuts” tend to be idiosyncratic and thus difficult and time-consuming to re-establish with new value chain partners. Furthermore, upgrading opportunities under this value chain network are limited.

Captive value chains are considered the third network style global value chain governance pattern. Relations in these value chains are predicated on small suppliers becoming dependent on larger, dominant buyers. Depending on a dominant lead firm for a large share of business and for process technology raises switching costs for suppliers, which are therefore, “captive.” In terms of upgrading opportunities, the relations could be considered beneficial if inputs provide a binding constraint. Such networks are frequently characterized by a high degree of monitoring and control by the lead firm. The asymmetric power relationships in captive networks force suppliers to conform to the modes of interaction specified by, and often specific to, the dominant customer. As a result, relations become thick and high switching costs are imposed on all parties.

Finally there is the hierarchy type of relational governance. In this type, there is rigidity in the relations between firms along the same value chain. This governance pattern is characterized by vertical integration (i.e. transactions take place inside a single firm). The dominant form of governance is managerial control, which virtually eliminates chances to upgrade.

In any relationship there is a lead actor or market agent wielding the independent ability to dictate the nature or structure of the relationship. These lead actors must be recognized and understood, since doing so is crucial in identifying upgrading possibilities. To a typical competing industry inserted into a global value chain, understanding governance implies favorably manipulating the distribution of rewards.

In a global setting, value chains have been increasingly characterized by fragmentation of key activities. As value chain members have concentrated into key

competencies, ways have been devised to parcel out inefficient activities. Therein lies the paradox of global value chains: firms concentrating or specializing into activities while being required to work with others. Immersing value chains into international production networks, furthermore, allows ample consideration for indirect but significant factors such as local and national government services, financial institutions, and supporting infrastructure.

Value chain analysis can be significantly supplemented by the concept of “clusters.” Clusters encompass the array of linked industries and other entities important to competition; a cluster can be concentrated geographically but can cover wide spatial and political boundaries. What is important, however, is that these boundaries are created based on productive linkages between scattered components of a cluster. Establishment of productive linkages, in turn, should be based on cost efficiencies, rendering old notions of comparative advantages less rigid.

The odd mixture of competition (each firm considers each other as rivals) and cooperation (mainly between firms with horizontal relations, producing complementary inputs and services) in a cluster is essential to competitiveness and sustainability. Another “odd” characteristic is the creation of a hybrid type of organization between the included firms and entities: A cluster’s organization—and the relations between members—lies between a rigid, hierarchy type, vertically integrated organization and a loose market-based relation. That is, a cluster is a different way of establishing relations along a value chain, fostering competition through repeated exchanges and contacts while establishing symbiotic coordination and trust.

The vibrancy of the organization and relations inside a cluster is partly dictated by the business environment and government policies. Even then, the cluster’s “competitive symbiosis” is considered derived from the following:

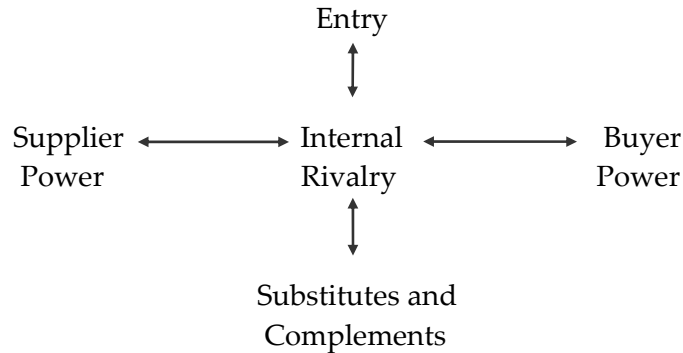
- i) cost efficient availability of employees and suppliers
- ii) access to specialized information
- iii) establishment of mutually beneficial internal relations
- iv) access to institutions and public goods
- v) competition enhanced by internal rivalry
- vi) continued inducement to innovation

These conditions are not static and are not always given. Some of these will have to be created; others amplified. In its entirety, the value of a cluster is in providing a perspective on the importance of mutually beneficial, competitiveness-reinforcing relations between members. Approaching any productive activity from the perspective of a cluster provides a comprehensive way to manage competitiveness amid globalization.

B. Five Forces

Five Forces analysis can complement the use of value chain and production networks analysis on a firm level. This approach divides an industry into five parts: internal rivalry, entry, supplier power, buyer power, and substitutes and complements. The interaction between these five forces is given in the diagram below.

Figure 1: Five Forces Analysis



Internal rivalry refers to the jockeying for market shares by firms within a market. An internal rivalry assessment usually begins with defining the outlines of the market (geographic coverage, product classifications, and other factors), and includes methods of price and non-price competition employed by firms. In the footwear industry, internal rivalry assessment should include the strategies employed by manufacturers and their impact on local as well as foreign competitors.

The next part of industry analysis is about assessing entry conditions. (Entry refers to the ability of new firms to enter the market.) Firm entry influences the profitability of existing firms by changing market share and providing dynamics to the intensity of internal rivalry. The number of entering firms can also signal the relative attractiveness of an industry. A high number of entering firms signal that profits and prospects of an industry are attractive or good, for example.

An analysis of substitutes and complements becomes relevant for the footwear industry when considering supply and demand price elasticities, which are important in evaluating market prices, pricing, and competitive strategies, as well as new productive and distribution arrangements. More importantly, price elasticity serves as a basis for assessing supplier and buyer power or the ability of each to dictate market prices. Consideration for peripheral industries (such as tanneries, rubber sole, adhesive and thread producers) can also be included.

The use of the five forces for industry analysis, however, is not perfect, because each firm in the industry is treated as a competitive threat. An approach such as this

effectively excludes the possibility of mutually beneficial cooperation among competing firms. In the case of the footwear industry, cooperation can become an attractive option if a comprehensive competitive strategy can be charted involving all firms.

C. Method of Analysis: Final Markets

The methodology proceeds as prescribed in Kaplinsky and Morris (2000), except for a consideration of distributional issues:

- i) point of entry for value chain analysis
- ii) mapping value chains
- iii) identification of product segments and critical success factors
- iv) how producers access final markets
- v) bench-marking production efficiency
- vi) governance of value chains
- vii) upgrading in value chains
- viii) distributional issues

Data used in the study are used to identify general trends, which are then used to indicate probable outcomes and identify alternatives. Difficulties with secondary data due to differences in footwear classification and the unavailability of some information were encountered. Several government (the Department of Trade and Industry (DTI), the National Statistics Office (NSO), the Tariff Commission, and the Marikina municipal government) and non-government agencies (the Philippine Footwear Federation Inc.) were utilized as data sources. The United Nations Library was extensively tapped when it comes to secondary international data pertaining to footwear manufacturing. A survey conducted under the auspices of the Pearl 2 Project proved useful in providing the general outline of the footwear firms inside Marikina. Some of the information unobtainable via existing data was given through consultation with footwear distribution agents, popular media sources, and graduate thesis and non-academic journals. (An appendix of mostly value chain analysis terms is provided for ready usability.)

The methodology followed in this study begins with a consideration of final markets. Final markets for footwear are subdivided into local and international. Consideration for these two market subdivisions is undertaken with identifying general characteristics and underlying trends. Identified markets for output suggest what the core competencies and competitive advantages of involved firms are along a value chain. Markets can be used to identify basic factors such as pricing and relative costing, to wider considerations such as correct market orientation and upgrading strategies.

III. THE MARIKINA FOOTWEAR INDUSTRY

A. Historical Background

The foundations of the Marikina shoe industry were first laid during the 1880s, when a wealthy landowner named Laureano Guevara taught himself how to make shoes after taking apart a pair he bought from England. He, together with Tiburcio Eustaquio, Ambrosio Sta. Ines, and Gervacio Carlos, comprised the first group of shoe manufacturers in Marikina. The shoe industry that emerged during this time was made up of family-owned firms producing small batches of handmade shoes that were of high quality but slow to manufacture. (Until the late 1990s, 97% of registered firms remained as such; most are still small firms, and a significant number are still unregistered. Tables 1 and 2 provide a snapshot of the industry's employment and status of operations.)

By 1935, Marikina was estimated to have 2,450 workers in 139 footwear shops producing 260,078 pairs of ladies' shoes and 86,692 pairs of men's shoes. The Marikina footwear cluster then thrived for decades, so that by the 1980s its exports were finding buyers in the United States, Europe, Australia, Hong Kong, and Japan. Prospects were also good in the domestic market, with about 70% of the shoes—totaling 33 million pairs a year—sourced from Marikina¹. Registered shoe manufacturers, employing about 300,000 workers or 20% of the city's available workforce, totaled 1,350, and as a whole, was the source of 65% of Marikina City's revenues.

Two decades later, this is no longer the case. Today, imported shoes from China make up roughly 80% of the local supply², reversing the industry's previously rosy prospects. Registered shoe manufacturers in the city went down from 722 in 1991 to 632 in 1993. In 1994, there were six large manufacturing companies in Marikina producing for brands like Reebok, Nike, Skechers, LA Gear, and Sergio Tachini. By 2003, only two of these firms remained (Stefano Manufacturing and Trident International Trading Corporation), and today, there are no local brands that represent a significant share of the footwear market. All in all, the competitive prognosis for the Marikina footwear cluster is bleak, because low cost competitor countries have favorable scale economies supported by much foreign investment.

Even then, Marikina remains an important footwear cluster within the Philippines. According to the DTI, the Philippine footwear industry remains concentrated in two regions: Southern Tagalog and the National Capital Region. Together, these regions have 1,750 firms, or 81.47% out of a total of 2,148 registered footwear firms in the country. Within the National Capital Region, footwear manufacturing remains concentrated in Marikina. The share of Marikina footwear production to the total number of firms in the capital can be observed from the data

¹ Business World, January 11, 2002, p.21

² Manila Bulletin, September 8, 2003, p. B-12

given in table 7. Marikina footwear firms number 682, accounting for an employment level of 7,480 laborers or 73.81% of the total number of firms and 61% of the employment with the National Capital Region's footwear cluster.

Table 1: Distribution of Footwear, Firms and Employment, National Capital Region, 2001

City/Municipality	No. of Firms	% Share	Employment	% Share
Manila	5	0.54	165	1.35
Quezon	7	0.76	185	1.51
Mandaluyong	1	0.11	55	0.45
Marikina	682	73.81	7,480	61.00
Pasig	35	3.79	915	7.46
San Juan	1	0.11	2	0.02
Caloocan	106	11.47	1,242	10.13
Malabon	12	1.30	465	3.79
Navotas	-	-	-	-
Valenzuela	20	2.16	775	6.32
Makati	2	0.22	19	0.16
Pateros	43	4.65	142	1.16
Taguig	4	0.43	400	3.26
Las Piñas	1	0.11	88	0.72
Muntinlupa	1	0.11	169	1.38
Parañaque	3	0.32	154	1.26
Pasay	1	0.11	2	0.02
Total	924	100	12,258	100

Source: National Statistics Office

The industry employs several types of workers. A *padronista*, is a worker who makes shoe patterns and designs based on shoe samples or photographs of shoes. The *sukatero* is a worker who cuts sections of leather from leather sheets, taking care to avoid waste. A worker who is classified as *mag-aareglo* prepares the upper portions of shoes, while a *costurera* hand sews decorative patterns on shoes using large needles and thread or leather thongs. The worker who is known as a *sapatero* uses a wooden mold to join uppers with sole and heel. Finally, there is a worker referred to as an *alamodista* who operates a large machine that stitches the soles of shoes to their upper portions. A good shoe worker can do all these jobs well, but the work would be much slower. Average employment level is about 60 workers per respondent footwear firm. Most of these labor inputs are devoted to production, with direct employment providing regular compensation at mostly daily minimum wages (about P250 to P350). Workers are paid per piece, though the pay also varies according to the complexity of the assigned task.

Previous studies that shed important light on the industry are the two Pearl 2 projects done by the DTI in 2003 and 2004, and the AIM Policy Center study of Dr. Morato. The first two studies are based on surveys, while the AIM study primarily used interviews. Results from the Pearl 2 studies reveal that most footwear firms consider themselves either micro or small enterprises (71.5% to 86% of respondents). In terms of annual sales, 58% have P10 million or less, 36% sell between P10 million to 50 million, and 6% exceed P50 million in the 2003 survey. In the subsequent survey, 49% said they had yearly sales of P10 million pesos, 26.5% sold between P10 million to P50 million, and 12.2% reported having more than P50 million in sales.

Table 2: Establishment Profile of the Marikina Footwear Cluster

Aspects	Pearl 2 (2003)	Pearl 2 (2004)
Size distribution	86% micro and small, 12% medium, 2% large	71.5% micro and small, 10.2% medium, 6.1% large
Indicated sales distribution	58% ≤ 10 million pesos, 36% 10 to 50 million pesos and 6% > 50 million pesos	49% ≤ 10 million pesos, 26.5% 10 to 50 million pesos and 12.2% > 50 million pesos
Product lines	concentration on ladies wear; other product lines cited: men and children shoes, bags, sandals	concentration on ladies wear; other product lines cited: men and children shoes, bags, sandals
Employment	64 average number of workers (2,950 direct workers ÷ 46 respondent firms)	60 average number of workers (2,964 direct workers ÷ 49 respondent firms)
Subcontractors	78% no subcontractors, 22% subcontractors used for some to all parts of work	53.1% no subcontractors, 34.7% subcontractors used for some to all parts of work
Mode of operations	65% semi-mechanized, 31% mainly manual, 4% fully mechanized	63.3% semi-mechanized, 30.6% mainly manual, 4.1% fully mechanized

Source: Pearl 2 Projects 2003 and 2004.

The footwear firms in these studies reported concentrating on women's footwear alongside working on those for men and children, belts, and bags. This stated product concentration reinforces the view that *Marikina-produced footwear's competitive strengths involve fashion-dictated products that are strong in quality and design, though few in number*. With no indication of a separate production line for each classification, this can be

construed as an indication of limited horizontal diversification possibilities or room for economies of scope. This is important in terms of exploring upgrading possibilities and opportunities to lower average costs with respect to economies of scope.

About 95% of the manufacturers are small producers with capital of at most P150,000 pesos; the remaining 5% of the manufacturers have capital ranging from P251,000 to P10 million. Mechanization of operations and automation of selected footwear-making tasks is confined to the latter class of shoe manufacturers.³ For most footwear producers, a production capacity of at least 1,500 pairs a week is required before it can sell to foreign markets.

With regard to means of production, the firms' smallness in terms of capital suggests limited opportunities to mechanize operations. (More than 90% of the respondents claim semi-mechanized or fully manual modes of production for both survey periods.) The seasonality of footwear production in Marikina (March to May for the opening of classes in June, and October to December for the yearend holidays) similarly limits automation, since this means an erratic recovery stream on machinery-invested capital. (Automation, in this context, is the presence of mechanized cutting, skiving or installing shoe lasts, soling, drying, testing, and other shoemaking tasks.)

In the AIM study, capacities for large firms were pegged at 23,545 pairs per month during peak production seasons, and 13,365 pairs per month during lean periods. For small firms, the rated monthly capacities were 3,342 pairs and 1,631 pairs per month during peak and lean periods, respectively. Note that in this situation, the presence of machinery results in an affirmation of automation without its usual negative connotations, i.e. machines dominating the entire product line assembly. In terms of volume, the studies cited report output going up from 1,000 pairs a week to 3,000 to 5,000 if semi-automation is pursued.

There is a perceptible lack of subcontracting and other manufacturing vertical arrangements.⁴ This can be interpreted as a sign of firms preferring to maintain production "in-house" to address seasonality and improve utilized production capacities. Yet while this relation between production and employment could be good given the periodicity of work, this could also mask a failure to exploit efficiency gains from specialization of inputs. The opportunity loss being referred to here is a retardation of productivity growth arising from the failure to concentrate on core competencies.

³ Manila Chronicle, May 4, 1987

⁴ Larger footwear firms, in contrast, have always subcontracted regularly. In these arrangements, they usually provide the raw materials required and generate greater revenues from assuming greater risk. A novel, related development is the use of smaller manufacturers of these larger companies' machines to accommodate demand surges.

III. THE MARKETS FOR MARIKINA FOOTWEAR

A. Domestic Market

Data on the local footwear industry is scarce, and data collection efforts suffer from a lack of orchestration or centralized effort by firms, supporting institutions, and government. A pronounced seasonality of production has contributed to the situation, and this is further aggravated by informality in the status of many firms. As a result, many workers inside the cluster are also informally employed.

The estimates of the Philippine domestic footwear market provided here are based on the assumption that domestic demand is equal to total domestic footwear production less total footwear imports plus total footwear exports. The DTI estimates the size of the domestic footwear market anywhere between 46 to 51 million pairs a year.

Morato (2005) provides two estimates: 18.65 million pairs during 1995 from a total number of 27 large footwear firms and 887 small footwear firms in the country with 65% and 55% capacity utilization rates, respectively; the other approximation for the same year is 40.8 million pairs. The second estimate was larger after including 60% of the 1,476 unregistered footwear producing firms at the time (the other 40% were suppliers or subcontractors).

In the latest census of establishments conducted by the NSO, the value added of 133 footwear kinds amounted to P2.35 billion and an average value added of P17.7 million per firm in 1999. For 2001, the same government office listed a total of 2,148 footwear firms in the Philippines. Using the 1999 average value added estimate, the size of the domestic footwear market should amount to about P38.02 billion in 2001.

Data on footwear products' pricing is also scarce. What could be done under the circumstances is to infer domestic prices from total annual export receipts. Average prices can be obtained by dividing total export receipts per footwear category by footwear volume exported in each category. As with interpreting output levels, resulting average prices should be considered with caution.

The choice of using average export prices can be justified. Since the Philippines is a relatively minor footwear exporter, there is good assurance that resulting export prices will in fact be lower because exporters are price takers. The top five footwear exports in 2000 were selected, as the prices of these footwear categories can be considered more competitive. The objective is to consider domestic prices, as reflected by the relatively low average export prices, relative to consumers' ability to pay.

The estimated average prices of top 5 footwear exports during 2000 are given in Table 3. The price varies from P182.5 per pair to P488.3. Noticeable is the absence of purely leather and usually more expensive footwear like sandals and slippers among the top 5 Philippine exports.

Table 3: Top 5 Footwear Exports, 2000 Value, Volume and Average Prices

Philippine Standard Classification Code	Export Value (FOB values; US dollars)	Export Volume (pairs)	Ave. Prices (USD)	Ave. Prices (PHP)
8512502 (sports footwear)	24,789,275	2,774,088	8.94	395.0
8514909 (footwear with outer soles of rubber & plastic)	14,757,689	1,335,511	11.05	488.3
9310219 (footwear manufactured from consigned materials)	10,769,009	1,175,673	9.15	404.0
8515100 (footwear with outer soles of rubber or plastics, uppers of textile)	9,378,149	2,270,891	4.13	182.5
9310211 (footwear with leather uppers, outer soles of rubber, consigned)	4,830,239	488,984	9.88	436.6

Note: Average exchange rate for 2000: P44.19 per USD.

Source: Department of Trade and Industry.

This range of average footwear prices can now be compared with average household income and expenditure levels recorded during 2000, which is in Table 4. The average household size for 2000 is five individuals, allocating 2.7% of expenditures to buy wearing apparel and footwear. This suggests that many Filipino households could not or can barely afford the average prices of footwear indicated previously. The first income category (under P10,000) would result in P50.73 spent per household member from an average expenditure of P9,394. Using the next two income categories, expenditure per household member goes up to P95.97 (for those earning within P10,000 to P19,999) and P146.73 pesos (P20,000 to P29,999 income). In fact, the people who can afford the lowest priced footwear listed in Table 3 are those included in the fourth income class. (Note that in this observation, potential footwear expenditures were determined inclusive of spending for other apparel.)

Actual available spending for footwear should be lower than the figures obtained here. Hence, an alternative way of looking at the two previous tables is that even the lowest priced footwear will effectively exclude a total of 1,201,219 households (number of households included in the first three categories) or 7.8 percent of all families from buying locally manufactured footwear.

Table 4: Annual Household Average Income and Expenditures, 2000

Income Class (Pesos)	No. of Households	Ave. Annual Income¹	Ave. Annual Expenditures²
Under 10,000	35,556	8,026	9,394
10,000-19,000	329,012	16,040	17,773
20,000-29,999	836,651	25,434	27,173
30,000-39,999	1,170,541	35,143	36,559
40,000-49,999	1,388,507	44,968	45,514
50,000-59,999	1,196,126	55,001	53,602
60,000-79,999	1,983,219	69,319	65,555
80,000-99,999	1,496,280	89,599	81,671
100,000-149,000	2,431,060	122,080	108,058
150,000-249,000	2,382,193	191,913	158,007
250,000-499,000	1,528,433	337,256	257,279
500,000 and over	492,077	939,397	646,809

¹ Average income was determined by dividing total income in each class interval by the number of households in each class interval.

² Average expenditures was determined by dividing total expenditures in each class interval by the number of households in each class interval.

Source: National Statistics Office/Philippine Statistical Yearbook.

Take another footwear category, the one listed under PSCC 9310211. This category is selected because it can be surmised this type of footwear can be manufactured in Marikina, the cluster that is the focus of this study. Following the previous procedure, the average price of this footwear category that is obtained is beyond the spending allocation of households in the first seven income categories. Only by the eighth income class, with an apparel and footwear expenditure allocation of P441 pesos per person, can the average price of P436 pesos begin to be affordable.

What the preceding discussion has pointed out is that low footwear price—specifically, lower than what is indicated by the indicated average prices—will have to be a major, if not prime attribute of footwear intended for sale domestically. A key reason why imports are flooding into the domestic market is that these imports are cheaper. Final buyers may have other considerations in purchasing footwear, but low incomes mean they have no recourse other than lower priced footwear.

Market-related aspects from the three previously cited studies of the industry are summarized in Table 5. Noticeable in the information summarized in the table are these common findings:

- i) Marikina footwear firms are primarily domestic market oriented
- ii) Most of the footwear originating from Marikina are leather and non-leather in classification

- iii) Consumers of Marikina-produced footwear are price conscious
- iv) These consumers represent low to middle segment of the domestic market
- v) China, using low prices as main strategy, is identified as the main competitor
- vi) Other competitors identified are mostly Asian countries

Table 5: Some Market Aspects

Market Aspects	Pearl 2 (2003)	Pearl 2 (2004)	AIM Policy Center
Cited product line(s)	Mostly leather. Mainly ladies footwear; partly men, children and bags	Mostly leather. Mainly ladies footwear; partly men, children and bags	Implied fashion oriented, 15-49 age groups
Market orientation	93% local; 7% both local and exports	64.9% cited local markets as either main or sole market	Mostly local market
Targeted market segment	55% mid-market, 29% high-end, 16% low-end	61.2% mid-market, 24.5% high-end, 26.5% low-end	Mostly low and mid-market
Marketing methods	Buyer identification through trade fairs, own contacts, referrals, distribute brochures and catalogs	Buyer identification through trade fairs, own contacts, referrals, distribute brochures and catalogs	No direct mention
Marketing channels	Direct selling 11%, department stores 25%, other stores 45%, traders 18%	Direct selling 61%, department stores 57.1%, other stores 81%, traders 28.6%	Direct selling, retail outlets, department stores, own retail outlets, specialty and boutique stores, traders
Main competitor	China 100% of respondents	China, 90% of respondents	China
Other competitors cited	Italy, Spain, Mexico, India, Thailand, Indonesia, Malaysia, Taiwan	Italy, Spain, Mexico, India, Thailand, Indonesia, Malaysia, Taiwan	Hong Kong, South Korea, Indonesia, Malaysia, Taiwan, Vietnam
Main competitor's advantages cited	Low price, low labor cost, full mechanization, cheap materials, high productivity, fast turnaround times	Low price, low labor cost, full mechanization, cheap materials, high productivity, fast turnaround times	Low price, cheap labor, full mechanization suggested
Other competitors' advantages	Low cost, high quality materials, design, craftsmanship, quality	Low cost, high quality materials, design, craftsmanship, quality	Low cost materials available, good quality, design and craftsmanship

Source: Morato (2005), Pearl 2 (2003) and Pearl 2 (2004).

There seems to be an inconsistency between the marketing aspects cited in the previous table and existing market conditions. Most of the footwear firms are oriented toward the low and middle segments of the footwear market, but their prices—if the indicated price range of Table 2 correctly reflects Marikina footwear price range—puts their footwear beyond the reach of most domestic consumers.

It can also be noted that a variety of marketing channels and means of consumer identification are now being utilized by the footwear firms. Using the value chain experiences observable in other footwear clusters, a vertical fragmentation, at least at the marketing distribution level, is now beginning to manifest itself. This is an essential trend that Marikina manufacturers can explore so that it can focus on its core production competencies and begin to take advantage of scale economies.

In value chain analysis, recall from the previous discussion that governance is defined as “the coordination of different dispersed activities involved in a chain,” and that it can take on various forms. Preceding observations about vertical fragmentation concentrated at the marketing-distribution level imply a quasi-hierarchical structure at present, though strict hierarchical governance will probably emerge in the future. Footwear firms will have to surrender their ability to dictate selling prices and concentrate on exploiting specialization and opportunities for scale economies. With domestic footwear consumers increasingly fashion- and price-conscious as imports become more available, firms have no alternative except to do so.

B. International Market

For 2002, global reported footwear imports amounted to US\$52.93 billion and footwear exports amounted to US\$38.72 billion⁵. Combined, these figures indicate a global trade equal to more than US\$90 billion. Global footwear imports increased by about 2% from 1998-2002, while global footwear exports growth during the same period was erratic.

Selected top major exporters and importers based on export-import values for the 1998-2002 period are listed in Table 6. The world’s top footwear exporter is China, and the rest of the list is dominated by Asian and European countries, except Brazil. Likewise, Asia and Europe make up most of the world’s footwear importers, save for the presence of the US—the top importer of footwear—and Canada.

⁵ International Trade Statistics (2004)

Table 6: Selected Leaders in Exports and Imports of Footwear, Cumulative Values and Market Shares, 1998-2002

Footwear exports			Footwear Imports		
Country	Cumulative values (FOB billion USD)	Percentage Share	Country	Cumulative values (FOB billion USD)	Percentage Share
China	48.10	24.75	USA	77.02	30.31
Italy	37.37	19.23	Hong Kong	26.99	10.62
Spain	10.19	5.24	Germany	21.36	8.41
Portugal	7.90	4.06	United Kingdom	16.29	6.41
Brazil	7.56	3.89	France	14.68	5.78
Germany	7.21	3.71	Japan	14.18	5.58
Indonesia	7.13	3.67	Italy	12.69	5.00
Belgium	6.36	3.27	Netherlands	6.25	2.46
Vietnam	5.46	2.81	Belgium	5.18	2.04
France	5.06	2.60	Canada	5.01	1.97
Romania	4.20	2.16	Austria	3.79	1.49
United Kingdom	3.88	2.00	Spain	3.56	1.40
Netherlands	3.71	1.91	Switzerland	3.39	1.34
Republic of Korea	3.69	1.90	Australia	2.60	1.02
Thailand	3.46	1.78	Denmark	2.33	0.92
India	2.13	1.61	Sweden	1.97	0.78
World Total	194.34	84.6	World Total	254.08	85.52
Philippines	0.42	0.22	Philippines	0.29	0.11

Source: International Trade Statistics (2004).

The Philippines can be considered a minor footwear trading country, accounting for just 0.22% and 0.11% of the industry's global exports and imports. Noticeable in table 4 is the country's positive footwear trade balance from 1998 to 2002: footwear exports amounted to US\$420 million as compared to total Philippine cumulative imports of US\$290 million.

A consideration for the composition of Philippine footwear trade is also important. In 2003, total footwear exports amounted to US\$45.95 million, while footwear imports were US\$55.55 million. Exports by classification were as follows: leather (US\$0.38 million, 0.82% of total exports), non-leather (US\$12.18 million, 26.51%), sandals and slippers (US\$0.25 million, 0.54%), sports (US\$22.69 million, 49.38%), footwear parts (US\$0.73 million, 1.59%) and consigned footwear (US\$9.72 million, 21.15%). Conversely, the Philippines imported US\$2.21 million of leather footwear (3.97% of total imports), US\$28.71 million of non-leather pieces (51.68%), US\$5.24 million of sandals and slippers

(9.43%), US\$5.94 million of sports shoes (10.69%), US\$8.84 million (15.91%) of footwear parts, and US\$4.61 million of consigned footwear (8.30%).

Taken together, the footwear export and import levels reveal that the Philippines' footwear exports are mostly non-leather, sports, and consigned footwear, while importing mainly the same types of products in addition to footwear parts.

There is an important insight that can be gained from the data previously described: The country's competitive advantage in footwear comes from the manufacture of non-leather, sports, and consigned footwear for middle to higher-income market segments. This, in turn, suggests two things: that competitor identification of firms must be fine-tuned by way of market segmentation, and that input availability constraints are important considerations in themselves. (The latter is particularly relevant in the use of leather.)

An assessment of the regional distribution of Philippine footwear trade can be made using the data given in Table 7, showing Philippine footwear imports coming mostly from other Asian countries while the majority of corresponding exports to Europe. This supports the earlier observation that pair prices are important in the local market. Conversely, it is proof of the Philippine footwear industry's potential to sell more to affluent markets.

Table 7: Philippine Footwear Trade in 2003, Top Ten Origin and Destination
(in FOB values, millions of US dollars)

Footwear Imports			Footwear Exports		
Imports	Values	% Share	Exports	Values	% Share
China	27.44	49.40	Netherlands	13.72	29.85
Hong Kong, China	13.44	24.19	Japan	6.32	13.75
Taiwan	3.22	5.80	United Kingdom	4.87	10.60
Vietnam	2.57	4.63	USA	3.03	6.59
Indonesia	2.53	4.56	Mexico	2.80	6.09
Korea	1.67	3.01	Germany	2.78	6.05
Thailand	1.40	2.52	France	2.17	4.72
Japan	0.60	1.08	Italy	1.44	3.13
Italy	0.51	0.92	Spain	0.96	2.09
USA	0.37	0.67	Singapore	0.79	1.72
Total	53.75	96.78	Total	38.88	84.59

Source: Department of Trade and Industry.

Domestic footwear production in 2001 was estimated at P38.02 billion. The imports in table 5, using the 2003 average exchange rate of P54 to a US dollar, amount to about P3.01 billion pesos. In terms of market share, imports account for less than 10% of the total footwear domestic market—implying that they do not constitute a serious

competitive threat to the local industry. But this should not be a reason for Philippine producers to be complacent: footwear imports are growing faster than either local production or footwear exports. Also, there is a mismatch between the composition of production intended for domestic consumption and footwear, which is being imported.

Comparative average prices of footwear exports and imports are given in Table 8. Top footwear exports were selected based on the five highest total values registered during 2003; comparative average import prices of each of these footwear categories are given in the adjoining column. Top imports were selected based on highest total values registered for each footwear category. These categories were listed according to the order of appearance in the PSCC imports column as sports footwear, leather, non-leather, sandals and slippers, and footwear parts.

Table 8: Comparative Average Prices¹ of Top Philippine Exports and Imports, 2003

PSCC	Top 5 Exports ²		Comparative Imports		PSCC	Top 5 Imports ³		Comparative Exports	
	USD	PHP	USD	PHP		USD	PHP	USD	PHP
8512502	10.17	552.2	6.10	331.2	8512502	6.10	331.2	10.17	552.2
9310219	9.05	491.4	-	-	8514809	1.56	84.7	12.13	658.7
8513209	3.15	171.0	0.70	38.0	8515100	0.87	47.2	4.94	268.2
8515100	4.94	268.2	0.87	47.2	8513204	0.29	15.7	0.51	27.7
8513201	1.39	75.5	0.93	50.5	8519009	2.33	126.5	6.73	365.4

Note: Average exchange rate for 2003 was Php54.30 per USD.

¹ Values and volumes were obtained from the Department of Trade and Industry.

² Top exports were selected based on export values registered in 2003.

³ Top imports were selected for each footwear type registered in 2003.

The data point to footwear export prices being generally higher than comparative import prices. This, in connection with footwear terms of trade (relative prices of footwear exports to imports), is advantageous for the Philippines—implying that domestic footwear producers are receiving more than what domestic consumers are paying for equivalent footwear imports.

However, with a view on the long-term competitiveness of Philippine footwear production, such a condition may not be considered advantageous at all because it suggests that foreign footwear production can readily produce equivalent footwear categories at lower prices. At this point, it should be emphasized that the trend of declining prices in the global footwear trade has been generally pervasive—which means the observed trend in average prices given in the table may not be so good over time. Then again, this perspective on relative export prices being higher than import prices due to better scale economies could be tempered by widely held suspicions of undervaluation, dumping, and other forms of unfair trade practices among footwear importers.

In the preceding section about the domestic market for footwear, the main competitor identified was China, followed by footwear imports from other Asian countries. This view needs to be re-examined. If the relative prices of footwear exports and imports in Table 6 truly reflect the pricing situation, then the identified competitive threats are wrong. That is, if the price range of footwear from other countries is significantly lower than the inferred prices of Marikina-produced footwear, then the latter must be competing with higher priced footwear from Italy and Spain. Conversely, the identified competitive strategy of using low prices to gain wider market acceptance is correct.

Philippine and foreign-made footwear differ in price range, but there are similarities in their product segments. Applying the previously described Five Forces framework, it can be said that even if Chinese shoes disappear overnight, other Asian and low cost footwear producers can easily take over.

The observations made regarding the regional distribution of sourcing and destinations of Philippine footwear trade bear important long-term implications, especially in relation to chain governance. Philippine footwear exports to Europe and the USA are primarily destined for value chains increasingly characterized by hierarchical and quasi-hierarchical structures. Buyers and middlemen in these countries will both stress the importance of low prices for successful insertion; chain governance in these countries will impose continuous productivity improvements among footwear exporters. The local footwear firms, in Marikina and in other local footwear clusters, will be more pressured to lower prices for both local and export markets. In the local market, the pressure will come from cheap alternative footwear imports.

IV. FOOTWEAR CLUSTERS ABROAD

In this section, the experience and various aspects of establishments and markets of footwear clusters in Vietnam, China, Brazil's Sinos Valley, and Italy are considered. Selection of these four clusters was based on their relevance to Marikina, and the intention is for their experiences to provide insights, options and strategies, on how to better the situation of Marikina footwear.

A. Italy

Footwear making in Italy traces its roots to the Middle Ages. The industry was initially nursed by the creation of guilds and apprentice-master training. As the years passed, clusters emerged in the different Italian provinces. Today, the competitive advantage of Italian footwear lies in leather shoes renowned in fashion-dominated markets, and in production, is known for close cooperation among small units.

The Italian footwear market is founded on sophisticated demand, a web of world class material suppliers, deep personal commitments to the footwear industry, and intense domestic rivalry. Italy's competitive advantage is driven by innovation from concentrated clusters of rivals, demonstrating how a traditional industry can be transformed and how competitive advantages can be upgraded along the footwear value chain.

Nonetheless, there is a growing awareness among Italian footwear makers that continued global success cannot be indefinitely based on style and design advantages. This means aggressive investment in advanced manufacturing equipment to improve product lines. Consolidation as a way to enlarge capacity while offsetting rising labor and materials costs is also being explored by some firms, though there is the possibility that it might result in downgrading the intensity of competition between footwear firms and subsequently slowing innovation.

As a complement to the intention to consolidate, new forms of vertical relations (e.g. new supply chains) and improving research infrastructure through links between associations, universities, and institutes are being undertaken.

B. Vietnam

Vietnam is a relative newcomer to the global footwear trade. Initially inceptioned by the state to generate foreign exchange resources, the footwear cluster in Vietnam has continued to thrive due to its competitive labor costs. Today, footwear exports are the country's third most important, after crude oil and garments. As of September 2004, there were 130 establishments churning out 265 million pairs of sports shoes, 48 million pairs of women's shoes and sandals, and 4 million pairs of leather shoes.

The importance of footwear in the Vietnamese economy, however, masks the disparity between export-oriented state-run firms and small companies catering to the local market, with the former possessing relatively new equipment and large production capacities and the latter using outdated, second-hand machines from Taiwan and South Korea—countries which re-export footwear using Vietnam as manufacturing base. (These arrangements usually cover the supply of designs and raw materials, as well as the creation of some marks before re-exporting to either the EU or US under contractor specifications.)

The European Union (EU) represents the biggest market for Vietnamese footwear exports at about 80% of the total. Currently, Vietnamese footwear exports into the EU enjoy quota-free status and preferential tariffs (provided 100% of the required inputs are made in Vietnam). It is expected though that China's membership in the WTO will force EU importers to treat Chinese and Vietnamese footwear imports equally.

If Vietnamese footwear producers intend to diversify their export markets, they are expected to maintain a 35% local input ratio. This local sourcing of inputs for exports may not be sustainable, and there is a suspicion that foreign firms have invested into Vietnamese footwear productive capacity simply intends to free ride on the quota free status of Vietnamese exports.

There are attempts inside Vietnam's footwear cluster to develop other sources of competitive advantages. Key competitive weaknesses have been identified, and they are as follows: a lack of capital and world market intelligence, a shortage of originally nurtured brands, weak design infrastructure, and internally nurtured marketing outlets. The Vietnamese government has recently begun encouraging local footwear firms to try circumventing some foreign clients, selling directly, and using idle productive capacity more actively (if not forbidding foreign lease of idle capacity altogether). The state is also extending subsidies, organizing centralized efforts at training and design, and creating industrial estates to address the industry's perceived deficiencies.

C. China

While a relative newcomer to the footwear trade (beginning only in the 1980s as shoemaking moved out of South Korea and Taiwan), China is the world's largest producer and a major market in its own right. Five leading production and distribution hubs have emerged: Guangdong, Fujian, Wenzhou, Chengdu, and Chongqing. In these clusters, an estimated 20,000 firms produce 6 billion pairs a year. Of the total output, roughly 25% are exported annually, accounting for a fifth of the world total.

China produces four main types of footwear: leather, cloth, plastic, and PVC. The leather category has benefited from a favorable shift in consumer preferences, and as a result, this category's domestic market share has increased from 9% to 35%. Cloth shoes production has also benefited from increased demand due to rising incomes. As for plastic shoes, China is currently the world's leading producer, with an annual output of 910-930 million pairs, with China's own consumption comprising two-thirds of its own production.

85% of the mainland's domestic leather footwear market is considered medium to low priced (Rmb100-Rmb300). Well-known domestic brands, especially in coastal cities, selling at Rmb200 or below are considered hot items. Imported footwear, even with well-known international brands and superior workmanship, are hard to sell due to higher prices.

China's membership in the WTO is expected to widely benefit footwear production for both its export and domestic markets. These benefits stem from the trade dispute settlement mechanism, lowering of trade barriers, GSP privileges, and the

removal of quotas. Indirectly, Chinese footwear exporters are expected to benefit from easier shifting to new markets as current export markets mature.

What is not being paid much attention to are the Chinese WTO membership gains that will accrue to footwear competitors aiming at the Mainland market. Reciprocity clauses in the WTO imply easier access into China, and the country has committed to further opening its market and slashing average footwear tariff rates from 17% to 10% by 2005. Among global footwear producers, medium-priced footwear from Spain and Italy are expected to seriously challenge domestic producers for a significant share of the local footwear market. Already, this development is forcing Chinese manufacturers to upgrade and venture into higher-priced segments. Growing competition for the Chinese domestic market is expected to result in a round of mergers and consolidations in the near future—illustrative of the importance of local brand development amid more intense competition.

Hong Kong, China footwear manufacturers are spearheading efforts aimed at upgrading. At first manufacturers from Hong Kong contracted mainland producers or leased underutilized productive capacities. Thereafter, these producers re-exported mainland produce or began to act as international agents for the contracted supply of footwear. Some mainland producers are beginning to follow the example of Hong Kong. Formerly foreign brands based in China and Chinese producers themselves have started to go abroad, financed in part by the surpluses and technological know-how earned while in staying in China. For Chinese producers of course, the risks inherent from doing so are much greater than producing in China for foreign brands under contract.

The Chinese experience demonstrates valuable lessons and responses to emulate. The Chinese may be the world's current biggest producer of shoes but it is a giant that is vulnerable. There are a couple of competitive weaknesses and barriers that possibly will make sustained Chinese dominance in footwear markets untenable. Already, its reputation for low quality and a lack of branding hampers Chinese footwear exports, particularly if the exports begin to go beyond contract production. A virtual absence of marketing information about individual markets and a lack of distribution infrastructure could become potential weaknesses later. The latter weaknesses cited here are of course a by-product of Chinese footwear history: producing under contract for foreign brands relying on volumes.

D. The Sinos Valley Footwear Cluster, Brazil

In 2000, Brazilian footwear producers had an output of 580 million pairs, of which 163 million were exported. By 2002, this had increased to 642 million total pairs and 164 million pairs of exports. Brazil is ranked sixth among footwear exporters around the world—a seemingly ordinary thing for a country with its size, except for one thing:

84 percent of its footwear exports and more than half of its total output come from one cluster: Sinos Valley, the southernmost state of Rio Grande do Sul (bordering Argentina and Uruguay). Recently, some producers have moved to other parts of Brazil, but even then, the state remains the main source of Brazilian footwear exports (80%). Roughly 70% of these exports go to the US, the rest of Latin America, and Europe.

There were 693 firms employing 101,000 workers in the Sinos Valley as of 1999. It has been termed a “super cluster,” in view of the range and depth of input suppliers, service providers, and support institutions that had developed around it. As a matter of fact, the Sinos Valley cluster concentrates 60% of input suppliers and 80% of leather and footwear machinery firms. The cluster is also remarkable for its institutional density, with its rich network of business associations, shared public-private technology, and training centers dating back to the 1960s. The insertion of Sinos Valley into the global value chain with American companies in the late 1960s triggered rapid growth. In a decade, the cluster transformed itself from an internal source of footwear to a major global exporter.

Yet despite these, Sinos Valley has not been able to position itself as a higher value-added producer known for design and branding. This failure can be traced to the type of value chain in which the leading firms were inserted. A handful of large local firms resisted US ownership of output and the cluster itself, and they asserted that true upgrading was endangered by the cluster’s insertion into the quasi-hierarchical US value chain.

This observation runs contrary to the more optimistic upgrading process observed by Gereffi (1999) in Asia, where an almost natural learning and upgrading process is noticed among firms that join a global value chain of suppliers. He documented a number of garment firms who managed to successfully upgrade products, processes, designs, and brand and marketing channels. Chain governance, according to Gereffi (1999), seems to be the main factor explaining the difference between what are conceptually similar textile and footwear industries.⁶

Sinos Valley’s main export markets stand for four value chains. The US value chain perfectly represents quasi-hierarchical governance. Being pioneers in the global sourcing of footwear production, the host location of many branded retailers, and internally characterized by strong buyer orientation, the US is capable of imposing their chain governance structure on other foreign suppliers. US quality control practices tight deadlines and ever-increasing pressures to lower production costs has been the blueprint for international sourcing of footwear in the past 30 years. With quasi-hierarchical value chain governance, buyers become the undisputed leaders, exerting control over intermediaries, local producers, and often, over input suppliers as well

⁶ Both are buyer-driven, low-tech, and labor intensive industries producing semi-commodities.

(convening power). (This value chain model is being followed by other developed countries.)

This asymmetrical relationship can be explained by several factors: marked concentration of exports among a few exporters who have ties with even fewer importer-agents; reluctance on the part of buyers to share knowledge on undertaking higher value-added activities; the presence of low-cost sourcing alternatives other than Brazil.

In marked contrast, European buyers see quality rather than price as the paramount consideration, and are generally more willing to accept higher prices given their long history of competing with their US counterparts. As a result, Brazilian producers have had to coordinate production with Europe.

On the other hand, the local Brazilian value chain is organized very differently, primarily because of low concentration of buyers and sellers, a strategic option among producers to sell directly to retailers, and producers carrying out strategic activities (branding and designing) themselves. A small number of producers who own famous local brand names, in fact, prevent non-branded producers from succeeding. This, alongside the entry of cheap Chinese footwear imports starting in the 1980s, has made the search for new markets even more urgent. Because even if Brazil manages to produce high quality, well-designed footwear, higher costs without additional volume will dissuade consumers.

In the quest for new markets, the type of distribution channels utilized will determine the type of chain governance that will dominate the Brazilian domestic market. Market-based chain governance endangers the international reputation of good quality Brazilian footwear. The more the Brazilian producers use export agents, the more quasi-hierarchical European or hierarchical US market chain governance gets replicated into whichever market these producers choose.

Overall, the Sinos valley footwear cluster illustrates the relation between the type of chain governance in markets and the upgrading that can be undertaken. In this case, observant footwear clusters abroad can readily identify the importance of segregating value chains into different components with the intent of upgrading.

V. TRENDS, UPGRADING, AND BEST PRACTICES FOR MARIKINA

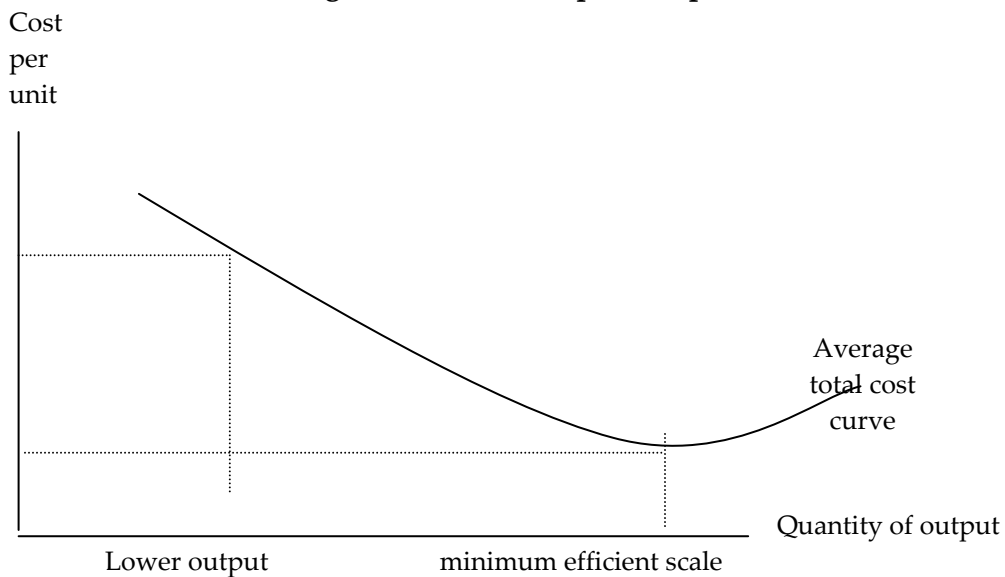
A. Benchmarking Productivity in Footwear Manufacturing

Higher productivity in a cluster is often associated with improved competitiveness, and although the concepts are often related, they are not necessarily the same. Better productivity could be brought about by allocative and technical,

efficiency,⁷ but competitiveness is more complex. To be competitive, there must not only be continuous improvement in productivity levels, but firms must demonstrate a commitment to providing better returns to stakeholders, and pursuing the right strategies. Ways to improve productivity in the Marikina footwear cluster broadly fall under improvements to methods, scale, and relations.

Methods refer to shifting to manual or semi-mechanized assembly lines. This is to achieve minimum efficient scale, which can be measured in four ways: engineering cost studies, statistical cost, survivor technique, and rate of return.⁸ The rate of return method, in particular, concretely suggests a need to undertake further mechanization and output capacity expansion. The low returns from footwear production, in this sense, could be partly remedied by increasing the numbers of pairs through automation, which, in turn, decreases production cost per pair. Increases in the costs of labor and capital, in addition, could be offset by the attainment of scale economies. This relation is demonstrated in Figure 1.

Figure 2: Relationship of Output with Cost



In order to mechanize and increase production scales successfully, several factors need to be considered. First, access to credit—expanding this can be accomplished by consolidation among firms via horizontal mergers or cooperative-style production arrangements.

⁷ Technical efficiency refers to producing highest possible output at least use of inputs while allocative efficiency involves the marginal rate of technical substitution being greater than the factor price ratio.

⁸ Lipczynski and Wilson (2004)

A reconstruction of existing horizontal and vertical relations inside the Marikina cluster could lead to productivity gains. Michael Porter (1998), proponent of the Five Forces model, says the development of “trust relations” among firms inside a cluster strengthens competitive advantage without undermining efficiency improvements from information sharing, outsourcing, and specializing in specific processes.

During the early 1990s, the fundamental determinants of competitiveness were production costs and the differential impacts of trade barriers. Less quantifiable factors, on the other hand, were technological developments, proximity to markets; role of quick response; high quality production; access to technology, management, design and marketing skills; offshore joint venture and contract production; availability of raw materials; and political and infrastructure constraints.⁹

The influence of these factors on footwear competitiveness, however, has been changed by international developments—most importantly, the removal of trade barriers by virtue of the WTO. Today, productivity levels define footwear manufacturing, as the global footwear supply chain that developed in the last decade has replaced traditional, integrated shoemaking. Overall, a favorable situation, especially for developing countries: After all, the process has facilitated design transfer, and has introduced modern management practices and technology; it has also provided developing nations with indirect access to major markets¹⁰

Collective efficiency in a production chain translates to competitiveness for enterprises in clusters. For enterprises that have yet to participate or “insert” themselves into one, benchmarking productivity via specific metrics as per value chain analysis can be useful (Kaplinsky and Morris, 2000).

Labor costs obviously impact competitiveness. Slow technical development in footwear operations, particularly in the production of uppers, makes footwear manufacturing labor-incentive, and thus inducing entrepreneurs to search for countries that pay lower wages.

Efficient use of labor has sometimes been understood and practiced as depressing wages to minimum levels. While this may be a key strategy of some clusters, it must nevertheless be considered self-defeating and counter-productive from a firm’s point of view, because it distracts from the larger savings to be had from improving production scale and threatens to drive out skilled workers and thereby erode the industry’s knowledge base. In this regard, the superior strategy is compensating workers adequately while enabling them to produce more via mechanization.

⁹ from Analysis of World Leather Value Chain and Footwear Market 2005

¹⁰ op.cit.

A good indicator of labor productivity is value added per employee, and this statistic for several countries is given in Table 9. (Value added is output value less input costs.) The selection was made using United National Industrial Development Organization (UNIDO) data. Value added figures are then averaged according to the number of labor inputs. Salary and wage levels—along with output distribution according to materials, utilities, labor costs, and operating surplus—are also given in the same table. To account for differences in the relative allocation of production costs per country, operating surplus—value added less salaries and wages—is also considered.

Table 9: Selected Characteristics, Years and Countries, Footwear (324)

Economy	Year	Value Added per Employee (current thousand USD)	Salaries and Wages (current thousand USD)	Percentage in Output (percent)		Operating Surplus
				Cost of Materials and Utilities	Labor Cost	
Industrialized countries						
France	1999	31.5	18.8	62.3	22.4	15.2
Germany	2000	34.9	21	71.7	17	11.3
Italy	2000	29.6	12.6	73.9	11.1	15
Portugal	2000	9	5.6	70.7	18.2	11.1
Spain	2000	16.8	9.5	74.9	14.2	10.8
United Kingdom	2000	42.5	21.5	49.2	25.7	25.1
Japan	2001	48.1	13.4	58.9	11.4	29.6
United States	1999	54.5	22.1	50.5	20	29.5
Developing countries						
Hong Kong	2001	10.9	8.3	72.6	21	6.5
India	2000	2.4	0.8	83	5.7	11.3
Indonesia	2001	2.3	0.6	58.8	10.8	30.4
Korea	2001	35.9	10.9	48.3	15.7	35.9
Philippines	1999	3.4	1.6	64.9	19.7	15.5
Vietnam	2000	1.1	0.6	70.1	15.9	13.9

Source: UNIDO Statistical Yearbook 2004.

Consider first the selected group of industrialized countries. In this group, Italy, Spain, Portugal and France are the countries that have significant domestic footwear manufacturing. Notice however that using value added per employee as a productivity indicator, it is the United Kingdom, Japan, and the US which are relatively more productive. What the US, UK, and Japan have in common though are internationally recognized footwear brands, retailers, and buyers. In these countries, former footwear producers must have migrated to becoming brand owners, buyers, and retailers after seeing the potential for better returns higher along the value chain. The upgrading in these countries must also have involved an evolution toward a hierarchical form of value chain governance and the development of an ability among buyers to set acceptable prices. (In the literature, footwear is described as a buyer -driven type of value chain.)

The industrialized countries displaying higher value added per worker while having limited domestic footwear production implies an ability on their part to dictate distribution of returns. This does not mean that producing countries always receive lower returns; rather, it does prove that bigger rewards are to be had from upgrading and making full use of one's competencies along the global footwear value chain.

A selection of Asian footwear producers is also given in Table 9. Here, the association between productivity and upgrading earlier observed among industrialized countries is beginning to be discernible among the developing countries. South Korea is a former footwear producer-major exporter whose rising labor costs have "eroded" this competitive advantage; yet its recorded productivity or value added per employee is much higher than significant Asian footwear exporters India, Indonesia and Vietnam. This could only mean an upgrading in South Korea, though this must have primarily been about processes and products. This is proved, furthermore, by the considerable number of international market buyers and intermediaries coming from South Korea today.

Raw materials and utilities constitute a greater proportion of production cost compared to labor. What this hints at is that greater input availability, as in India and Indonesia, may not be that advantageous—especially in view of its correlation with relative productivity and competitiveness.

B. Emerging Trends and Directions in the Global Footwear Trade

There is a continuing global shift in the competitive advantages of footwear production characterized by lower labor costs and widespread dismantling of trade barriers. Other less quantifiable but equally important factors defining this shift in footwear manufacturing competitiveness include:

- i) Continuous technological innovation
- ii) Proximity to major footwear markets
- iii) Quick response or fast turnaround times
- iv) Possession of Management, design and marketing skills
- v) Reliable and consistent footwear quality/standards
- vi) Ready acceptance among factory-hosting countries of joint ventures, contract production, and other forms of fragmented vertical arrangements
- vii) Country specific factors (e.g. political stability, infrastructure constraints and availability of raw materials)

Even the world's historically biggest footwear manufacturer, the US, has been adversely affected by this trend. Many footwear factories have been shut down as firms

move production entirely to other countries. In 2003, there were just 300 footwear plants operating in the US, compared to more than 1,000 in 1968. Share of imports in the domestic US market accounted for a mere 4 % in 1960. This share climbed to 47% by 1976, and has remained at about 89% since 1995. Today, footwear imports are the fourth largest source of the US trading deficit—after apparel, automobiles, and consumer electronics.

Established footwear clusters and brands in Europe, particularly the UK and Italy, have responded to this movement by outsourcing more expensive tasks to remain viable within their respective value chains. UK footwear clusters and Italian brands can be cited as instances of this trend to out source. The greater availability of information, the need to exploit ever-increasing economies of scale from specialization, and mandated WTO removal of trade barriers are expected to increase this reliance on foreign footwear suppliers.

Even multinational brand owners and retail outlets have not been spared the tendency to vertically disaggregate the footwear value chain. These firms have opened overseas offices to make direct arrangements with manufacturers and middlemen. Three types of middlemen proliferating in the United States and European Union markets can be identified: contractors, agents, and trading companies. Consider the distinction between these middlemen:

- i) Contractors are hired by an MNC to contract with manufacturers to produce specified goods. They work on commission. Profit margins can range from 10% to 400% of the manufacturing price.
- ii) Agents are individuals or small companies that work directly with overseas manufacturers or larger contractors and help facilitate outsourcing deals in a number of ways, such as linking the two parties, providing information, and facilitating license approval among others. A commission is paid by MNCs, with the amount normally between 1% to 10% of the value of goods purchased.
- iii) Freelance agents are former trading agents or managers of companies that rely on their former factory suppliers.
- iv) Trading companies take ownership of goods and resell them to US manufacturers, merchandisers, and retailers.

The influence and importance of these middlemen tasked to coordinate and integrate internationally dispersed footwear manufacturing activities promises to change the industry. While these middlemen positively impact the global market by creating partnerships and facilitating best practice sharing, there have been instances of developing countries complaining that the insertion of these middlemen in value chains stand in the way of upgrading opportunities for their countries.

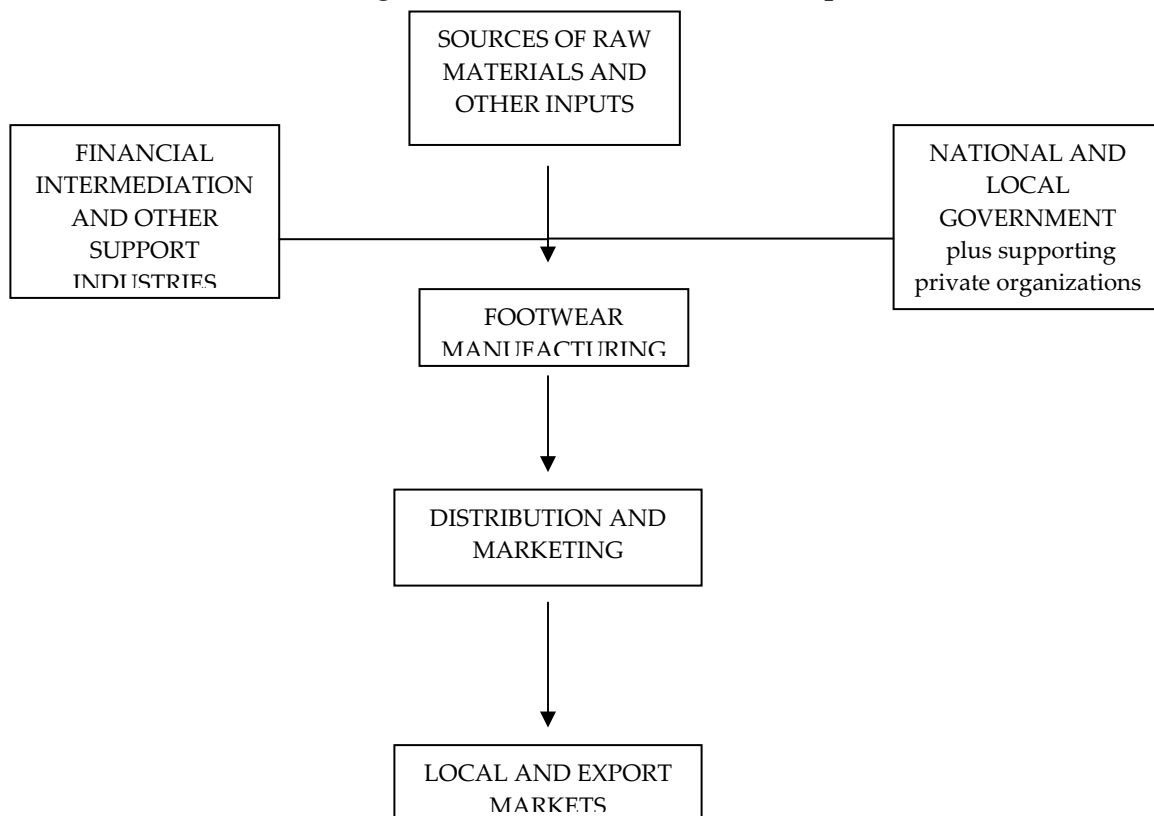
Another emergent direction in the global footwear market is the rising importance of buyers in major importing countries. These buyers could be owners of internationally established brands, retail outlets, or middlemen exerting downward pressure on suppliers' prices because of the rising proportion of consumers accustomed to having their preferences satisfied immediately at competitive prices. These types of buyers have inserted themselves into footwear management tasks such as product life cycle management, styling and design, production practices, labor practices, and output delivery.

Finally, the onset of trade agreements and WTO provisions has brought about the need for footwear producers everywhere to be fully acquainted with many more countries' business regulations, trading rules, taxes, and incentives. This has a direct bearing on risk management of each market agent along the footwear value chain. In relation, the global determination of what were once purely internal business variables such as operations, employment practices, licensing agreements, quality assurance, and marketing techniques forces footwear factories everywhere to contend with an entirely new array of contractual considerations.

C. Mapping the Footwear Value Chain

A mapping of the footwear value chain allows a broad description and objective evaluation of footwear manufacturing in Marikina (Figure 3).

Figure 3: Footwear Value Chain Map



The components of this chain were deliberately simplified to maintain focus on key activities. The importance of financial intermediation and other supporting activities to the footwear value chain is highlighted by its inclusion in the diagram. These refer to banks, non-banks, and other complementary organizations.

The national government, the Marikina city government, and private support and industrial organizations such as SIKAPMO, SAMAHAN and the Philippine Footwear Federation Incorporated (PFFI) make up the other half of those crucial, complementary relationships. Local and national governments are included because of their policymaking; private organizations because of their provision of support services.

Vertically after manufacturing in the value chain are distribution and marketing, which includes all the different channels firms utilize. Transportation, communication and others could be included here. The footwear value chain, finally, ends with the local and export markets.

Problems in the sourcing of raw material and inputs have been identified in the three previously mentioned studies on the Marikina footwear cluster. Morato (2005) reports that problems at this stage concern traders' oligopolistic control in the market for inputs.

Table 10: Aspects Related to Production

Aspect	Pearl 2 (2003)	Pearl 2 (2004)
Raw materials	43% mainly local with imported, 29% more imported than local, 14% equal parts local & imported, 14% purely local	32.7% local, 24.5% imported and 16.3% local and foreign suppliers
Sourcing of raw materials	82% sourced from open market, 6% produce own materials, 12% internal and open markets	67.3% sourced from open market, 32.7% undertake own sourcing
Top concerns about raw materials	No mention. 30% mentioned supply chain sources under needs indicated	Price top concern cited, other concerns: availability, quality and delivery times
Financing sources	61% internal sourcing, 42% resorted to bank credit lines.	81.6% internal sourcing, 39% resorted to bank credit lines.
Other financing sources cited	No mention	Private lending facilities, co-operatives, discounting arrangements with buyers, credit lines with suppliers

Source: Pearl 2 Project (2003 and 2004).

Looking at data on the Philippines, it would first seem that the country's productivity in footwear manufacturing compares favorably with successful exporters India, Indonesia, and Vietnam. Unfortunately, this is not true: the US\$3,400 value added per employee recorded in the Philippines pales in comparison to other countries, especially when considering price segments and product classifications. Taken another way, it could be said that there are opportunity losses from the Philippine value added per employee data. These losses could still be recovered by undertaking a suitable upgrading.

Identified footwear industry problems are summarized in Table 10. One of these problems is high import dependence, which is perceived to aggravate high local production costs. Even then, these figures may have been inflated, or the industry's dependence on imported raw materials underestimated, since many footwear firms depend on local traders who source inputs from abroad. Some imported inputs are also processed locally before reselling to manufacturers. Aside from these, other identified problems given in Table 10 involve market relations of footwear firms with raw material suppliers.

At this stage, there could be some immediate remedies that could be applied. An innovation in favor of footwear firms could be initiated by undertaking purchases as a cluster rather than by individual firms. This arrangement would endow the anointed buyer with much greater bargaining power vis-à-vis input suppliers. One of the existing private organizations can become this suggested buyer.

The exact impact of government policies on raw materials' costs with regard to the Philippine footwear industry has not been considered yet. Import tariffs, for instance, inflate materials' prices and indirectly strengthen the bargaining power of both local and foreign suppliers. Excessive taxation and other forms of interference are also real and legitimate drawbacks to the local footwear industry's growth.

The problems associated with supporting industries mostly concern financial intermediation—in particular, unfair lending practices (Morato, 2005). The data in table 9 suggests a growing reliance on internally sourcing capital among footwear firms. (From 61% in 2003, this proportion has grown to more than 80% of the firms in 2004.)

For firms which obtain credit from external sources, banks were identified as the dominant counterparty. Other external sources identified in Table 10 are private non-bank facilities, credit cooperatives, discounting arrangements with buyers, and supplier-provided credit lines. Toward widening access to credit, instituting and enforcing standardized accounting methods as well as business registration and regular financial disclosures should collectively make for a good first step. A cluster-based sourcing of private capital or tapping public lending institutions would complete and complement the previous steps.

The value chain's marketing and distribution stages—retail outlets, specialty stores and boutiques, department stores, sales agents—also need attention. At present, vertical fragmentation in this part of the value chain has been a reason for higher footwear prices, as each agent involved imposes her own mark-up.

A footwear value chain map is complemented by a consideration for backward linkages, which indicate the relative importance of inputs from sectoral sources. Leather and non-leather footwear manufacturing's backward linkages, from the Philippines' 1995 input-output table, are summarized in Table 11.

Table 11: Distribution of Sectoral and Primary Inputs

Sector Code	Sectoral Classification	Value of Inputs (PhP '000)	Percentage to Total Inputs (%)
21	Textile manufacturing	345,601	8.18
22	Footwear & wearing apparel	121,742	2.88
24	Furniture & fixtures	2	Nil
25	Paper & paper products	2,017	Nil
26	Printing & publishing	214	Nil
27	Leather & leather products	1,414,332	33.49
28	Rubber products	1,014	Nil
29	Chemical & chemical products	5,180	Nil
30	Products of petroleum & coal	33,020	Nil
33	Metal fabrication	7,178	Nil
34-36	Machinery except electrical, electrical machinery & transport equipment	46,214	Nil
37	Miscellaneous manufactures	12,994	Nil
38	Construction	443	Nil
39-40	Utilities	70,441	Nil
41-44	Land, sea, air transport & storage	62,897	1.50
45	Communication	3,182	Nil
46	Whole & retail trade	187,998	4.45
47-49	Banks, non-banks & insurance	17,444	Nil
50	Real estate	11,417	Nil
55 and 57	Private business services & private personal services	33,851	
Total intermediate inputs		2,377,181	56.30
	Compensation of employees	834,330	19.76
	Depreciation	99,239	2.35
	Indirect taxes & subsidies	49,151	1.16
	Operating surplus	862,648	20.43
Total primary inputs		1,845,368	43.70

Source: 229x229 Sectoral Disaggregation Input-Output Table, 1995

Total value of inputs recorded by footwear manufacturing, which may be primary or intermediate, during 1995 was Php4.22 billion. Inputs are broadly classified into intermediate and primary inputs (labor, taxes and subsidies, depreciation, operating surplus). The most used by footwear manufacturing come from the leather products sector, accounting for about a third of total inputs. Other sectors which contribute inputs heavily are textile manufactures (8%) and other footwear manufactures (2.88% of which are footwear components), transportation, and trade. Trading services make up a bigger proportion of total inputs than footwear components. Taken together, all intermediate inputs used comprise 56.3% of total inputs.

The remaining 46.7% of inputs are primary inputs. Data in table 10 show that labor cost is 19.76% of all inputs—a bit smaller compared to operating surplus, which is at 20.43%. This comparison is important because it means that internally, labor cost, which has been cited as a reason for the shift of production to countries like China, represents just a small proportion of production expenses.

VI. CONCLUDING NOTES

An upgrade or innovation, in the value chain literature, refers to an improvement in the role of firms or the entire cluster along its value chain, resulting in better returns or higher value creation. This improvement should result in better returns or higher value creation.

For labor in a cluster, an acceptable enhancement would probably mean higher returns for skill endowments, greater productivity, and possibly more employment opportunities. To other stakeholders, upgrading would mean greater viable opportunities by virtue of extant linkages.

As previously mentioned, there are four possible types of upgrading¹¹ (process, product, functional, and inter-chain). With respect to footwear, undertaking a process innovation should lead to a significant reduction in the cost of producing each pair. Product upgrading is the most internal to firms—pursued on an individual company basis, and orchestrated at the cluster level. Functional upgrading entails increasing value added accruing to firms by changing the mix of activities conducted. For instance, a firm focused on manufacturing could later move into designing or concentrate on marketing and distribution. This changes the role of an organization in the value chain where it belongs to.

An inter-chain innovation could be defined as movement into a new, more profitable value chain. The different link would probably involve similar input suppliers or processes, but the resulting output falls under a different product

¹¹ See Memedovid (2005).

classification. In the case of footwear, there are limited opportunities to embark on this type of upgrading

While upgrading is indeed brought about by favorable policy, it is also true that any upgrade initiative requires the satisfaction of several key conditions: enhanced technical capabilities, open access to leading firms in the global value chain, firm relations with support service industries, and empowered stakeholders.

Though relationships with leading firms are expected to be one-sided at first, these links should eventually lead to the acquisition of valuable experience in exporting, information gathering regarding direct competitors and standards overseas, and the establishment of a network of reliable industry partners. These contacts will enable domestic firms to improve existing productivity to levels that become favorable to other clusters. With respect to ancillary industries, ensuring healthy relations with them guarantees upgrading that is mutually and more widely beneficial. On governments and institutions, the provision of market information on prices, standards, and costs should already constitute a big step forward. Eventually, information networks should be in place to allow firms to make quick, informed decisions: After all, the only sustainable competitive advantage these days is probably the ability to know faster than one's competitors.

The lack of harmonized standards and measures among firms in industrial districts is a common constraint to reaching higher levels of division of labor, competitiveness, and cluster growth. This increases transaction costs, and requires the use of specialized firms for certain jobs that could be performed internally within firms. Although local value chain members might generally agree with the need to harmonize, the implementation process would probably require participation of industry associations, workers, the government, and international technical assistance.

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