Challenges of Exporting Differentiated Products to Developed Countries: The Case of SME-dominated Sectors in a Semi-Industrialized Country

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Index

1. Introduction ............................................................................................................................... 2
2. Scope of the study: Exports of differentiated products to developed countries .............. 4
3. Theoretical framework .......................................................................................................... 7
4. General Findings .................................................................................................................... 11
5. Lessons for public policy ...................................................................................................... 17
6. Case studies of emerging export activity in four Argentine sectors .................................. 18
   Case I: Light-Ships ........................................................................................................... 23
   Case II: TV Programs ....................................................................................................... 44
   Case III: Wine ................................................................................................................... 69
   Case IV: Wooden furniture ............................................................................................ 113
References .................................................................................................................................. 154
Appendix .................................................................................................................................... 156

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1. Introduction

In recent decades, several developing countries have started impressive processes of export-led growth. Economies that previously exported almost exclusively primary products rapidly shifted their export structure toward manufactures. Argentina, in contrast, has not experienced analogous export success in manufacturing. Despite initiating its industrialization process decades earlier than most other developing countries, manufacturing exports have not shown a salient dynamism and are not a dominant component of its export structure. Argentina has apparently been unable to leverage its pre-existing industrial experience in the global economy.

The opaque performance of Argentina’s manufacturing, however, hides the stories of a number of entrepreneurs (and their firms) who are achieving considerable success in exporting manufactured and differentiated products to developed countries on a consistent basis, the type of export success most notably absent in the economy as a whole. These entrepreneurial stories are the focus of this research work. We develop case studies of their export activity and the subsequent export dynamism of their sectors, which their activity helped to generate. In particular, we identify the factors that made these export pioneers successful. Identifying these factors is critical for understanding why most other firms that could potentially export fail to do so. Even though the case studies involve economic sectors with very different characteristics, the factors explaining the appearance of export pioneers are strikingly similar.

We develop a theoretical framework that takes elements from the pioneer-diffusion model of Hausmann and Rodrik (2003) and Hausmann, Rodríguez-Clare and Rodrik (2004). As in that model, our framework emphasizes the existence of an uncertainty environment surrounding domestic firms before a new activity – in our case exporting – has taken place. We provide further definition for the concepts of “discovery”, “pioneer”, and “diffusion”, which allow for better characterizations of the regularities found in the case studies. We focus on pioneering activity involving exports that are substantial, sustainable and primarily targeted toward developed countries.

Our case studies involve four industries, Wines, Wooden Furniture, Light Ships, and TV Programs, that have experienced substantial export growth in recent years. These industries all produce differentiated products, yet span a broad range of economic activities. The case studies first describe the structure of the industries. Then, they characterize the emergence of the export pioneers and the subsequent process of diffusion. Finally, they analyze the role played by public institutions.
We find a number of regularities that are common across these sectors. Among them, the most remarkable regularity is that, in all of our case studies, the appearance of a pioneer is largely explained by a knowledge advantage relative to other industry participants about the tastes, operation and business practices of foreign markets, which the pioneer acquired previously and independently of his decision to export. This regularity has several implications that reject a priori reasonable presumptions about potential determinants of pioneering export activity. First, export pioneers do not differ from other entrepreneurs solely in terms of entrepreneurial ability or a lucky realization of an uncertain investment. Second, their advantage does not relate to production knowledge but to marketing knowledge. Third, before the pioneer has initiated foreign sales, the knowledge necessary to export does not seem to be acquirable as a result of a conscious effort to develop an export strategy. Export pioneers only seem to emerge among those who already possess this knowledge.

The pessimism that this result might convey is not warranted. Our results characterize an environment that is only present at a particular period of a country’s export development process in which exports of differentiated products to developed countries are only incipient. The pioneers’ actions diffuse to other firms in their sectors that later follow their steps. Furthermore, diffusion also occurs across sectors as the advantage of pioneers is based on knowledge that is relevant for other industries as well. Public policy then has a potentially important role in fostering such diffusion within and across sectors. The potential importance of public policy is strengthened by our finding that, as opposed to the implications of Hausmann and Rodrik (2003), diffusion does not necessarily hurt the pioneer. In contrast, diffusion always benefits the pioneer during its early stages, in most cases due to increased foreign awareness of the country as a potential exporter.¹

This study is organized as follows. Section 2 delimits its scope. Section 3 describes the theoretical framework. Section 4 presents the findings that are common across case studies. Section 5 discusses policy lessons that can be derived from these findings. Finally, section 6 presents the four case studies of this research work: Light Ships, TV Programs, Wine, and Wooden Furniture.

¹ See Vettas (2000) for a model of endogenous demand in which diffusion can benefit the pioneer.
2. Scope of the study: Exports of differentiated products to developed countries

The objective of this study is to understand and characterize the emergence of export activity in economic sectors previously oriented toward the domestic market. We study firms and sectors in a semi-industrialized country, Argentina, mainly focusing on exports to developed economies as the destination market. The economic sectors that we study share as common features that they produce differentiated goods and are mostly populated by small and medium sized enterprises. This section explains the reasons for constraining the scope of the study to such kind of exports and describes the criteria that we use to select our case-study sectors.

a. Scope of the study

Argentina is a country with a considerably diversified industrial base, largely developed during the period of import-substituting industrialization. In most industrial sectors there are well-established firms that have been operating (even occasionally exporting) for decades. Despite the long presence of local firms supplying the domestic market, export activity in most sectors has traditionally been scarce. The lack of export activity is particularly salient in the case of differentiated goods; a substantial fraction of exports of industrial products consists of commodities such as paper pulp, aluminum, and petro-chemicals.

In the last two decades, many developing countries have initiated processes of impressive export growth largely directed toward developed countries. The strong export performance of those countries is usually attributed to a combination of policy changes, such as opening their economies to foreign trade and investment, and worldwide technological advances, such as drastic reductions in transportation, information, and communication costs. Argentina, as many other Latin-American countries, has also liberalized its foreign trade and investment regimes and benefited from similar technological advances. However, export growth in this country has been considerably less spectacular, mostly so in the case of differentiated-product exports to developed countries. While Argentina’s total exports multiplied by a factor of 3.3 during the period 1991 to 2005, exports of differentiated products to OECD countries grew by a factor of 2.6. These exports accounted for only 4.5% of total exports in 2005.2

We emphasize the distinction between exports to developed and to developing economies because of the very different hurdles that exporting to those countries imply. In particular, successfully entering markets

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2 The classification of goods into differentiated and non-differentiated follows Rauch (1999). OECD countries are members of this organization in 1991.
in developed economies with differentiated products requires potential exporters to make substantial efforts to upgrade the physical characteristics of their products and to sophisticate their marketing practices. Most Argentine producers of those products lack the knowledge and information to make those efforts efficiently and thus choose not to attempt a committed export strategy.

A detailed description of the hurdles domestic firms need to overcome to export is provided in the next section and later on in the case studies. Here, we want to highlight that one of the main pay-offs of making those production and marketing efforts is a reduction in the products’ degree of substitutability relative to those offered by competitors (i.e. products become more differentiated).³ As a consequence of the higher differentiation, foreign sales to developed countries tend to be more stable. Figure 2.1 displays the evolution of Argentina’s exports of differentiated products to OECD versus Non-OECD countries during the period 1991-2005. The graph shows that while exports of differentiated goods to Non-OECD countries are sensitive to changes in costs relative to other countries, such as those induced by the Brazilian devaluation in 1999 and by the Argentine devaluation at the end of 2001, exports of those goods to OECD countries follow a path that is notably less volatile.

![Figure 2.1](image)

This slower but more persistent export growth is driven by an increasing number of firms that have been able to overcome the challenges of exporting differentiated goods to developed markets. The analysis of

³ The equilibrium relationship between product quality and the extent of differentiation is analyzed in Coibion et al. (2006). Marketing efforts can also affect the extent of differentiation even for physically identical products.
why those firms have achieved this type of export success and how this success induces export success of other firms is the focus of this paper. Even though their number is a very small fraction of the population of firms, understanding what determines their success is critical because it allows us to understand why other firms fail to export. Only based on such understanding can public policies of export promotion be effective.

In addition to focusing on emerging export activity in sectors that produce differentiated goods and export to developed countries, our case studies involve sectors mostly populated by small and medium sized enterprises. Large firms – often multinationals – face similar requirements to access developed-country markets but different (and usually smaller) constraints to overcome them. While their case is also important to understand, we prefer to keep our focus on sectors that share a common set of basic characteristics even at the cost of narrowing the scope of the study. The breadth of industries to which the analysis applies is still sufficiently wide to represent a large fraction of the economy. Therefore, the conclusions of this study could potentially be the basis for the design and assessment of a variety of public policies aimed at fostering industrial development.

b. Choice of sectors for case study

We choose to study in detail four economic sectors: Light Ships, TV Programs, Wine, and Wooden Furniture. These sectors are similar along several dimensions. First, they export differentiated products. Second, they all ship a substantial fraction of their exports to developed economies. Third, none of these sectors shows high levels of economic concentration. Fourth, they have experienced strong export growth in the last fifteen years. There are sectors other than the four we select for case study that share these characteristics. Appendix 1 presents a brief statistical analysis of export performance in Argentina at the sectoral level in which a set of quantitative and qualitative criteria are applied to identify such sectors.

Among the sectors with such common characteristics, we choose these four because they span a diverse set of broadly-defined economic categories: Agriculture-based Manufacturing (Wine), Traditional Industrial Manufacturing (Wooden Furniture), Non-Traditional Industrial Manufacturing (Light Ships), and Services (TV Programs). As a result, they can generate broader lessons as a group than possible alternative choices.

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4 A few large firms in the Wine and TV Program industries are exceptions. However, smaller firms in both industries still capture a large fraction of production and exports.
3. Theoretical framework

Hausmann and Rodrik (2003) and Hausmann, Rodriguez-Clare, and Rodrik (2004) – henceforth HR – argue that the emergence of new economic activities in developing countries is characterized by a substantial degree of uncertainty about production costs. This uncertainty is only resolved – in a particular country – once the new activity is carried out in that location, even if it has been performed in other countries for years. Then, for a new activity to emerge, a pioneer needs to embark on a costly venture of uncertain outcome. This venture might be successful, but it might also turn out not to be profitable. HR argue that, in addition to the venture risk, another factor hampers pioneering activity. Even if the uncertainty turns out to be favorably resolved, knowledge of the successful outcome could be easily transmitted to other firms who might imitate the pioneer, dissipating the rents he has generated. From a social perspective, there is a problem analogous to the standard dilemma found in the patents literature: finding the extent of patent protection that optimally balances the trade-off between incentives for invention and early diffusion. As opposed to this standard dilemma, however, when the “invention” in question is the “discovery” of a new activity’s production costs in a particular country, it is not possible to resolve this trade-off through the patent system because such knowledge simply cannot be patented. As a result, HR assert that developing countries suffer below-optimal “discovery activity”, as the potential monopoly rents of pioneers – which would induce them to invest in those activities – is rapidly dissipated by the early entry of imitators.

The HR framework is in principle suitable for analyzing emerging export activity in differentiated products from a developing country, like Argentina, to developed countries. Since Argentina’s exports have historically been concentrated on agricultural and industrial commodities, this activity is likely to be subject to uncertainty about production costs. To the extent that the nature and outcome of the risky investments that a pioneer makes to find out all the implications of an export venture is observable to other firms, who can then imitate, his private returns will be lower than the social returns he generates. As in the HR framework, such a market failure will induce below-optimal investment by pioneers.

In this section we present a framework that adapts elements from the HR model. Based on the findings of our case studies, we provide more specific content to the conceptual apparatus of that framework. We first argue that generating sustainable export growth requires a firm to adopt a set of business practices

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5 We argue later that exporting, as a new activity, is subject to additional layers of uncertainty that go largely beyond uncertainty about production costs.
that is substantially different from the set of practices that are necessary to compete successfully in the domestic market. We distinguish the two by calling them, respectively, the “export business model” and the “domestic business model”. Then, we re-define “discovery”, “pioneer”, and “diffusion”, the central concepts in HR, to be consistent with the theoretical framework we propose.

a. Export business model versus domestic business model

A firm in a developing country that attempts to succeed in selling differentiated products to foreign markets – in particular those of high-income countries – needs to change several of its business practices. We categorize those changes into two broad groups which we call “product upgrade” and “marketing upgrade”. The central elements that characterize product and marketing upgrade are not necessarily identical for every sector. However, many of those elements – described next – are shared by some or all of the industries included in our study.

Product upgrade

Consumer demand has idiosyncratic and specific components in different countries. In particular, consumers in developed countries tend to demand products of higher quality, which in general have more sophisticated designs, are made of better materials, or are less likely to malfunction. Because of the different characteristics of consumer demand in foreign countries, domestic producers in developing countries who attempt to enter foreign markets need to upgrade their products and manufacturing practices to satisfy the higher quality standards and/or specific needs and preferences of the markets they target.

Product upgrade imposes several requirements on domestic firms. First, they need to upgrade and customize the design of their products, which implies the capability of mapping the specificity of foreign consumers’ needs and the higher quality standards into their design and product development processes. This adjustment might involve subcontracting these activities to third parties or developing the capability inside the firm (e.g. hiring specialized designers). Second, firms need to upgrade the production process to meet the higher quality standards of developed countries. Meeting this requirement usually imposes the need to develop new practices for quality attainment. Third, firms also might require that suppliers and service providers upgrade their products/services to accompany their own upgrade, which often involves deepening customer-supplier relationships.
Marketing upgrade

Substantial changes in marketing practices are also an essential requirement for successfully exporting to foreign (developed country) markets. First, firms need to develop the capability of understanding the preferences and needs of foreign consumers. While in the domestic market they are naturally embedded in an environment that continuously provides them with spontaneous signals about consumer needs and their reaction to the firms’ products, analogous feedback from consumers in the foreign market is not as easily available or interpretable. Therefore, firms need to learn how to obtain this information in a more systematic manner. Firms also need to understand the nature of competition in foreign markets in order to choose which markets to target and define a positioning strategy in those markets. While their accumulated experience in the domestic market allows them to easily predict competitors’ and consumers’ reactions to their own strategies, this experience is usually of little use to predict those reactions in the foreign market. In the case of branded products, firms also need to elaborate a branding strategy. In the domestic market – often small relative to the size of foreign markets – brand recognition is likely the consequence of the firm’s long presence in the market. Entering foreign markets, in contrast, requires a well thought-out brand positioning strategy since competition in those markets is usually more intense.

In addition to focusing on the end-customer, firms need to understand the structure of distribution networks in the export market in order to choose and develop the distribution channels most appropriate for reaching consumers in their target segment. They also need to understand the needs, requirements, incentives, and constraints of their distributors, who are their next-tier customers. Addressing their needs and requirements (e.g. timely delivery, quality consistency, packaging requirements) is a key factor for gaining access to foreign distribution channels. Failure to conform to the channel’s requirements can be interpreted as a signal of non-reliability and risk the continuity of the business relationship with the channel. Efforts to satisfy the requirements of distributors is distinctively important for exports to developed countries since the negotiating power of distributors in those countries is often larger than the negotiating power of domestic distributors (potentially due to their larger scale and larger set of potential suppliers). A good match between the domestic firm and the foreign distributor is also important. For example, large distributors might have more access to retail outlets but fewer incentives to make specific investments to foster sales of a small supplier. In some sectors, firms might need to implement post-transaction elements of customer service specific to the foreign market. Repair and maintenance, for example, requires mobilizing resources in each of the targeted foreign markets to establish the necessary network of service providers.
Two contrasting business models

Product and marketing upgrade distinguish two contrasting business models. In the “domestic business model”, product and marketing upgrade have not taken place. This business model characterizes most domestic firms, which are unable to export on a consistent basis. In the “export business model”, product and marketing upgrade have been implemented, so this model characterizes firms that are successful in exporting differentiated goods to developed countries.

We divide the required changes in business practices into product and marketing upgrade for analytical and expositional convenience. However, we emphasize that the two upgrades are fundamentally intertwined. In particular, both need to be implemented to transition between the domestic and the export business models.

b. Discovery and pioneer

It could be hypothesized that, among the many components of product and marketing upgrade, there is a single one that is crucial for a particular industry’s export success. In this hypothetical case, “discovery” could be defined in a narrow sense. For example, a discovery could be finding that a specific modification to the product design dramatically increases its acceptance in the targeted market or realizing that on-time delivery is a baseline requirement. However, our case-study findings indicate that there is seldom such a silver bullet. In contrast, we find that there are always several changes that need to be implemented together to develop a sustainable business in a foreign market. Consequently, we adopt a broader definition of the term: we define discovery to be the implementation of a successful export business model for the first time in a given country.

Firms that fail to implement the required upgrades might still be able to carry out sporadic exports or export regularly to developing countries. However, they will not be able to achieve substantial and sustainable exports to developed countries. The latter type of exports requires a number of improvements and adaptations in the firm’s way of conducting business that need to be satisfied jointly.

We define the pioneer to be the individual (or firm) who makes the discovery, i.e. who first implements a successful export business model. The discovery might come about as a combination of the pioneer’s actions and elements of luck. On the one hand, part of the implementation of a successful export business model might result from the pioneer imitating foreign firms. For example, he can imitate a product
design or the way foreign firms relate to distributors. On the other hand, a discovery might be due in part to the successful outcome of an investment made under uncertainty or even to mere coincidence. Discoveries in Hausmann and Rodrik (2003) have precisely these two components; pioneers imitate the products of foreign firms and also are lucky to uncover low production costs for those products in their countries. However, those two elements do not fully characterize how discoveries come about. First, a successful export business model can be developed in part through a lengthy process of experimentation and learning, along which the outcome of specific decisions and investments provides the pioneer with valuable information that helps him make subsequent choices. Second, the ability to implement a successful export business model can also stem from an information and knowledge advantage held by the pioneer as a result of his experience in related or unrelated activities. As is later discussed, this advantage turns out to be crucial.


c. Diffusion

The successful implementation of an export business model by a pioneer generates knowledge that eventually diffuses to other firms. Diffusion can take a specific or a general form. Specific diffusion is the transmission of knowledge about particular elements of the product and marketing upgrade implemented by the pioneer. For instance, specific diffusion could involve the characteristics of a new package or the details of the pioneer’s marketing efforts. General diffusion is broader in scope; it is the transmission of the knowledge that a successful export business model does exist, even if some or all of its elements are not known.

4. General Findings

a. The uncertainty environment

When domestic producers assess the potential profitability of an export venture before discovery and diffusion have taken place in their industry, they face various sources of uncertainty. In general, a potential source of uncertainty stems from each of the dimensions – described in the previous section – along which firms need to upgrade product and marketing. For example, firms face uncertainty related to the cost of acquiring the necessary equipment and implementing quality control practices or to their

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6 The introduction of experimentation and learning and information advantage as factors facilitating discovery implies a potential tension between the standard connotation of the word “discovery” and the scope that we give to it in this study. Subject to this
ability to find the right suppliers for the sourcing of parts required for the upgrade. They also face uncertainty about which markets to target and about their ability to design or adapt products that appeal to foreign consumers in those markets.

The uncertainty associated with the profitability of a potential export venture – before discovery and diffusion have taken place – is in general so large that domestic firms elude the risk involved in a serious effort to upgrade their product and marketing practices. In addition to the uncertainty associated with each dimension along which firms are required to upgrade, a more profound layer of uncertainty is associated with the firms’ ignorance over what dimensions are most relevant to their particular case. Furthermore, they are often even unaware of some of the dimensions along which they need to upgrade. Under such uncertain environment, their export efforts are limited to attending a trade fair, contacting a foreign distributor, or advertising their products in a foreign outlet. But such a limited export investment does not lead to a sustained and substantial presence in foreign markets. In fact, this type of export experience often terminates not long after it has started.

The deepest source of uncertainty relates to the need to marketing upgrade. Marketing upgrade requires information and knowledge about the intricacies of foreign markets that domestic firms typically lack. They need to understand the preferences of foreign consumers, make positioning and branding decisions, find appropriate distribution channels, understand the needs and business practices of distributors, and (in some cases) mobilize resources for post-sale services. However, they neither have the information about how to satisfy these requirements nor do they know how and where to acquire it. In the domestic market, firms rely upon intuition, experience, frequent contact with consumers and distributors facilitated by geographical proximity, and embeddedness in the local culture. These are powerful tools for marketing domestically, but are ineffective for marketing abroad. In order to export, domestic firms need to develop new and largely unfamiliar marketing practices.

In the case of product upgrade, in contrast, the tools that firms rely upon to produce domestically seem to be more similar to those they need when producing for the export market. A potential explanation is that the information and knowledge required for product upgrade tends to be of a more codifiable nature, available in manuals, trade magazines, or transmitted in educational institutions to technicians, specialists, and professionals whom domestic firms can easily hire if required. Marketing requirements – such as
understanding the needs and preferences of foreign consumers or understanding the “way of doing business” in the foreign country – are considerably more difficult to codify.7

b. The knowledge advantage of pioneers

We find that the pioneer, in all four sectors, has as a substantially superior understanding of foreign countries’ culture, idiosyncrasies and/or way of conducting business. Such an understanding resolves a large number of uncertainties that remain in place for other entrepreneurs in the industry, and therefore facilitates the conception and execution of the export business model. Facing fewer hurdles than his peers, the pioneer faces more certain investment prospects for product and marketing upgrade.

The fact that pioneers have such a distinctive knowledge advantage would not be surprising if the advantage were endogenous to a previous decision to become an exporter. However, this is not the case. The knowledge advantage of pioneers is always based on prior experience with foreigners and foreign markets that is unrelated to their subsequent decision to export. In all the cases, we find that pioneers had previous experience socializing in foreign countries. Socialization allows for the creation and sharing of explicit and tacit knowledge – in this case, in areas such as human relations, business practices and tastes in a foreign country.8 Pioneers later found this knowledge critical in their export ventures. In two of the industries (Light Ships and TV Programs) the pioneers were first importers. The import activity, which involved regular trips abroad and frequent contact with foreign agents, promoted socialization abroad in their respective business communities. In the case of the Wine industry, the pioneer lived for many years in the United States. First, he studied for four years in New York and years later spent three more years as a visiting professor at UC Berkeley. The latter experience allowed him to witness the transformation of the wine industry in Napa Valley and socialize with its wine community. Even though at the time of his visit he was already one of the most successful domestic producers, the strategic location of Berkeley was not a factor in his decision to accept the visiting position, which he was offered by a friend. In fact, the pioneer was barely aware of the transformation that was occurring in Napa Valley at the time. Finally, the pioneer in the Wooden Furniture industry spent three months in the United States as a teenager in an exchange visitor program. Later, he worked selling seeds and fertilizers to farmers for years. In that job, he frequently socialized with Americans who were sent to Argentina to provide sales and marketing training.

7 Our claim here contrasts with a large literature emphasizing the non-codifiable nature of production knowledge. In the industries we study, however, access to production knowledge does not appear to be a relevant bottleneck for export success.
In all of the cases, the pioneers’ access to explicit and tacit knowledge about how to market abroad and how to deal with foreign businessmen allowed them to focus on the dimensions of upgrade that were the most relevant. Most other domestic producers, lacking this knowledge, were not able to conceive a thoroughly planned export strategy.

c. **Newcomers versus incumbents**

In none of our cases is the advantage of pioneers based on superior production knowledge. In fact, the pioneer in the Wooden Furniture industry is not even a producer (he is a commercial agent) while in the Light Ship and TV Program industries the pioneers are both newcomers to production after being importers for years. Even for individuals who had no previous production experience, the challenges of producing goods that satisfy export requirements appear to have been relatively easy to overcome. Their marketing knowledge drastically reduced the uncertainty associated with implementing an export business model and therefore provided them with the incentives to invest in product upgrade. In stark contrast, the production-knowledge advantage of pre-existing producers was not sufficient to encourage them to undertake such upgrade. This is evidence of the intertwined nature of product and marketing upgrade; firms invest in product (and marketing) upgrade only when marketing uncertainty is sufficiently small.

The Wine industry is the only one among our case studies in which one of the largest domestic producers also becomes a pioneer. We consider two possible explanations to account for this fact but cannot determine which of the two, if any, is valid. A first explanation is that factors specific to the wine industry played a role in narrowing down the scope of uncertainty that the pioneer faced relative to large producers in other industries who did not pioneer export activity in their sectors. On the one hand, Argentina is endowed with favorable climatic and soil conditions for wine grape production – Argentina has been one of the largest wine producers in the world for decades. On the other hand, Chile underwent a dramatic transformation that spurred remarkable export growth in this industry prior to Argentina. The Chilean experience provided a visible benchmark for assessing the potential profitability of the export business in a similar country. Both the presence of favorable natural conditions and the successful experience of a proximate neighbor could have substantially reduced the degree of uncertainty that domestic producers faced about whether the implementation of a successful export business model was feasible in Argentina. In that case, it would not be surprising that one of the large domestic producers also becomes an exporting pioneer. While partially appealing, this explanation is unable to account for the

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8 The creation and sharing of tacit knowledge through socialization is studied by Nonaka (1994) in the context of organizations.
fact that the pioneer in this industry implemented an export business model that was quite different from the export model of Chilean wine exporters, as he targeted a substantially higher segment of the market. A second explanation is luck: the independently motivated exposure of one of the industry’s largest incumbents to the transformation of the US wine industry later proved critical to develop an export business model.

*d. Diffusion: the role of the pioneer*

In the theoretical framework we distinguished between general and specific diffusion. The pioneer’s implementation of a successful export business model often generates both types of diffusion. First, his export success is usually accompanied with a significant growth in size (e.g. sales, number of employees) which is easily observable by other firms and taken as a signal that a profitable export business model exists. Even though they might not know the details of the export business model, knowing that one exists provides them with incentives to learn the unknown details, for instance by paying careful attention to the pioneer’s actions or by hiring a pioneer’s employee. Second, pioneers often generate specific diffusion as well; some of their specific actions are observed by followers, who can then imitate.

Even though diffusion can potentially hurt the pioneer, in our cases we have not encountered evidence that the prospects of diffusion deterred pioneer’s investment relative to a benchmark in which diffusion did not occur. Furthermore, the pioneers’ recollection of their decision environment at the time of investing in discovery activity (i.e. in developing the export business model) did not include the concern that diffusion might deplete their profits.

Somehow surprisingly, the contrary is in most cases true: pioneers were themselves explicit promoters of diffusion. A potential explanation for this counter-intuitive behavior is that pioneers might benefit from diffusion to other competitors, in particular at early stages of their new export activity. First, consumers often identify country of origin as one of the main characteristics of foreign products. Therefore, a pioneer might benefit from the existence of other exporters who can help develop “brand” recognition for the country as a whole. Second, pioneers might benefit from the appearance of other exporters as they increase the demand for specialized infrastructure and specialized (high-quality) intermediate inputs and services. Third, economies of scale in the costs of international transactions appear to be relevant in some industries; pioneers might benefit from the diffusion to producers of similar products that help them diversify the portfolio of products they offer in foreign markets.
e. Other mechanisms of diffusion

In addition to the pioneer’s actions, there are several other channels of diffusion. Among those channels, in our case studies there are instances of diffusion occurring through pioneer’s employees opening up their own shop, other firms hiring pioneer’s employees, and communication between competing firms and between buyers and suppliers. Business associations, government agencies and public-private institutions also play a prominent role in diffusion, which we discuss in more detail in the next section. However, this role is apparent at later stages of the diffusion process; in our case studies, none of these entities plays a critical role at the stage of discovery or early diffusion.

f. Pattern of specialization

Discovery is presumably not equally likely to occur in every sector. Pre-existing conditions might also play an important role in determining the set of economic activities among which discovery is more likely to take place. In this regard, we find an intriguing regularity to be the fact that in all our sectors export growth is based on products with an important component of design.\(^9\)

In two of the sectors (Light Ships and Wooden Furniture), export products employ design features from the Italian design tradition, which is highly regarded worldwide. The massive flow of Italian immigration to Argentina contributed to a local design capability that persists in the form of a younger generation of designers that maintain close links with Italy. In these two industries – and potentially in several others – this capability might provide Argentina with a distinctive advantage for participating in world markets with products that are design-intensive.

However, the fact that export success is primarily observed in design-intensive market segments within the sectors we study might alternatively be explained by the relatively high wages of the country – due to a large agricultural income – that do not allow Argentina to successfully participate in market segments of more standardized products, which are typically more dependent on cost competitiveness.

\(^9\) The term “design” is understood here in a broad sense. In Wines, the design function is performed by the enologist. In TV programs, this function is performed by the creator(s) of the format.
5. Lessons for public policy

By identifying the key advantage of pioneers, this study sheds light on the factors that prevent other domestic firms from exporting. Domestic firms typically fail to understand foreign countries’ culture, idiosyncrasies and/or way of conducting business, limiting their ability to design and implement a successful export strategy. The magnitude of the uncertainty they face is so large as to discourage them from making a committed export effort. Their problem is not lack of technological capability. It is instead that they do not know how to market their products internationally. Firms that are able to design a focused marketing strategy solve the production requirements without great difficulty.

A striking regularity in our findings is that the root of the pioneers’ knowledge advantage precedes their decision to become exporters. This finding has strong implications as it suggests that desirable attributes of the firm such as high productivity or a strong willingness to sell abroad are not sufficient to export differentiated products to developed countries: firms are required to possess knowledge that they cannot easily acquire. Hence, a relevant policy question is whether public policy can leverage this knowledge to favor other potential exporters.

Suggesting or designing specific policy instruments to attain this objective is beyond the scope of this study. Such a task requires considerable creativity and specific knowledge of institutional detail. In this regard, the contribution of this study is primarily to describe the nature of the existing constraints for export growth and provide a framework that allows for a more focused approach to policy design and evaluation. Nevertheless, the results of this work suggest that since the distinctive knowledge of pioneers transcends the specifics of their own industries, public policy should attempt to foster the diffusion of this knowledge not only within their industries but also across industries. In particular, the pioneers’ experience generates lessons that are useful for most producers of differentiated products who attempt to establish a stable presence in developed country markets. To the extent that this knowledge could be spread throughout the economy, export success should become less dependent on the singular features that characterize the pioneers in our study. Public policy could support environments – such as business conferences, business association meetings, and business-oriented educational institutions – that promote interaction between pioneers and other actual or potential business participants. These environments facilitate the transmission of explicit knowledge and allow for elements of the pioneers’ tacit knowledge to take an explicit form and hence become easier to communicate.
Our finding that early diffusion generally benefits pioneers implies that, in contrast to Hausmann and Rodrik (2003), concerns over the depletion of pioneers’ rents are not warranted to an extent that justifies public policies curtailing diffusion. In particular, a policy solution like the patent system, which attempts to induce discovery by restricting diffusion, might be a harmful policy as it might deter rather than induce discovery activity.

While we find that public policy has had almost no role at early stages in the process of export emergence, it has had a significant role at later stages of this process. In particular, in two of our four sectors (Wine and Wooden Furniture) public institutions, business associations and public-private agencies have played an important role in diffusing production knowledge. Fewer entities, however, attempt to diffuse marketing knowledge, which is the type of knowledge most clearly lacking. Even among the latter entities, it is very hard to assess the effectiveness of their intervention without substantial additional research focused on evaluating their specific programs.

Finally, the findings of this study also inform the debate about which sectors should be targeted for export promotion. Such policies are usually regarded as more effective when applied to sectors with a comparative advantage (under some definition of this concept). Despite common wisdom that Argentina’s comparative advantage lies in sectors intensively based on natural resources, our findings suggest that this country has the potential to become a successful exporter of differentiated products even if those products are not based on natural resources, as long as the information and knowledge constraints associated with initiating an export venture are substantially mitigated. Furthermore, upgrading exports of resource-based products (i.e. climbing up the value chain) also requires mitigating similar constraints – to the extent that upgrading involves product differentiation – as we observe in the wine industry. Therefore, the set of desirable policies for export promotion of differentiated products might be similar regardless of whether products are based on natural resources or are manufactures with no significant natural resource component.

6. Case studies of emerging export activity in four Argentine sectors

Before presenting the four case studies, we provide a summary description of the evolution of the Argentine economy in recent years. Government policies and the external conditions faced by exporters in Argentina have varied widely over the past 15 years. After decades of protectionism, Argentina initiated a consistent process of unilateral trade liberalization in the late 1980s, which was mostly
completed by the early 1990s. The nominal average tariff decreased from 37% in 1985 to 12% in 1991 while most non-tariff barriers were removed. Argentina was also a founding member of Mercosur, which started in 1991 and included a transition period that finalized in 1995 with the formation of a customs union. In addition to substantial unilateral and regional trade liberalization, other structural transformations took place simultaneously, including the removal of restrictions to FDI, the liberalization of the capital account, and a drastic privatization and de-regulation program. These reforms were accompanied by substantial economic growth until the onset of recession in the third quarter of 1998, which turned into a prolonged depression and led to the financial, currency and debt crisis of 2001. GDP growth since reaching the trough of the crisis has been consistently strong. Figure 6.1 shows the path of Argentina’s GDP since 1993, at constant prices.

![Figure 6.1: Gross domestic product (1993 prices, seasonally adjusted)](image)

Over the past decades, Argentina’s export sector has undergone large real exchange rate fluctuations. Figure 6.2 displays the path of a real exchange rate index. The chart displays a sudden appreciation following the launch of the convertibility regime, as moderate rates of inflation persisted for several months following the peso’s peg to the US dollar. The exchange rate remained relatively unchanged, appreciating slightly from 1995 to 1998. It appreciated suddenly in 1999 due to Brazil’s devaluation of the real, and remained at this level up to the crisis in 2001-2002. The crisis led to a sudden and large devaluation, and an overshooting period that lasted through 2002. The real exchange rate has since depreciated gradually, and is now roughly at about twice its value during the previous decade.

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10 A drastic program of trade liberalization was implemented in the late 70s but lasted only a few years.
11 Calculated by the Central Bank of Argentina and based on exchange rates and prices in the US, the euro area and Brazil.
The combined effect of reforms and the macroeconomic environment have had a significant impact on the evolution of Argentina’s exports. Export growth, which averaged 2.97% annually in the period 1970-1988 (in constant U.S. dollars), averaged 5.89% in the period 1988-2005. Figure 6.3 displays Argentina’s total exports since 1980, broken down into four major components. Exports in all components were relatively unchanged during the 1980s, although there was some growth in exports of manufactures (both industrial and agriculture-based) towards the end of the decade. Export growth in all components picked up during the early 1990s, but stalled again during the late 1990s in all sectors except fuel and energy. Growth continued after the devaluation of the peso in January 2002, although there was a temporary decline in 2002.
Even though all major export categories have grown substantially in the past 25 years, different rates of growth have led to a substantial change in Argentina’s export mix (see Figure 6.4). Primary products and agriculture-based manufactures, which jointly dominated exports from 1980 to 1991 (72.5% of the total), declined to a 53.5% share of exports in 2002-2005. Most of this decline was due to primary products, whose share declined from 34.2% to 20.3% between periods. Exports of fuel and energy picked up most of the increase (from 5.0% to 17.9% of exports), followed by industrial manufactures, whose share of the total increased from 22.4% in 1980-1991 to 30.0% in 1992-2001 and 28.5% in 2002-2005. In addition to the rise in fuel and energy exports, the most striking change in Argentina’s export mix has been industrial manufactures’ displacement of primary products as the second largest component (behind agriculture-based manufactures).

The largest sector behind growth in industrial manufactures has been the auto sector. Exports of autos and parts grew substantially over the 1990s (almost nine-fold over the decade) following Mercosur integration, which entailed an agreement for compensated auto trade between Argentina and Brazil. Auto exports have again picked up since the devaluation of the peso, as auto terminals have started to ship outside Mercosur. Industrial product aggregates and the large volume of auto exports mask, however, a more broad-based growth in exports of relatively sophisticated products to OECD countries. Figure 6.5 displays Argentine exports to OECD countries, net of autos and classified into differentiated and non-differentiated products. This graph is similar to Figure 2.1, except that automobile exports are not included. In addition, differentiated exports to OECD countries are compared here with non-differentiated good exports to those countries.
Growth in exports of differentiated products to OECD countries has outstripped that in non-differentiated products over the past decade and a half. Whereas exports of the latter products (as well as all non-fuel export components, see Figure 6.3) stalled during the real appreciation of the peso in late 1990s, exports of differentiated products to OECD markets grew substantially from 1999 through 2001. While exports of non-differentiated goods to OECD countries picked up immediately following the devaluation of Argentina’s peso, exports of differentiated products were slower to react.
Case I: Light-Ships

The development of Argentina’s light-ship building industry started at the beginning of the twentieth century, with the arrival of British immigrants with an interest in nautical sports. The inflow of these immigrants – and the clubs and sports activities they established – created a consistent domestic demand for light-ships, leading to the appearance of local producers. A domestic light-ship building industry has therefore existed for decades in Argentina, and there have been early attempts to export. These export efforts were isolated and lacked continuity, however, compared to the trend observed over the last decade.

The sector case study specifically focuses on motorboats, since these account for most growth in exports of light-ships. Nevertheless, export outcomes for the sailboat industry (the other main component of the light-ship building industry) are briefly reviewed at the end of this section.

The extent of export growth over the past 10 years can be quantified both in terms of volumes and export destinations. In terms of volume, exports declined from US$ 2.6 million in 1991 to a low of US$ 252 thousand in 2000, and since then have grown almost 40-fold to US$8.0 million in 2005. The path of total

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12 Light-ships are defined for statistical purposes as those weighing up to 15 tons within 4-digit category HS 8903 (yachts & other vessels for pleasure, etc.; row boats, etc.). The value for the weight threshold is largely arbitrary, and the decision to establish it in terms of weight is motivated by data availability since the basic measure of ship size in the industry is length rather than weight. The overall pattern of export growth (as described below) is robust to small changes in the threshold, but not if the weight restriction is entirely lifted. This is because the position also includes large luxury yachts, and there is one firm in Argentina that has been conducting sales of these vessels (which have very high unit-values) intermittently throughout the 1990s.
exports is shown in Figure I.1\textsuperscript{13}. The most outstanding characteristic observed here are the sustained high growth rates since 2003: almost 200\% in 2004 and 80\% in 2005.

Figure I.2 shows exports broken-down by destination. Prior to 2002, approximately 55\% of motorboat exports went to the US and the remaining 45\% to Mercosur, while exports to Europe have surpassed all other destinations since 2002. Exports to Europe reached 60\% of all exports in 2005, and drove most of the growth over the period. On the other hand, exports to the US declined to an average 6\% of units sold. As described below, Argentine firms directed their initial export attempts at the US market and later reoriented their efforts to specific markets within Europe.

**Figure I.2. Motorboats exports by destination (in units)**

![Graph showing motorboats exports by destination](image)

**Main exporters in Argentina**

Figure I.3 breaks down export figures by firm. Compañía Constructora de Embarcaciones (CCE) was the first firm to achieve substantial motorboat exports after 2000. Other producers have since followed CCE, and official statistics put current exports at close to US$ 10 million.

\textsuperscript{13} Although the figure clearly shows explosive export growth, the official customs statistics presented here are not as informative as they are for other sectors because industry sources claim that under-invoicing is widespread. This claim can be confirmed by checking U.S. websites that post advertisements for used Argentine boats: the prices quoted on some used boats are higher than the export price recorded by customs when the boat was new. Consequently, official statistics do not accurately capture the size of the sector's overall exports.
López Blanco’s CCE was the first company to achieve non-negligible and consistent motorboat exports. Other firms have followed CCE, so export shares have become increasingly diversified.

Table I.1: Exports by firm, from 2001 to 2005

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of exporters</th>
<th>Value of exports by top eight firms (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>25</td>
<td>95.3</td>
</tr>
<tr>
<td>2002</td>
<td>52</td>
<td>83.6</td>
</tr>
<tr>
<td>2003</td>
<td>47</td>
<td>86.0</td>
</tr>
<tr>
<td>2004</td>
<td>46</td>
<td>80.3</td>
</tr>
<tr>
<td>2005</td>
<td>52</td>
<td>73.2</td>
</tr>
</tbody>
</table>

Source: CEP (2005).

CCE remained the main exporter in terms of units sold (19%) in 2005, but there are other relevant players in the industry, namely: Altamar Yacht (13%) and Klase A (11%). These two firms have sustained export growth consistently since their entry in 2003, as shown in Figure I.3. Other (so far) small-scale exporters have appeared over the past two years. Table I.1 shows that the number of exporting firms increased after
2001, while the share of exports by top exporters has decreased consistently over the period. The eight largest exporters accounted for 95% of total exports in 2001, while their share decreased to 73% in 2005.

Europe is currently the largest export destination for Argentine producers and – as explained below – the market on which they focus most export efforts. In 2005, the largest importers of light boats from Argentina were Spain (33.1%), Italy (21.3%) and the United States (10.6%), with the remaining exports going to 23 other destinations.

The light-ship building industry includes sailboats as well as motorboats, and these have also undergone sustained export growth. Light ship exports in 2005 consisted of 66.0% for motorboats (HS 890392), 23.3% for sailboats (HS 890391) and 10.8% for other small boats (HS 890310 and 890399). Both segments cannot be considered as the same for the purpose of this study because there are important differences in production processes, commercialization abroad and the characteristics of the final product. Both industries do share some common ground, however, in terms of raw materials, suppliers and commercialization for the domestic market, and there are manufacturers that produce both products.

Sailboat exports have followed a similar path to the one described for motor boats. Export volumes grow abruptly after 2002, with Europe as the main export destination. As with motorboats, the share of exports to the US also declined after 2002, despite being the main destination in the earlier period. The main markets for Argentine sailboats in 2005 were also Europe (65% of units sold) followed by Latin America (28%) excluding Mercosur, while the remainder is explained by 6% of sales going to Mercosur and 1% to the US). The firm Río Tecna S.R.L. was the first to achieve sustained sailboat exports, followed and eventually surpassed by Compañía de Barcos S.A.

International trade

According to CEP (2005), the largest exporters of light ships in 2004 were Italy (19%), the United States (13%), France (13%), Germany (11%), Spain (8%) and the United Kingdom (8%).

At a global scale, industrial techniques and serial production are currently replacing handcrafted production centered on individual artisan workers with broad sets of shipbuilding skills. The objective is to achieve a reduction in costs, of which the most relevant are labor costs. Additionally, the trend in the light-ship building industry is towards the consolidation of large business groups, by association of about seven to eight individual shipyards. This is intended to reduce costs by sharing design and engineering
expenditures. The most important of these groups are Ferreti, Azymuth and Rodríguez. The three largest European companies account for more than 10% of the total sales, and more than one quarter of the total production in Europe comes from its 10 largest firms.

The international market for light boats is divided mainly between Europe (21%) and the United States (72%). European customers buy equivalent proportions of motorboats (53%) and sailboats (47%), while the US demands more motorboats (69%) than sailboats (31%). The European market for motorboats is currently growing at a higher rate than that for sailboats.

Across the world, the final consumers that demand these products employ them for recreational and sports purposes. The greater demand for motorboats is linked to a preference for more comfortable and better-equipped boats. Additionally, motorboats are perceived as being easier to drive and therefore have a broader appeal. Some consumers base their preferences for these boats on associations with concepts such as freedom and status.

**Value chain of the light ship industry**

The light-ship building industry is part of the metal-mechanic sector and is classified as heavy manufacturing industry. The main activities carried out by firms in the sector are the construction, repair and refitting of ships.

The production process involves the following stages: design; reception and processing of materials, parts, equipment and facilities; construction of the structure of the boat through the assembling of parts; and the assembly of final components. This task is carried out in shipyards and workshops. Shipyards focus on construction but also repair and refit boats, whereas workshops are dedicated almost exclusively to the last two tasks. According to the Federación de la Industria Naval Argentina (FINA), there are approximately 100 firms currently in operation in Argentina (shipyards and workshops) and 60 of these belong to the light-ship building sector.

Suppliers of boat parts and components are called *navalpartistas*. These firms may belong to very different industrial sectors, as their products can range from engines and electrical equipment to televisions and refrigerators. The light-ship building activity also requires trained workers in a number of handicraft skills. The level of craftsmanship involved usually increases with the scale of the boat, since larger boats usually undergo further customization for individual clients.
In this section, we will describe the value chain of the lightship building industry. We have included the main roles that can be identified from the end-customers of a ship to the suppliers that manufacture parts or raw materials specific to shipbuilding. Figure I.4 shows the structure of the value chain from the end-customers to the suppliers of parts and raw materials.

**Figure I.4: Value chain of the light ship industry**

**Commodities Manufacturers**
Not all items grouped as commodities here are such in a strict sense. The grouping refers to all inputs such that their use has no discernible impact on the end-customer’s purchasing decision. These products may be important to the quality of the end product, but the consumer is rarely capable of verifying the products used or the consequences of their use. The consumer must trust the builder to employ all components and raw materials in a satisfactory way.

**Raw Materials Manufacturers**
Raw material manufacturers include suppliers of, for example, fibers, resins, paints and aluminum. Most of these products are purchased in bulk and, similarly to the commodities, end-customers’ purchasing decisions are not influenced by the choice of the raw material manufacturer. Manufacturers of
Commodities and raw materials are large relative to the size of the light shipbuilder. Due to their relative size, these manufacturers are usually unwilling to tailor their products to the specific needs of the shipbuilder. For instance, the aluminum supplier is one of the largest companies in Argentina and shipbuilders represent a minuscule share of its sales. Shipbuilders have been unable to negotiate for this supplier to provide a type of aluminum that is specific to shipbuilding.

Ship Parts Manufacturers
Ship parts manufacturers can be classified in two distinct groups: traditional and non-traditional suppliers. Traditional suppliers produce parts that are specific to shipbuilding, such as propellers, axles and rigging. These suppliers have capabilities that are specific to shipbuilding, such as manufacturing technology, design expertise, or knowledge of working with materials that are specific to the industry. Non-traditional suppliers provide inputs that are usually supplied to other industries, for instance the windshields, aluminum parts, and CAD-CAM (computer-added design) services.

Technology Suppliers
Some parts of a ship require very specific design and testing. For example, the design of the boat’s propulsion system requires an evaluation of hydrodynamic properties. Due to the high degree of knowledge and specific machinery that is required for the task, this type of design is limited to few suppliers worldwide. The business of these suppliers is to patent a design and sell the right to use the design to shipbuilders. Designs developed by technology suppliers are adapted to a specific boat model by naval architects and designers.

Naval Architects and Designers
Ship design has become increasingly challenging as end-customers have become more sophisticated. Design concepts have been imported from other fields or products; for instance, car manufacturers design speed gauges to be big and expressive to enhance the perception of speed. This type of design trend rapidly carries over to shipbuilding because end-customers expect new design features to be present in ships as well. Design is influenced by customer tastes, which are affected by trends and cultural factors. Ship design was traditionally carried out by a naval engineer. However, design has become central to shipbuilding in recent years and the ship’s industrial design, while still important, is now second to the architectural design of the boat. Increasing emphasis is currently placed on the boat’s living space, i.e. the deck and interiors. The name of professional ship designers has changed from “naval engineers” to “naval architects” or “naval designers.”
Training Service Providers

Training service providers include universities, consultants, non-for-profit organizations and international agencies that jointly sponsor and deliver training courses to shipbuilders and their key suppliers.

Shipbuilder

The role of the shipbuilder is similar to that of a car manufacturer. The shipbuilder integrates all suppliers to execute the production of a designed product. The shipbuilder buys raw materials to manufacture some parts of the ships, such as the hull. The builder also buys undifferentiated parts and subcomponents; the nature of which will not be apparent to the end-customer. The end-customer does not need to be informed about these products because it is the builder’s role to select the appropriate suppliers. The builder also integrates branded products such as the engine, mechanical components and ship instruments. Other branded products include comfort appliances such as a refrigerator or a microwave oven. Lastly, the builder integrates branded or unbranded comfort items such as sofa-beds, tables, toilets and seats.

Distributors

Distributors play a central role in the successful access to each market, and require precise knowledge of the products that they seek to sell. Distributors may have access to a sample boat to show to prospective customers, but this is not the case in all markets due to the small scale of Argentine exporting firms. In addition to detailed knowledge of the boats themselves, the distributor must be able to work with clients to specify the customization of the boat.

Certification agencies

Certification agencies set standards used by shipbuilding manufacturers. Certification agencies assess and certify that the materials, technology, products, facilities and manufacturing processes are in accordance to national and international laws. Some countries or regions require certification to allow boat sales. In others, certifications act as a differentiating element to assure distributors and end-customer about the quality of the product. The certification agency most frequently used worldwide is Italy’s RINA.

Maintenance/repair service providers

Maintenance and repair service providers play a critical role in the success in the ship-building industry. Ships need to be serviced both regularly, such as for tune up, and as needed, for example to repair breakdowns or damage. Assuring access to maintenance and repair service providers is a key factor for competing in foreign markets. In a domestic market, most of the suppliers to the ship builder are local;
thus, there is a well-established network of parts and service providers ensuring that end-customers have access to required services. In the case of foreign markets, shipbuilders need to plan and provide for the delivery of these services. To successfully leverage on the existing network of service providers in each target market, ship builders have to provide detailed manuals and support material.

**Brief history of the light ship industry**

The light-ship building industry in Argentina has a long history and traditions beginning in the early twentieth century, when Argentine and European immigrant artisans joined in establishing the first shipyards to build wooden boats near the River Plate. According CEP (2005), 90% of light-ship building capacity is currently located in a single location – an area comprised by the Tigre and San Fernando counties, in the northeastern part of the province of Buenos Aires and on the delta of the Paraná River – which was an area previously populated by British immigrants with an interest in nautical sports and is still a hub for a number of marine sports, including yachting.

Approximately 200 companies are located in the Tigre-San Fernando area, where light-ships are required for transport and communication between the islands of the delta. Growth of nautical sports (yachting, water ski and windsurf), mostly in the Luján River, the delta channels and the River Plate, encouraged the creation of new shipyards and associated industries.

New materials were introduced to light-ship manufacturing in the 1950s, including fiberglass and the use of polyester in sails. These materials allow for lighter boats, implying higher speeds and longer product life. The industry established a chamber in 1969, the *Cámara de Constructores de Embarcaciones Livianas* (CACEL), with the aim of promoting the shipbuilding activity. A further construction material development was the introduction of fiberglass reinforced plastic (FRP) in the 1970s, which potentially allows for the implementation of serial production techniques. The industry was characterized by small and medium-sized firms, most of which were family businesses, and were mostly focused on production for domestic water sports. Average annual production reached 7,800 units in the early 1980s.

Argentina’s convertibility regime in the 1990s was beneficial to imports of both final products and technology. Until 1993 there had been slight increases in volumes produced, but not to a substantial difference from the levels produced in the late 1980s. Production increased significantly from 1994 through 1999, and later declined through the later stages of economic recession through the end of the convertibility regime in 2001.

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The devaluation and subsequent depreciation of the local currency following the end of convertibility caused a sudden improvement in relative prices for the light-ship building industry, making Argentine boats more competitive on international markets. Although the international price for several cost components was reduced (such as labor costs, indirect costs and some local materials), imported and tradable materials are still an important proportion of total production costs. In particular, motor engines account for the largest share of imported input costs.

One of the main obstacles to light-ship exporters is the lack of financial resources with which to promote export growth. According to CEP (2005), firms obtain financing from their own resources (78.6% of firms) and from anticipated payment from customers (43% of firms).

Most companies in this industry are SMEs, with an average of 20 employees per company. Shipyards tend to specialize in the production of a specific type of boat: motor boats, sail boats or cruisers. Depending on the size of the boats, these firms can work by order (in the case of larger ships) or produce short series.14

**Domestic business model versus export business model**

Producers under the domestic business model conceive the light-ship building industry as an artisan activity, and are part of a community with a lifestyle centered on the river. Both traditional builders and their customers are yacht and boating enthusiasts, and builders view their business as providing non-standardized products that are customized to specific needs of the members of their community. Firms are almost entirely dependent on domestic customer demand and local financing conditions, and export ventures are rare and limited to utilizing surplus production capacity when domestic demand is low. Most of these exports are also limited to the neighboring markets of Uruguay and Brazil. Skills in business management, finance, commercialization and marketing are underdeveloped.

The production and marketing decisions of firms under the export business model disregard the features of the domestic market, so the production capacity of these shipyards surpasses in both quantity and quality the requirements of this market. New products are designed to satisfy specific niche demands in foreign markets. Unlike firms under the domestic business model, firms using this model separate activities into business units and employ distinct managers for the areas of production and marketing.

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14 In the light-ship building industry, serial production refers to the fact that production is carried out on the base of standardized models or matrices, resulting in very similar finished products, with slight differences in finishing details.
Some managers and technical staff have been employed abroad, with leading international firms in the industry.

*Product upgrade*

The business model for the domestic market does not tap into the greater-precision production techniques allowed by the use of fiberglass reinforced plastic (FRP). Shipyards are managed by artisans and craft specialists such as carpenters and mechanics with a long tradition of wooden shipbuilding. Introduction of product and process innovation is not adopted to a full extent. The new material technologies incorporated by the light-ship manufacturing – such as fiberglass for the hull and polyester for sails – allow for product innovation and the implementation of serial production techniques. Firms under this model produce low quantities (due to the small scale of the domestic market but also because most firms seek to supply a broad portfolio of products) and hence fail to achieve scale economies that justify the process innovation allowed by these materials.

Companies under the export business model introduce improvements in production processes, quality, and design, which in turn require changes to the organizational structure of the firm. Production is standardized and documented (ships are accompanied by detailed technical information) to enable technical support abroad. This allows minor servicing to be carried out by brokers and representatives in foreign markets. Standardization also enables the exporter to send technicians overseas to the destination market, since it potentially limits the range of problems that customers may find with the product and facilitates dealing with these problems without returning the ship to a shipyard.

Domestic market producers build ships to fulfill local customer needs. A singular trait of yachting around Buenos Aires is that the sport can be practiced over the expanse of the River Plate, the widest fresh water estuary in the world. Ships are therefore designed for fresh water and are not required to be resistant to sea corrosion. Domestic business model producers offer the same product abroad as they produce for the domestic market. In the European and other world markets, light ships are typically used in salt water and are required to be resistant to sea corrosion.

Shipbuilders with foreign market-orientation have developed a derogatory term – “cholo engineering” – for production methods used by handicraft shipbuilders: they state that they employ second-rate engineering practices to build ships in a fake-modern style, using new materials but without updating old
techniques to realize the materials’ potential. As an example, they claim that designs for these products are based on the building techniques used for wooden boats, despite using modern materials such as FRP.

Export business model firms employ professional managers specialized in production or marketing, and these are delegated major functions within the firm. The owner is usually the only chief executive in firms under the domestic business model, although family members may focus on managing specific tasks. This distinction does not just follow from scale, as several firms under the domestic business model are larger than export business model firms.

The flow of information between the production and marketing divisions is crucial for exporting firms, as products are developed for specific market niches and are customized – within the constraints allowed by each model – for individual clients. Product development in exporting firms uses market survey information on the demand for specific product attributes in developed markets, so upgrades are dependent on the product marketed.

The upgrade of production processes benefits from changes in global patterns of technology adoption. Shipyard managers access publicly available technical information and attempt to implement innovations for both process improvement and product quality upgrade. The adoption of already available technology enables upgrades to the quality and standardization of products. As a commercial manager said: “This is an industry that has no secrets at all. Everything (you need to know to build a boat) is published. There are no technical or intellectual rights either”.

Although access to these technologies may be public, it is not necessarily available to all producers in Argentina’s light-ship building industry: the right information needs to be pursued, and requires the ability to read technical material in English. As the export business model is deployed, the use of production documentation and blueprints becomes extended, and explicit and codified knowledge replaces tacit knowledge.

The steps in designing and creating the product under the export business model are substantially different to those under the domestic business model. This is the case, for instance, with moldings techniques used in production. Firms under the domestic business model make moldings by hand and employ substantial labor to file fitted parts, since matrices for boat parts follow wood-boat practices and lack precision.
The structure of motorboats under the practices of the export business model is designed precisely. Whole arrays of new matrices are constructed from scratch, and are engineered to produce high quality parts with extremely detailed corners and junctions. Although in no case do local firms reach a scale to fully implement serial production (as with the Italian light ship building industry), export business model firms do have the scale to integrate computer aided design (CAD) technology into the production process.

A key aspect of product quality is style. When new exporters decide to target their products to foreign markets, they depend on their design capabilities. For example, producers in Argentina realized that they had an advantage as followers of the Italian design tradition, which is highly valued across the European market but not everywhere in the US market. Exporters employ these design capabilities and adopt product design practices to emulate European industry leaders such as Azymuth and Ferreti. They employ in-house world-class designers and involve them into the production process, mostly Argentine professional designers with extensive training in Italy. More importantly, export business model firms identify the nuances in style requirements of different foreign markets and are aware of the need to make the appropriate design style choices for each market.

The organization of export business model firms has also involved adaptation upstream in the value chain, to resolve issues in the supply of special parts. Firms in the industry were exposed to products from world-class suppliers during the 1990s. Export business model firms have since applied a strategy of developing a network of distributors outside ship part manufacturers for the traditional ship-building community. Shipbuilders share tacit knowledge with their suppliers and work collaboratively in the design stage of their parts.

Marketing upgrade

Commercialization and marketing activities are underdeveloped in the shipyards under the domestic business model. These managers lack specific skills in business administration or marketing. According to a leading designer: “Although (domestic-market producers) know how to build ships, they do not have a clue about how to manage the shipyard as a company”. The upgrade to the export business model involves a substantial change in terms of capabilities for business administration and marketing.

The standard commercial practice for domestic producers is to rely on customers to finance the manufacturing of their products. The sales function is usually delegated to third parties such as dealers or brokers, under annual representation contracts. The marketing of these products domestically is based on
brand recognition – often the last name of the shipyard owner –, which is obtained from a long presence
in the market and word-of-mouth transmission. The fact that producers are members of the local nautical
sports community plays a role in this type of transmission. Exports are sporadic and targeted at
neighboring markets, mostly when domestic demand is low. Firms employing the domestic business
model do not participate extensively in international trade fairs, and their involvement is limited to
attempting to sell their existing product lines.

Managers under the export business model require substantial marketing knowledge and experience, and
in practice shipyards internalize the marketing function instead of delegating entirely to brokers.
Exporters market their products to final consumers by producing high quality marketing materials and
websites, advertising in the world’s main boating magazines and establishing permanent commercial
representations in key foreign markets.

Each exporting firm develops a specific marketing strategy regarding the appropriate choices for target
market size and product categories. Firms under the export business model make marketing decisions
regarding product development matching company capacities and skills with the competitive environment
they face on international markets. Exporters have to find opportunities in foreign markets in terms of
pricing and positioning that match company capabilities in terms of scale and style; they have to discover
niches in underserved market segments that can be supplied by firms that are relatively small by
international standards. To this end, firms under the export business model employ detailed knowledge of
products already supplied in foreign markets.

As a result of this targeted marketing, exporters focus on a particular segment: for instance, certain motor
boat categories in relatively small markets. Limiting the number of products helps these firms standardize
production and assure quality, and facilitates the expected scaling up of demand. Since products in this
segment are to some extent adapted to customer requirements, limiting the range of the product line
allows producers to keep projects manageable under their design and production constraints. Shipyards
that started exporting to the US found that the market was too large and required greater variation in
customer adaptation than they were in a condition to adequately serve at the time.

15 The sailboat export business has employed a similar strategy, focusing sales on boats for competition and highly customized
boats. Exporters in this industry consider that such a focus helps them avoid competition from larger firms on the international
market.
In contrast to this strategy of presenting a limited portfolio of export products, firms oriented at the domestic market offer a broad range of products, as they seek to cover all of the domestic market’s requirements.

The selection of a specific target market entails the positioning and pricing of the product in terms of competing alternatives. Argentine exporters avoid the premium segment and specifically seek to compete by offering the same quality as second tier brands, while selling at prices comparable to brands in the third or fourth tiers. This constitutes the main competitive advantage of boats offered by Argentine shipyards.

Downstream, the export business model requires building an international commercial network. Reaching foreign markets calls on exporters to understand the requirements of foreign dealers. Consequently, exporters consistently participate in international boat-shows (e.g. those in Genoa, Venice, Barcelona and Valencia) and devote substantial efforts to developing qualified networks of distributors for their products. Involvement in foreign trade fairs also allows exporters to make direct sales to customers.

A key promotional activity undertaken by exporters is brand development. Light-ship exporters make substantial marketing efforts towards controlling and making use of country-of-origin bias. Country of origin has been identified in the literature as an important cue that might be used by global marketers to influence consumers’ valuation of a given brand. Based on consumer surveys and laboratory experiments, researchers have identified country-of-origin (COO) as a factor that affects cognitive, affective, and normative dimensions of customer behavior. COO is a cue for product quality, and has symbolic and emotional value to customers as these hold social and personal norms related to product origin (see Verlegh and Steenkamp (1999) and Agrawal and Kamakura (1999)).

In the early stages Argentina had no recognition as a producer of light ships. Domestic model shipyards did not concern themselves with the country-of-origin issue, as almost all their business is local. Consumers’ country-of-origin bias and perceived quality are specifically important in the light-ship industry because potential resale value is a key attribute considered by buyers. One of the challenges that the industry faced was that the resale value of Argentine boats was significantly lower than for boats with brand-name recognition. Although potential clients appreciate that Argentine boats cost roughly 20% less than equivalent products from major international competitors, many are reluctant to buy Argentine boats due to their lower resale value. To solve this problem, the marketing strategy under the export business model seeks to improve the image of Argentine boats. Marketing campaigns are targeted accordingly, and
are succeeding in obtaining the specialized press in target markets to recognize Argentine origin as an added value. Argentine boats are also attaining a level of international recognition from their increasing presence in foreign markets, prestige acquired by specific designers and the performance of Argentine nautical sportsmen and women at international competitions.

The export business model also seeks to build brand recognition in foreign markets through co-branding strategies, using quality certification: certifications from the European Economic Community (CE) and the Registro Italiano Navale (RINA) are currently standard for Argentina’s export boats. Upgrading marketing practices also entails providing quality assurance services that were new to industry in Argentina. Under the domestic model, technical support services are an extension of workshop activity and do not meet delivery, quality or satisfaction-assurance standards, and products do not obtain international quality certification.

**Pioneer**

One of the most important shipbuilders is Luis López Blanco, whose company has led the industry in exporting light ships. Follower company Altamar has become the largest exporter in terms of value since 2003, but Mr. López Blanco’s company remains the leader in terms of units sold and has served as an example of a well-executed export strategy for Altamar and subsequent followers.

Mr. López Blanco started his career working as an accountant and business administrator for shipyards and other firms in the nautical industry during the late seventies. He worked as an employee for a shipyard until the mid-1990s, when he finished this relationship and started his own company: Compañía Constructora de Embarcaciones (CCE). CCE represented Ferreti, a premium Italian brand of motorboats, and Cummings, a US motor engine license, as well as domestic brands. His main business was the commercialization of new and used boats.

López Blanco considered that the domestic production model of shipbuilding was flawed, and he sought to become involved in production. By his account, domestic producers are proud of using handicraft techniques in shipbuilding. He regarded pride in the craft as a hindrance to developing a high quality, exportable product. As an importer and distributor of leading foreign brands, he was acquainted with the product features and some of the marketing practices of the firms for which he acted as a representative. He decided to start a production venture in 2000, after identifying a relatively unattended segment in the domestic market. A particular segment of boats (with length 10 to 11 meters and double command) was
only being produced by one other shipbuilder in Argentina, so he created a product to compete in that segment of the domestic market.

Although López Blanco was experienced as a businessman in the industry, he was clearly a newcomer to the production side of light-ship business. Instead of applying the standard building practices from the domestic business model, he employed state-of-the-art molding techniques that required higher engineering and design inputs, and increased the standardization of production processes. For this purpose, he employed workers with specific skills that were not widely used in the industry, such as industrial designers and naval engineers.

The boat was developed in 2001 with the aim of emulating industry leaders such as Azymuth and Ferreti. López Blanco considered that the resulting product, named Aqualum 35, was a substantial quality upgrade from competing products in the domestic industry. In addition to employing a wider range of skilled workers, production required the use of new materials and suppliers.

While making his first sales locally, Mr. López Blanco started to attend the Genoa and Venice international boat shows in search of foreign buyers for his Aqualum 35 motorboat. By his own account, colleagues in the industry considered that he was wasting too much time and money on boat shows. He followed this up by producing high quality marketing materials and taking out advertisements in some of the world’s main boating magazines, as well as establishing permanent commercial representations in several foreign markets. CCE achieved its first successful export by sending a boat to Italy.

To open up new markets he decided to sell his boats abroad below cost, and added quality assurance services that were new to Argentina’s industry. For instance, on one occasion he decided to send a technician to the United Arab Emirates to rework an instrument panel for a client that he heard was unsatisfied with that part of his new boat. However, growth was interrupted by the Argentine crisis in 2001. Mr. López Blanco sold personal goods to cover the firm’s financial needs during the subsequent period.

Most of the firm’s business opportunities since 2002 followed from López Blanco’s participation in international boat-shows, first as import broker and later as producer. Mr. López Blanco had socialized with the community of Italian dealers since his period as a local representative for international brands. This allowed him to learn about market demand for specific types of products and their features, as well as commercial practices in the industry.
Interaction with the Italian dealers underscored the importance of producing high quality marketing materials, which must be well written in the language of each customer market. Socialization with Italian dealers also taught López Blanco about specific product features valued by clients: for instance, he changed the design of control panels to follow the style of instrument panels on premium automobile brands such as Audi and Ferrari. López Blanco also decided to equip the Aqualum 35 with Italian comfort appliances, which improves the quality perceived by customers. The rationale behind the use of imported rather than domestic appliances is not only to employ premium brands, but also to set foreign customers at ease by providing appliances that they already recognize and trust.

From participation in boat-shows, Mr. López Blanco set up a qualified distribution network for his products, obtaining representation deals all over the world with companies that represent other first line brands. CCE’s products have been exported to Germany, France, Italy, Spain, Norway, Greece and Venezuela.

Starting in 2003 and 2004, Mr. López Blanco perceived that Argentine origin was gradually becoming a value added for his boats: According to López Blanco, coverage by specialized yacht journalists started to identify Argentine origin as positive rather than damaging. Mr. López Blanco perceived that country-of-origin was particularly important for motorboats due to the issue of resale value – as explained above – and therefore set out to improve the image of Argentine boats abroad by targeting his marketing campaign accordingly.

In addition, CCE focused as well on building international brand recognition for Aqualum, and employed quality certification for this objective: CCE obtained certification from the European Economic Community (CE) and the Registro Italiano Navale (RINA).

Efforts in terms of improving quality, design, and technical support led to changes in the firm’s organizational structure. Investment in these capabilities has allowed CCE to develop a larger boat (between 40 and 43 feet) entirely designed by computer and CAD systems for the European market, for which CCE charges a higher cost mark-up.

**Diffusion**

As Figure I.3 shows, diffusion in the motorboat sector took place from the year 2002 onwards. The diffusion process is still in an early stage, as the first followers are starting to appear. CCE’s experience
was key in encouraging other firms to undertake export ventures. Builders in the light ship building community viewed López Blanco as eccentric for pursuing foreign markets prior to the devaluation of the peso. His approach set an example, however, as he started to export his Aqualum 35 model to Europe successfully during the crisis in 2001.

It is possible to distinguish two main followers that have emulated the export business model: Altamar Yachts and Klase A. Altamar has followed the export business model more closely, adopting the management and marketing practices developed by Mr. López Blanco, while possibly benefiting from greater financial resources.

Altamar Yachts was started with the explicit purpose of focusing on the export market, and by 2005 had achieved US$ 1.5 million in official export revenues. The company initially attempted to export its product line to the United States and focused on the market in Miami, Florida. This venture failed, however, and Altamar learned that it needed to change product development to focus on the requirements of specific foreign markets. Altamar executives learned from CCE that they could only expect to become competitive in specific niches, so they focused on smaller markets. The larger share of its sales in 2003 was made to Mercosur countries, but the company subsequently reoriented its marketing efforts towards Europe where it has sold mostly to Spain and the Netherlands. The company has also sold boats to Chile, Brazil, Venezuela, the United Arab Emirates and Trinidad and Tobago. The firm has also developed a network of distributors in its target markets, which currently consists of five firms.

Exports by Klase A amounted to US$ 0.5 million in 2005. Klase A is still attempting to reconvert its production process towards the export market. It started by selling boats to Mercosur and later turned to the European market, following CCE and Altamar Yachts. Most of its sales are still in Argentina, however, and the firm is transitioning from the domestic to the export business model.

Altamar Yachts and others shipyards have benefited from the diffusion of the pioneer’s export business model, and CCE is widely regarded as the industry leader in terms of production and marketing practices. The diffusion process started mainly with word of mouth around the small community of light-ship builders. In addition to this, specific actors promoted the diffusion of CCE’s business model: designers and commercialization agents.

Designers helped expand knowledge of customer preferences (linked to Italian design in the targeted market segments) among firms. Firms have become aware of the relevance of commercialization agents
in developing sustained exports, as previous export ventures had attempted to bypass agents and broker deals directly through presence at boat-shows. Finally, business chambers such as CACEL provide a channel for diffusion by enabling contact between shipyards.

Notably, both CCE and its followers regard diffusion to be a positive mechanism in so far as it expands the presence of Argentine firms, and thereby brand recognition, in international markets. Particularly, diffusion promotes an improvement in the image of Argentine boats if more firms are able to successfully export products of adequate quality to foreign markets.

This perception is complemented by the fact that the size of the international market largely exceeds the current export capabilities of local firms, reducing the potential rivalry between Argentine shipyards. Additionally, more firms in the light-ship building industry imply a larger sector, which could benefit all the shipyards to the extent that it leads to the development of industry-associated services.

Public policy

Governmental institutions played a secondary role in promoting the development of the light-ship building industry’s exports. The impact of the intervention of these agents is currently considered to be very low. It appears that the role of public policies has not been crucial in supporting firms in the sector.

Shipyards received help from Fundación ExportAR (a governmental organization dedicated to promoting exports of Argentine products) to attend trade fairs, which in some cases occurred before CCE’s own marketing campaign but did not yield sustained exports. The support from ExportAR received by firms in this was not critical in enabling them to establish their brand names.

Interactions between members of this industry and the government of the Province of Buenos Aires occurred through CACEL, so the impact of this government’s support may be indirect and harder to detect. CACEL represents both exporting and non-exporting firms, so in practice it acts as a venue for the diffusion of the business practices of exporting firms.

Some specific public policies could be suggested with the purpose of promoting further growth in exports of the light ship building industry. Two actors that would be required to play central roles are universities and the local government of San Fernando.
There is a need to develop education and research on naval related knowledge. This would significantly benefit local shipyards, since knowledge is an important input to the business and skilled technicians are scarce. Universities with PhD programs in naval engineering played a determinant role in technology development in Italian shipyards. This requires closer links between universities and firms in this industry. For instance, the University of Buenos Aires (UBA) has a hydrodynamics laboratory with a testing channel, but it is in a state of disrepair and the naval engineering program came close to being closed down during the 1990s. Although both UBA and the National University of Technology (UTN) have expressed interest in setting up new programs linked to the naval industry, neither conducts research and development related to the light ship industry, possibly because leisure boats are disregarded by the traditional engineering community.

Specific promotion and efforts to liaison the private sector with universities should be considered in this area, since no university devotes a department or area to carry out research related to light ship design and technology. There is at least one major naval engineering program (UBA) and a sailboat architecture program (UNQ), but there is no specific program for light ships. Neither program is near the San Fernando area. The liaison between the private sector and universities is considered key in Italy and is heavily promoted.

The establishing of an industrial district for the sector would lead to greater visibility for the activity both locally and internationally, lower supply costs (by aggregating demand for inputs), and better infrastructure. This should take advantage of the existing industrial concentration in the San Fernando area.

The local government of San Fernando, potentially with the financial support of the Province of Buenos Aires, played a role in promoting the recognition the industry within Argentina and the Argentine brand name abroad. However, the undertaking of further export promotion ventures by the local government may require a material and human resource upgrade.
Case II: TV Programs

Argentina has a long tradition in the production of film, and its industry exported successfully during the first half of the twentieth century, mostly to Spain and Latin America. Exports disappeared almost completely after the 1940s, however, and the experience with film did not spill over to the TV industry. The return of democracy and the end of censorship ushered in a new creative environment after the mid-1980s, and the creation of original films and TV commercials thrived. A small production company won an Oscar Award for *La Historia Oficial* during this period, and this event marked the emergence of the independent production company as a new type of player in the film industry.

For many decades the most common way to export TV content has been in the form of a finished program, which in Spanish is known as “la lata” (the can). This often involves dubbing the product into the language of the importing country. The leading exporter of this type of product is the United States. Latin America’s share of TV programming exports involved mostly the sale of “telenovelas” (Latin American “soap operas”) and while Latin America’s exports were a negligible fraction of international trade, Argentina only had a small share of these. Argentina’s exports were carried out by the broadcast networks and were oriented to non-traditional markets such as Russia, as the conventional wisdom in the industry was that Latin American viewers did not find the Argentine Spanish accent appealing.

During the early 1990s most TV channels were privatized. This led to a reorganization of the broadcasting industry and the practice of outsourcing production became common, setting the ground for the development of independent production in the TV industry. Although they started by producing content for privatized broadcast channels, these firms gained exposure to international markets and later sought to develop products for these markets.

Argentine production companies succeeded in becoming involved in international markets by means of the TV format, and programs based on formats currently represent most of Argentina’s growing exports in this industry. In brief, a format is a complete guidebook for the production of a specific TV program, usually developed jointly with the program itself. Under a format, TV programs are purged of local content and licensed to other firms that retain the main structure and features of the program but adapt specific components to local tastes. Developing a format involves the codification of production and marketing knowledge, and therefore produces, in addition to TV content itself, an asset that the production company can resell or readapt for foreign markets.
TV formats fall into distinct genres under headings such as non-fiction (e.g. news programs, talk shows, reality shows and game shows) and fiction (e.g. dramas, special features, sitcoms, among others). To date, formats have been most successful in non-fiction genres but trade in fiction programs is currently growing in the form of “formatted telenovelas”. Formatting strips traditional soap operas of their specific domestic context and replaces it for that of the purchasing country. Adaptation of fiction genres is usually more complex than for non-fiction.

Exporting a format can lead to exporting a large number of services. At the very least, a buyer will purchase the format and related consulting services. This involves the production company assisting the buyer in adapting the format to a local market. Although the information needed to adapt a format to a specific domestic market may be to some extent codifiable, exporters seek to maintain this information tacit and deliver it by means of consulting services. In addition to the format, a buyer can also hire a wide range of production services that include scriptwriters, directors, production managers and assistants, casting specialists, costume designers and tailors, theatrical designers, hairdressers and post-production editors, among others.

**International trade**

The transformation of the international TV industry towards the widespread use of formats started in the United Kingdom. Traditionally, production projects in the UK were carried out within large, vertically integrated organizations with their own technical, creative, and production staff. Up until the early 1980s, the UK television environment was dominated by a few large, bureaucratic organizations that produced programs in-house for their own captive, terrestrial broadcast channels. Since then, the UK has witnessed the development of a large number of independent producers, which play an increasingly important role in the domestic and global industry. According to Starkey et al. (2000), the change was spurred by the 1990 Broadcasting Act, which imposed quotas on the BBC and ITV companies to source at least 25% of their programming from independent producers by 1993.

Planet 24, a United Kingdom TV production company owned by Bob Geldof, created the *Survivor* format in 1994. It initially failed to attract the attention of any major broadcasters in Britain or the United States, but was eventually sold to Swedish TV company Strix Television as *Expedition Robinson* (alluding to Robinson Crusoe). The show proved to be a major hit in Sweden in 1997, and remained successful through 1998 and 1999 in European countries such as Denmark, Norway and Switzerland. This format-based show gave rise to the reality TV phenomenon and was the first highly-rated and profitable reality
show on broadcast television (Moran and Malbon, 2006). Its first season in the US aired in 2000 under the name *Survivor*, and enjoyed a huge ratings success. Jointly with ABC’s prime-time game show *Who Wants to Be a Millionaire?*, it sparked a reality-television revolution. Networks deferred sitcoms and conventional drama series, and rushed reality shows into development. Unlike other programming trends in the past, however, this was based on formatted programs and program genres that could be adapted with relative ease to the structure of TV formats.

The largest player in the worldwide format business is currently Endemol, a TV think-tank formed by the merger of two Dutch production companies in 1994. Specializing in non-fiction programs, Endemol grew rapidly to become the world’s leading format creation and production company, with offices in 23 countries. The company achieved rapid growth through acquisitions as well as internally developed TV production companies.

Format-based programming is displacing other types of production content from the airwaves: the number of formatted shows broadcast worldwide has risen by over a third from 2002 to 2005, while the number of format hours broadcast increased by 22 percent from 2002 to 2004. International format sales (net of production costs) amounted to €2.4bn in 2004. The United States is the single most important format market in terms of production value, followed by Germany and France. The UK is the biggest exporter of formats: 32 percent of all format hours broadcast worldwide originate in the UK.

Sales of fiction formats are small compared to formats in genres such as reality shows, talk shows and game shows. Game shows account for 50 percent of global format airtime, and the reality show genre accounts for the highest production value (Fey et al., 2005).

Exports of formatted *telenovelas* have also grown substantially in recent years, and these attract large audiences in both developed and developing countries. Eastern Europe is the fastest growing market for exports of formatted *telenovelas*, and a dedicated regional channel, *Romantica*, was launched in 1998. The channel has seen substantial growth in the number of subscribers and demands a large volume of *telenovela* hours. The US Hispanic market is also a large and growing market for *telenovelas*: 17 of the top 20 Spanish language TV programs among Hispanic viewers were *telenovelas* in early 2004. Although this market is served by a large number of Spanish-language channels showing *telenovelas*, there is no dedicated *telenovela* channel.
Overview of Argentine exports

Argentina was one of the first developing countries to follow the trend in the UK, as the privatization of broadcast networks led to the emergence of an independent production industry concurrently with that in the UK. From the mid-1990s, the separation of functions between broadcasters and production companies drove the latter to use formats in attempting to sell products to broadcasters. Production companies have since developed their own formats for both domestic and international markets, and formats now constitute the bulk of the industry’s exports.

Argentine TV exports span the whole range of related services, from selling format rights to consulting and production services. Depending on the services involved, the current price of purchasing one hour of TV content from an Argentine producer can range from US$ 500 to US$ 100,000. The extent of this variability follows from the different types of TV programs and production services sold. Official statistics for TV exports are difficult to find due to this variability and because the product is not processed through customs, so figures can only be estimated.

Regular exports from Argentina started in 1997 and have grown consistently since, with higher sales values and an increasing number of participants. A conservative estimate of the average export price for TV programs and formats is around US$ 6,000, and an estimated 45,000 hours were sold in 2005. This suggests that at least US$ 270 million were exported in 2005.

Approximately three hundred Argentine firms are active in this industry, employing 24,506 workers directly. Although some of them are large, e.g. TV broadcast channels, most are small and medium-sized enterprises (SICA, 2006). The format production industry can be broadly broken up into independent domestic companies, foreign-owned companies and broadcast networks.

Most firms are independent domestic producers, and may range in scope from supplying a few specialized services to supplying all production inputs (renting equipment and studios, castings performers, filming on location, providing specific human resources and selling film materials and catering, among others) and creative inputs (script writing, directing, production, scenery and wardrobe design, editing and acting). Few independent producers are capable of exporting entirely on their own, and most depend on larger companies such as the international offices of broadcast corporations or international companies. Independent production leaders such as Promofilm and Cuatro Cabezas, however, do conduct all aspects of exporting TV content.
National broadcast and cable channels have taken on a large role in the industry. This trend became more important after Telefó Contenidos started to operate in 1999, and has since become the largest exporter in Argentina. Firms of this type usually supply both production and creativity inputs, as well as acting as international brokers for their own products and those of smaller production companies.

Foreign-owned companies are also large exporters, and tend to specialize on specific types of programs that usually correspond to the genre in which they started their business. Relevant examples of these are Dori Media and Endemol.

Value chain of the TV program industry

This section provides a schematic description of the value chain for the production of a TV program in Argentina, from end-customers (TV viewers) to the suppliers of inputs to production.

*Figure II.1: Value chain of the TV program industry*

Although depicted in Figure II.1 as a series of lined boxes, the value chain of TV production is particularly complex. Each TV program is a unique project requiring a distinct assemblage of skills and capabilities, and production is dependent on a range of (often freelance) individuals. As a result, the “value chain” has the form of a network, particularly upstream of the TV program producers. Roles in the value chain can be played by distinct firms, or these can be aggregated under a single firm. Next, we describe each tier in the production of TV programs.

*Creativity Suppliers*

Suppliers of creative content include scriptwriters, directors, production staff (not to be confused with the producers of the finished TV program, below), casting specialists, costume designers and tailors, post-
production editors, theatrical designers, hairdressers and actors. These are usually freelance workers whose services are purchased by the program’s producer, who acts as the integrator and business maker. Suppliers of this content are critical to the success of the TV program because they tailor the product to the preferences of the target market and provide the distinctive qualities that can make a program appealing to viewers. The size of the population of creativity suppliers is an indication of maturity of the TV industry. In Argentina there is a large population of TV scriptwriters, organized under the Argentine Scriptwriters Society (Sociedad General de Autores de la Argentina), as well as specialized web sites and interest groups that organize and lobby for the community and train new authors and writers.

Consumables and Equipment Suppliers
Consumables and equipment suppliers include the owners of film sets and studios, firms that rent equipment, and suppliers of film consumables such as media (tapes and optical discs). These suppliers are less critical than creativity suppliers in terms of the characteristics of the final product, but in some cases establish long-term working relations with producers.

Other Suppliers
Production requires supporting services such as catering, staff for secretarial and janitorial work (often temporary) and suppliers of office and hardware products needed on a filming set.

TV Program Producers
The output of TV program producers is a ready-to-watch TV show. In a sense, TV program producers are like ready-to-eat food producers in that they integrate a broad array of “ingredients” suppliers to produce a high-value product. However, relations between program producers and their suppliers are not like those in the food industry. Since each TV program is unique, they are tailored and produced as a project rather than as a process line. TV producers are not engaged in business transactions with each supplier all the time. However, they are engaged in persistent business relationships, particularly with suppliers of creative content. This type of relationship is termed a latent organization in the organizational sociology literature, because business relationships are long-term and are based on the reliability of the resources and capabilities of each individual agent in the latent organization. Capabilities and the track records within the latent organization provide quality assurances that allow the network to function (Starkey et al, 2000).
TV-signal distributors and TV broadcasters

Before the appearance of cable TV, content production and the broadcasting function were integrated into the same firm. Since the creation of cable TV, the roles have split between the producers of channel content and the distributors of the cable TV signal. Content producers create specific “TV channels”: a series of TV contents, such as programs and infomercials, that are usually presented as an individual channel on a TV set. Channel content is sold to cable signal distributors, who package content as channels from different sources and market paid TV services to final consumers. It is still common, however, for TV-signal distributors to be involved in broadcasting. This is the case with “traditional” TV networks such as ABC in the United States, or Grupo Clarin’s ARTEAR and Multicanal in Argentina.

Trends toward integration of the value chain

The value chain for TV program production has swung from integration to disintegration and, in recent years, back to integration under a different form. Traditional integration involved TV channels doing broadcasting, signal production and TV program production. TV channels owned the studios and all human resources were channel employees. These integrated organizations evolved into a set of more specialized firms, with all roles described in this section fulfilled by independent firms. Since 2000, a number of companies have started to integrate under different frameworks. Some TV channels regained a role in TV program production: Telefé created Telefé Contenidos and Canal 13 acquired stakes in two independent production companies: Ideas del Sur and Pol-ka. Another form of re-integration was also carried out when the domestic branch of Endemol (a production company) purchased traditional studio set Estudio Mayor.

Domestic business model versus export business model

Argentina’s current export boom in TV programs is driven by a new business model for creating, producing and trading TV content. Production companies follow a specific set of practices to conceive and implement program ideas, and adapt them to local markets abroad under the framework of the TV format. The model is based on the division of TV production into distinct stages, with conception or idea development clearly separate from production, as well as an explicit aim to isolate the components that can be sold abroad. The development of this model allowed for the specific services that are embodied in a format to be exported on their own for the first time. This is in contrast with exports of a finished program, were it is almost impossible for the product from the exporting country to divest itself of local
traits. Producing a program under the format model does not serve a purpose unless the format is to be exported, so format creation is necessarily linked to an export business model.

Under the domestic model, the conception and production of TV content is carried out in a unified manner. A production company will attempt to export the finished program if it was successful in the domestic market, but under this model exporting is necessarily a secondary activity and cannot motivate production independently. Watching an (often dubbed) imported TV program requires an exercise in cultural openness from the viewer, so international trade of TV programs under this model was dominated by production companies that could lower cultural barriers between viewers and their product.

*Product upgrade*

The adoption of the export business model implies a change not only in the characteristics of end products experienced by viewers but also in the nature of the process that leads to the final product. To develop formats, producers must create TV content with a strong plot structure or framework yet allow for variation in production procedures, requiring a more flexible, professional and organized staff. The minimal requirement to export a format is for a TV program to be purged of local content and licensed to other firms that keep the main structure and characteristics of the program but adapt specific components to local tastes. At the other extreme, exporting a format can entail a substantial part of the adaptation work as well as production, either in the country of destination or origin, or in a third country. Production in this case requires all associated services to be capable of deploying for export.

Companies that follow the export business model also develop specific relationships with other agents in the value chain. In order to be flexible and potentially scalable as required by specific projects, independent production companies form working relations with a large network of independent suppliers. Associates of production companies must upgrade their practices to supply independent producers leading the export of production services. In addition to the performing and production services mentioned above, freelance networks are often developed with studio sets, animation companies and stunt services.

The domestic production model in the TV industry is centered on finished programs aimed at reaching domestic audiences. Since producers under this model have relatively close knowledge of the relevant market, most uncertainty involves aspects of production and whether the product will adequately match these relatively well-known tastes. Production companies under the export business model add a further layer of uncertainty to their business, as they need to learn the taste patterns of viewers in foreign markets.
This requires an additional set of skills from creative and production crews, such as knowledge of these tastes or the ability to respond to directives on these tastes, carrying out their roles differently than when producing for their country of origin.

Producing the adaptation of a format requires learning the characteristics of target markets. This requires acquiring information on specific cultural components of the target market (e.g. a specific demographic group within a country or region) by contracting local consultants and upgrading production crews to develop skills in social and market research.

Game shows are the most common type of format, and many of these are remade in multiple markets with local contestants. Key examples include *Survivor*, *Who Wants to Be a Millionaire?*, *Pop Idol* and *Big Brother*, all of which have been successful worldwide. Game and reality shows are highly adaptable as formats. Under the domestic business model, these entertainment programs are often based on charismatic hosts and impromptu comedy, and lack plot structure. To drive ratings, they are designed to exploit idiosyncratic tastes and local customs, making the finished program itself very difficult to export. However, these types of programs are among the easiest to strip of local features. Under the export business model, product design and production are separated with a view to developing an exportable format. Among the largest companies developing these formats for export from Argentina are Endemol, a Dutch TV think tank, and Cuatro Cabezas, an independent production company.

Fiction formats must overcome substantial cultural barriers in order to be exported, since elements such as plot and character development may be harder to isolate from local characteristics. Under the export business model, the product is designed to avoid relying on the idiosyncratic tastes and local customs of the country of origin, and match more universal tastes. When producers started to design fiction programs for formatting, they broke down plot structure into a core story of universal applicability with added modular components, and developed adaptable characters and “exchangeable” specific content. For instance, *Rebelde Way* – a telenovela produced by Cris Morena Group (CMG) that became Dori Media's biggest hit and has been hugely successful in 50 countries – is based on the problems of high school teenagers. The extent of differentiation through format adaptation has allowed this program to be successful in several European countries in the form of both the domestically adapted format and the Argentine finished program. In Spain, the Argentine version of *Rebelde Way* competed with the Spanish one on the same time slot.
**Marketing upgrade**

The emergence of new categories of TV programming products – new types of finished programs, formats, and regional content for cable channels – has changed the marketing of TV products.

Entrepreneurs under the export business model pay close attention to global programming trends and may in turn be part of larger networks, allowing them to increase their exposure to and connections with destination markets. Distribution in the domestic market is relatively simple. To a large extent, it depends on long-term relationships between producers and programming managers or their staff. Access to the international marketplace is more competitive and can occur through several routes. As with the domestic model, one route is based on personal contacts and established business relationships with international distributors, but these are relatively harder to establish. An alternative route for expanding exports is seeking new sales at industry trade fairs.

Argentine industry leaders travel regularly to world industry fairs, particularly in Cannes, France and the US. Producers cultivate commercial relationships with network managers and potential future associates in production or commercialization. They also screen the market for programming trends and in search of new opportunities to design and create their own formats for specific market niches.

Learning about new format types at trade fairs also allows Argentine producers to supply production services for popular and internationally well-known formats. Argentine firms can then market production services, adapting and producing formats that they do not own. The ability to market this additional export activity follows directly from the production upgrades provided by the export business model.

Exporters must have a marketing strategy to present their products at international fairs. For Argentine producers, this implies an effort to overcome country-of-origin bias, i.e. client concerns about quality due to the product’s country of origin. Argentine producers use different approaches to solving this issue, such as entering joint ventures with companies from third countries, adopting the form of local branches of international corporations and building a reputation through the gradual accumulation of experience providing formats and services in markets of relatively easier access. Access to these markets, in turn, is facilitated by ownership of a successful TV program that may act as a flagship or showcase product for the independent production company.
A recent marketing strategy by Argentine producers has been to present and sell *telenovelas* as a format. This approach has proven to be successful and has helped build brand recognition for Argentine products on international TV markets, since these types of products had not been formatted successfully in the past.

**Pioneer**

One of the first production companies to produce content independently for the newly privatized broadcast channels in the 1990s was a newcomer to the industry: Horacio Levin’s Promofilm. Promofilm was originally an advertising company targeting the domestic market, but some of the firm’s projects in the late 1980s started to change its business focus. The company’s first production efforts had been standard TV advertising spots, but in order to sell commercials for toy companies Mr. Levin started to trade in cartoons and animated films with stated-owned channels. He purchased foreign entertainment films for children that programming managers were unaware of, and introduced them successfully in the domestic market, which at this stage was the only market he was seeking to become involved with. His first innovation was therefore on the commercial side of the TV business, and under the domestic business model.

By his own account, he was able to broker these deals because he understood some of the flaws in the TV industry from the inside: for instance, that newly privatized broadcasters had to a large extent disregarded global programming trends. According to Mr. Levin, “we were far away from the world (...) in those days nobody (in the TV industry) took notice of what was going on in the world”. 16 He considered the TV production business at the time to be open to newcomers, but regarded himself as young and inexperienced.

Levin compared TV produced for international markets with domestic products, and came to the conclusion that most domestic programs were produced without well planned content frameworks and relied on celebrities and impromptu comedy. He sought to identify programs with more solid program structures, which could be successful independently of features such as the charisma of TV celebrities. In particular, Levin decided to become a TV producer by adopting generic features from US TV shows.

Promofilm’s first experience in production was under the form of “advertainment” – an entertainment program with a single major sponsor that was moderately successful. He later employed a genre that was

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16 Interview with Mr. Levin, our translation from “estábamos mucho más lejos del mundo aquí (...) en aquella época nadie le importaba lo que pasaba afuera”.
new to the domestic market: talk shows. Promofilm merged the talk show formula to components with an Argentine appeal (specifically, the show was focused on social issues), creating a program named *Causa Común*. The program was launched very successfully in 1993, and Levin became well known in the Argentine TV industry as the creator of an unusual hit.

According to Levin, program managers working for the TV broadcast channels took notice of his approach. He states that he made an effort to keep up-to-date with best practices in the industry: “*I was always interested in the outside world, I found it very tempting (…) I greatly enjoyed looking for things abroad to bring them back to the domestic market*”17

Mr. Levin made it a practice to travel to world industry fairs and meetings four times a year, twice to Cannes, France and twice to the US. He also developed a close relationship with the owners of Globomedia, a Spanish independent production company. Levin met the owners of Globomedia when they visited Buenos Aires to attempt to sell a format for a game show. The relationship led to joint production ventures, and the companies merged in 2000. Visiting trade fairs and his relations with Spanish colleagues allowed Mr. Levin to experience the latest trends in the global industry first-hand. He met and established relationships with colleagues from other countries, and learned about new production models and genres that at the time were unheard of in the domestic market.

Mr. Levin was observing trends in global TV markets as formats started to come into use. For Mr. Levin, the initial appeal of this practice was that he could employ successful programs and introduce them to the domestic market – as he had done earlier with cartoons – but would also start playing a role in production. Levin’s next step was to employ this new production model, in the role of adapting it to the domestic market.

Mr. Levin presented an idea for a new game show to Channel 13 of Argentina. Despite the proven success of the format, Levin states that network executives saw the product as a substantial risk because they were cautious about mainstream ideas from the international TV industry still new to the domestic market. In negotiating a deal to produce the show, Levin acquired most of the upside and downside risk. Channel 13 paid for a fraction of fixed costs, and the remaining cost were left to Promofilm.

17 Interview with Mr. Levin, our translation from “a mi siempre el mundo exterior me resultó muy interesante, muy tentador (…) me gustó mucho ver que había afuera para traerlo acá”.
The idea for the program – known as Sorpresa y media – adapted a section from a Spanish program. Mr. Levin purchased the format from Spanish producers and worked out a new show, developing further additions. The product performed very well in terms of audience and commercially.

An unusual aspect of Sorpresa y media’s success was that it achieved high ratings despite airing on Sunday nights. This time slot had been relatively neglected by networks, but after the program’s success they started to pursue audiences more aggressively by scheduling programs with higher production value. Producing Sorpresa y Media allowed Promofilm to gain further production experience and upgrade its capabilities for domestic production. The program involved a large staff and substantial logistics, and Promofilm developed the operating practices of producing a live prime time show. Levin seized on this success to upgrade Promofilm’s human and equipment resources.

Producing Sorpresa y Media also generated a successful showcase product for Promofilm to display to regional broadcasters. Sorpresa y Media’s arrival as a flagship for Promofilm products was timely: while the product was enjoying success in the domestic market, countries such as Venezuela and Colombia were privatizing and opening their TV markets as Argentina had done five years earlier.

Mr. Levin considered that the increased openness in regional markets would allow him to attempt the same production model and methods abroad. In 1995, he decided to create his first joint venture with Spain’s Globomedia. Their agreement was to share production strategies and logistics as well as formats, expanding to Latin American markets with the aim of “putting Promofilm and Glomedia’s experience into play in other countries”18. Mr. Levin’s decision to joint venture with Spanish colleagues had several advantages: it reduced the uncertainty due to the financial risk of new ventures and provided him with a worldwide perspective of the TV market, allowing him to scan the world for new formats.

Promofilm-Globomedia developed their first formats from their own successful Argentine TV programs, adapting them for the Latin American market. The pilot case was Sorpresa y media in Venezuela. Neither firm had a clear plan to adapt the format to foreign tastes, since this was a new venture for both companies. In the first months the show was aired in Venezuela, it became clear to the team that they would not replicate the show’s success by rigidly repeating the practices used in Argentina. According to Mr. Levin, they discovered that they needed to make changes in style and content to make the show less melodramatic, a component that appealed to Argentines, and more upbeat – more “chêbere!”19, a keyword from Venezuelan culture. The program was subsequently adapted for Brazil, Ecuador, and Colombia.

18 Interview with Mr. Levin, our translation from “llevenos la experiencia de Promofilm y Globomedia a otros países”.

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Adapting Sorpresa y Media to different foreign audiences allowed both companies to gain substantial experience with this process. Learning from this experience, they took steps to adapt other formats.

Another significant stage of experimentation took place with the earliest type of globally traded TV format: game/reality shows. Being aware of the European TV market proved to be a key commercial ability for Promofilm, as scanning for new formats and opportunities led the company to one of its most successful formats: Expedition Robinson.

The Promofilm-Globomedia joint venture was an early adopter of the Expedition Robinson format, and purchased the rights to produce the show in Latin America and Spain. Six months later, CBS bought the rights to produce the show in the US. The show aired in 2000, on the Telecinco network in Spain and Channel 13 in Argentina, and was a huge success.

Expedición Robinson was the first reality-show ever seen on Argentine and Spanish TV. It was a local production adapting the Swedish version of Expedition Robinson, and was contemporaneous with the show’s first seasons in Germany-Austria, the Netherlands-Belgium and the United States.

The program’s production involved a crew of more than 100 people, including producers, scriptwriters, camera and sound technicians, and art directors. Production was made on-location in Panama, involving considerable logistics. However, the uncertainty surrounding such a complex production was overshadowed by the risk of putting the program on the air.

Although the production of Expedición Robinson seems like a major commercial risk for a small company like the joint venture of Promofilm-Globomedia, Levin perceived the uncertainty to be low. Mr. Levin explained that “I do not remember ever taking a significant risk, I was pretty sure that the business would cover my costs. However, I was impressed by the huge success it had. The country (Argentina) froze during the final episode of Expedición Robinson, everybody in Channel 13, artists or network executives were asking me who was going to turn out to be the winner.”

Promofilm-Globomedia’s ability to successfully adapt Survivor to the Argentine and Spanish markets garnered international credibility for the firm. This was made clear when they heard from staff of Planet 24 – the owners of the original rights to the format – that they were so pleased with their performance that they were recommending the production services of Promofilm-Globomedia during meetings for the sales

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19 Interview with Mr Levin, our translation.
rights of *Survivor*. This translated into contracts to produce 17 different versions of the program from 2000 to 2003, for foreign markets such as Spain, Italy, Chile, Colombia, Venezuela, Hungary, Russia, and the UK, among others.

The *Expedition Robinson* venture brought to light that the previous export ventures, focusing on Latin America as a main target, were not the company’s ceiling and that Promofilm-Globomedia had the opportunity to become part of the global TV industry’s value chain. Their experience with *Expedición Robinson* enabled Promofilm-Globomedia to further enhance the skills and training, as well as the size, of their workforce. In addition to acquiring greater technical skills, Promofilm-Globomedia acquired the ability to delegate to independent creative and production teams that could be deployed flexibly to simultaneous productions. According to Levin, “*success arrived when the Promofilm staff understood what it took to reach people’s desires in each country (...) and adapt the show to each place*” 20

Promofilm trained this network of people using resources that were to a certain extent already available in Argentina. These included skilled technicians and managers, as well as people involved in Argentina’s long history of audio-visual production. Resource availability allowed Promofilm to grow fast and at a relatively low cost, while still achieving world-class quality. The availability of these factors also provided favorable conditions for the subsequent diffusion of Mr. Levin’s export business model.

Promofilm-Globomedia used talk shows and reality shows as a platform for experimentation in creating their own formats for export to foreign markets. They adapted talk shows and reality shows to the particularities of other markets such as Colombia, Chile, Ecuador, Mexico and the Hispanic market in the United States. These activities led the companies to deal with the region’s main broadcast networks, such as RCTV and Venevisión in Venezuela, Caracol and RCN in Colombia, Azteca in Mexico and Telemundo in the US.

Promofilm has since successfully created and produced programs for Telemundo such as “*Protagonistas de Novela*” in 2000, the first reality show that the company produced exclusively for the US Hispanic market. A version for Argentina was not produced, so this was the first time that the company aired a show without previous experience in their home base market. The program was successful and was later produced by Promofilm for five other countries in Latin America, and has recently been aired in Greece.

20 Interview with Mr Levin, our translation.
Promofilm has continued to export formats without pre-testing in the home market: In 2004 they produced *El Conquistador del Fin del Mundo*, a journey through the Argentine Patagonia featuring teams from five countries competing at game events. The show was produced and broadcast simultaneously on five Latin American networks: TV Azteca (Mexico), Gamavisión (Ecuador), Telemundo (US), UCTV (Chile), and SBT (Brazil). The show was also adapted for Basque TV.

Leveraging its earlier experience with the “adventainment” genre, the company created and produced formats for documentary/reality programs such as *Lo Dejo en tus Manos* (a home renovation program sponsored by Loews) and *Mi Primer Hogar* (a home renovation program sponsored by The Home Depot), exclusively for Telemundo.

In 2004 Promofilm purchased the format for *Temptation Island*, a game/reality show owned by Fox, and adapted it to four different foreign markets: the Fox and Telemundo channels in the US, Hungary and Brazil.

The company’s growth led to the opening of offices in various countries in Latin America and the United States, employing teams of local professionals to meet growing demand for formats and programs. But production capabilities were evolving quickly, and competition caught up with Promofilm both in the home base and abroad.

**Diffusion**

Promofilm was the main actor promoting diffusion of its own export business model. After the success of *Sorpresa y Media* and the sale of production services to prime markets such as the US, Promofilm attained the stature of an industry leader. The outlines of Promofilm’s business model were common knowledge to the community of TV producers in Argentina, and Levin felt that he had nothing to fear in sharing specific knowledge with others.

Promofilm’s crew and Levin himself acted as vectors of diffusion. Production companies such as Cuatro Cabezas, Telefé Contenidos, ARTEAR, Cris Morena Group, Ideas del Sur and Pol-Ka followed Levin as the next generation of exporters, and learned from Promofilm’s experience.

There were, however, other vectors of diffusion of the export business model. International format providers such as Endemol and Promofilm’s Spanish associate Globomedia also spread the export
business model by two channels: providing guidance for the domestic production of formats, and establishing domestic offices to buy formats for export to foreign markets. Early in the diffusion process, Globomedia and Endemol purchased the operations of independent production companies in Buenos Aires.

Diffusion at the domestic level was facilitated by the existence of production capabilities in a dormant state in the Argentine TV and film industries. The most important cultural attribute required to export or adapt TV formats is the ability to adapt programs to different local tastes. The success of Promofilm generated positive spillovers in the form of a demonstration effect.

There are currently at least four large and twenty small industry followers. Two of the large firms remain independent producers – Cuatro Cabezas and Endemol Argentina (currently P&P, following an acquisition) – while the other two are leading national broadcast corporations that have incorporated the production function – Telefén with its Telefén Contenidos division and ARTEAR (Channel 13) with two captive production companies (Pol-Ka and Ideas del Sur).

Cuatro Cabezas is one of the larger followers and currently the export leader. It has been successful at selling original formats from programs developed originally for the domestic market. On its way to becoming an exporter, Cuatro Cabezas repeated the same learning path as Promofilm: It was initially a newcomer to the industry and targeted mainly the domestic market. Despite some initial failures, the company reoriented to producing entire TV shows independently from national broadcasters, innovating on the content side of the business while employing the traditional production model.

Their main product, a format derived from a program called CQC (Caiga Quien Caiga) is a long-run commercial export success. It started as an innovative program on Argentine TV, with good response from the Argentine audience. The show is a comedy-based weekly news roundup, and is presented by a trio of anchors that employ heavy doses of irony, as well as street reporters that ask uncomfortable questions to politicians and celebrities, seeking to provoke funny reactions. Alumni from this program have moved on to starring in other programs, which in some cases have also led to successful export formats.

The success of this program provided Cuatro Cabezas with a flagship product with which to attempt sales to foreign markets. Notably, the company’s ability in converting the show into a TV format was a direct consequence of an intervention by Horacio Levin. The program was adapted for Spain in 1996, when Mr.
Levin purchased the rights for his associates of Globomedia. Spain was the first country where Cuatro Cabezas exported a format. Later they took an independent path and established its own office in Madrid. They also adapted the show for France, Israel, Chile and Italy. With offices accommodating a hundred people in Madrid and Santiago, Cuatro Cabezas currently supports the production not only of CQC but also of E24, a documentary/reality show.

The experience with this flagship product enabled Cuatro Cabezas to learn the commercial side of international format trading. Although the company had produced a strong product for the local market, it had not acquired knowledge of international trends in the TV industry or a strong reputation. Critically, however, the type of content with which Cuatro Cabezas was successful in the domestic market was of a nature that could be formatted: it relied on a rich program structure that was relatively independent from the show’s TV personalities.

Cuatro Cabezas evolved into a think-tank for the development of innovative formats, and its format creation capabilities allowed it to overcome their initial inexperience in the commercial area. The company has sold other formats for broadcast TV – such as El Rayo, Puntodoc, SuperM, Algo habrán hecho, La Liga, E24, and Nos pierde la fama, among others – all of which were originally developed and tested in the domestic market. The firm’s success has allowed it to access international cable markets. For example, Cuatro Cabezas has produced programs for HBO (Sexo urbano), TNT (Proyecto 48), The History Channel (Historia secreta de las ciudades) and Discovery Travel and Living (Ciudades y Copas and Casas).

Since Promofilm started to develop capabilities to deal with formats in the early 1990s, Cuatro Cabezas and Telefé were followers in the domestic market as well. These companies employed formats in 2000 to air successful reality shows such as El Bar (Cuatro Cabezas) and Big Brother (Telefé). As followers in the adaptation of formats for the domestic market, these companies also developed new capabilities and skills that could later be leveraged for format creation and export.

The pattern of diffusion is intertwined with the evolution of industry structure. Following a period of expansion in the activities of independent production companies during the late 1990s, broadcasters such as Telefé and ARTEAR started in 2000 to take on greater production roles. Promofilm-Globomedia has associated with Televisa and has developed a TV channel from scratch in Spain.
Telefé, a major TV channel in Argentina, underwent a substantial change in strategy in 1999. The company split its production business in two divisions: Telefé Contenidos, in charge of production services and format creation, and Telefé Internacional, a division in charge of international commercialization.

As with other exporters, Telefé started by importing and adapting formats, specifically reality shows and sitcoms. Telefé Contenidos produced *Big Brother* in 2001 and 2002. The company has continued to act as a format importer, and in 2004 produced a domestic version of the successful US sitcom *The nanny*. Employing these format genres was considerably innovative for the domestic market, and required substantial adaptation skills from Telefé Contenidos. In 2006 the company started airing a second version of US sitcom *Married with children: Casados con hijos*.

Telefé benefited from diffusion through a business relationship with the pioneer. Telefé staff learned about implementing the production aspect of adapted formats while leasing studios to Promofilm, when this company filmed *El frijolito*, a Mexican-style soap opera for the US Hispanic market (Telemundo). From this experience Telefé Contenidos reverse-engineered the aspects of the production process that allowed Promofilm to fictionally set the program in Mexico despite producing it in Buenos Aires.

After the success at adapting international formats to Argentina’s domestic markets, Telefé Contenidos started to create its own content under the export business model. The channel’s inward orientation has changed since the 1990s, when the company targeted the domestic market exclusively and aired mostly light comedies and soap operas. Programs developed under the export business model (either as exports or imports) currently occupy every broadcast hour on the network. One important event in the reorientation of production was, as commented above, the local production of “Big Brother”. According to a consultant, “With the production of any reality show the level of professionalism developed is high”

Telefé Internacional has sold Telefé’s own format products (e.g. *El Deseo* and *Resistiré*), and acted as an international broker for small independent producers such as Ideas del Sur, helping them sell programs such as *Los Roldán*, *Disputas*, *Tumberos*, and *Sol Negro* (through the end of 2005). Telefé Internacional has been involved in brokering sales by several companies: Yair Dori Internacional (*Rebelde Way, Rincón de Luz, Mil Millones*), Cris Morena (*Floricentia, Rebelde Way, Rincón de Luz*), RGB (*Abre tus Ojos, Kachorra, Provócame*), Central Park (*Jesús El Heredero*) and ARTEAR/Pol-ka (*Padre Coraje*).
Telefė has also started to develop fiction formats from programs that have been successful in the domestic market, such as *Simulators*, produced by Daniel Szifron. It is also attempting to extend the international success of *Resistiré*, which is a psychological fiction drama with a running backstory as well as storylines that wrap up on each episode. Innovation in terms of new format types, as was the case with Cuatro Cabezas’ sale of CQC, allows local producers to further extend their sale in foreign markets beyond the sales of production services and formats in traditional genres.

ARTEAR, Argentina’s other leading broadcast channel, followed a path similar to that of Telefė but started later. ARTEAR’s practice until 2003 had been to develop relationships with independent production companies such as Promofilm, Pol-Ka and Cuatro Cabezas, through an open-contract policy. The policy changed when the network hired Adrian Suar, founder and CEO of formerly independent production company Pol-Ka, in the role of general manager and tasked him with creating a pool of captive production capacities: Pol-Ka and Ideas del Sur were taken over by ARTEAR. In 2004 the companies produced the mini-series *Epitafios* for HBO. ARTEAR and Pol-Ka are now producing the *Desperate Housewives* format for Argentina as well as six other Latin-American countries, and plan to create an international format brokering company.

Foreign investment has also provided a channel for the diffusion of the export business model in Argentina, and the main players in this role have been Endemol and Globomedia.

Endemol Argentina started as an independent production company in 1997, under the name “Producciones y Publicidad”. In 2001 the company associated with Dutch TV think-tank Endemol and changed its name to P&P Endemol.

The company’s biggest success has been the *Big Brother* reality show, with versions in many countries after the initial Dutch version, and the company has specialized in developing formats for inexpensive production. The company was sold to Spanish telecommunications and media corporation Telefónica in 2000. In Argentina this caused Endemol to become a natural ally of Telefė, which is also owned by the Telefónica group.

Endemol Argentina is currently widening its scope to fiction, documentary series, news and children programs. The company exported 700 hours of TV programming in 2005, including formats such as *Cuestión de Peso* to Italy and Spain, and *El ultimo pasajero* to Vietnam, Turkey, Indonesia and Chile.
The Promofilm-Globomedia venture reached a new stage in 2000, when the partners decided to merge both companies and change their export strategy, as they had failed to retain a leading position in Latin American markets. It became clear to the partners that the strategy of replicating a domestically successful format with a quality upgrade (as they had done on the domestic market with *Expedición Robinson*) was under intense competition.

Independent production companies in their destination markets discovered how to catch up with minimum production capabilities. In a period of three to four years, countries such as Venezuela, Chile, and Colombia upgraded their own production industries. Promofilm’s office in Venezuela, which at its peak employed almost 150 people, was closed, along with offices in several other Latin American countries. The company retained its offices in Mexico, as well as Miami and Los Angeles in the United States, with teams of local professionals to provide production services for large clients such as Telemundo, Fox, HBO, Televisa and Azteca, among others. Promofilm-Globomedia has become a division of Grupo Arbol – a Spanish media conglomerate with offices in Los Angeles, Miami, Madrid and Buenos Aires.

Under Arbol’s management the company is currently producing over 3,500 hours of programming per year, for broadcast and cable networks around the world, and holds a 40% share in Mexican network Televisa. Promofilm-Globomedia’s main strategy and efforts have been reoriented to the Spanish market, and it is currently devoted to producing a network channel in Spain, named *La Sexta*, that was launched in 2006.

Levin decided to leave his executive post at Promofilm-Globomedia in 2004, when it became clear to him that Grupo Arbol would focus their TV division on the broadcast side of the business. The Argentine office of Promofilm-Globomedia has lost its leading export position to Cuatro Cabezas, Telefé and Endemol.

Although diffusion took place mostly in the domestic market, it was also of a regional nature. As explained above, after 2000 it became difficult for Promofilm to retain a leading position in adapting formats for Latin American markets. Latin American independent production companies caught up with minimum production capabilities, learning Promofilm’s practices during project development. Mr. Levin acknowledges that some of the capabilities required by his business model diffused during joint production with partner companies in target markets. Production companies such as Teleset in Colombia
and Magnolia in Italy hired entire task-groups of technical staff from Promofilm during co-productions. Televisa, the largest TV broadcaster in Mexico, recruited an entire group of scriptwriters from Promofilm.

Domestic diffusion also takes place through the start-up of new companies, led by former managers of pioneer or followers that leave employed positions to start their own businesses. New and small companies are attempting to become permanent exporters of content for cable TV channels. Examples include Tandem Producciones, which are former production managers of Cuatro Cabezas, and Nativa Productions Inc, which are former production managers of Pramer, a cable content distributor and producer with a regional scope.

A distinctive feature of these new offshoot producers is that they target production of content for cable TV in the US, Europe and regional markets. The size of the Argentine cable market has aided these production companies in the development of niche cable products, as required by export markets. Argentina was one of the first markets in Latin America to introduce cable TV, and as shown in Figure II.5, the extent of cable TV viewership remains exceptionally high by regional standards.

![Cable TV Viewers in Latin America (2001)](image)

Specialization patterns in TV exports have also turned out not to be exclusively related to regional coverage. Successful specialization in certain genres and segments, such as young Hispanics in the US or fiction lovers in Russia, has allowed for substantial export growth compared to the replication of domestically successful formats in nearby regional markets.
A second stage in the diffusion process is currently underway. Some elements from the business model for exports are being employed in related products and sectors: content for cable channels and in the advertising industry.

Even though a few firms specialize exclusively in either TV programs or commercials, many are involved in both, as well as in the production of films. The success in exporting TV formats or production services is now spreading to other divisions of the same companies, leading to a similar success in the export of TV commercials. 21

Although formats and production services are the key elements in the export business model, the development of long-term business relationships and new production methods has also allowed for substantial growth in sales of finished programs. Unlike production under the domestic business model, however, where exports of the finished product were an ancillary activity and had no influence on production, some domestic programming is currently developed with a view to its international marketability. The sale of a domestic program in the form of a “lata” has become integrated into domestic production activity, as this activity is now synchronized with the export business model.

Counterfactual case

In Argentina, the case of Ideas del Sur illustrates an example of failure to export in this industry. With a large portfolio of well-known and successful domestic programs, the company has attempted to emulate the successful experience of Promofilm and other followers but has failed repeatedly.

The company’s degree of specialization in comedies for the domestic market may have been partially responsible for its failure to adapt its program Los Roldan effectively for the Mexican and Colombian markets. The program performed poorly in these countries and business failure led Ideas del Sur to downsize its workforce significantly and merge with ARTEAR.

The fact that production in this industry is carried out by loose networks of collaborators means that it is very difficult to keep production secrets. These types of information leaks, however, do not guarantee the complete diffusion of the export business model. Developing a format involves the codification of

21 Although TV advertisement exports are outside the scope of our study, it is worth mentioning that out of 1,384 commercials filmed in Argentina during 2005, 712 were made for the domestic market and 672 were exported. Although there are no official statistics on these exports, Eddie Flehner (CEO of Flehner Films, Argentina’s largest production company by film-hours) estimates that exports of TV spots in 2005 ranged between US$ 70 and 100 million.
production knowledge. In the case of Ideas del Sur, codification was delegated to Telefé Internacional, which went beyond brokering and became involved in format management. As a result, Ideas del Sur voluntarily forfeited a creative role in format creation.

Ideas del Sur failed at learning and carrying out the export business model. The company did not learn how to purge the local content from their programs or develop programs that were suitable for formatting. The main structure of their programs provided an insufficient base from which to attempt adaptation of specific components to local tastes.

Following its failure to produce its own formats, Ideas del Sur has become a format importer, constraining the company to provide production services for the domestic market. Although the case of Ideas del Sur suggests that the export business model may not be adequate or completely defined for comedy based formats, idiosyncratic aspects may have driven the company’s failure. Ideas del Sur is owned and managed by the charismatic hosts of its successful domestic programs. The latest generation of production companies, in contrast, is owned and managed by former production managers that worked for the larger established exporters and have had the entrepreneurial drive to start their own businesses. Ideas del Sur’s management remained mostly focused on the domestic market throughout the period, and outsourced key functions in the export business.

Public policy

The Argentine national government has not played an active role in either helping the pioneer discover his business model or in promoting its diffusion. There are no national government offices dedicated to production in this field. Other offices or agencies deal with the film industry within the realm of cultural policy and with the aim of promoting Argentina’s film industry.

The national government’s film promotion agency is aimed at culture preservation and is designed to “defend” Argentine film. Officers in charge of this agency and the film community that supports those policies focus exclusively on national film promotion, as TV production is considered a minor art and a commercial product that does not require governmental support.

Before privatization, the control of all TV content was in state hands. The national administration did not develop any specific policy for the TV sector following privatization. Although local governments have
provided some support to this industry – for instance, local authorities issue film permits – the preeminent role has corresponded to broadcasters and public-private agencies.

Public and private universities, as well as other higher education institutions, have updated communication, film and media programs to incorporate the requirements of the TV industry. Private institutions have pioneered the creation of new career programs in TV production, digital editing, animation and special effects design. Schools that have developed these programs are Escuela de Arte Multimedial Da Vinci, and TEA Imagen.
Case III: Wine

The emergence of a new type of fine wine in the 1970s offered an opportunity for wineries in Argentina to pursue the export of such products rather than dedicating themselves largely to the production of table wines for the domestic market as they had done in the past. The tastes of these new wines were radically different than those of traditional fine wines. To meet the growing demand for this type of wine, wineries would have to new techniques in the growing of grapes, the making of wine and the manner in which they commercialized their products. Many of the techniques for producing these wines were pioneered by newcomers in this industry in countries like the United States and Australia. Consequently, wineries throughout the world which adapted these techniques would come to be known as “new world” producers even when they were located in countries that were traditional producers of wine. New world producers distinguish themselves from their “old world” counterparts by their scientific approach to the growing of grapes and the making of wines.

Wines in Argentina captured part of this market for new-world wines by adapting a scientific approach to winemaking. Initially there was a high degree of uncertainty as to whether Argentine wineries could actually make this transition as no one in the industry had any experience with this approach to winemaking. Nevertheless Nicolas Catena Zapata was the first to prove to others in the industry that it was possible. As we will show, the real boom in exports of wines from Argentina occurred in the late 1990s after Nicolas Catena Zapata demonstrated that it was possible not only to produce a new style of fine wine in Argentina but also to sell it on the world market.

International trade

Starting in the 1970s and throughout the 1980s, world consumption patterns shifted away from lower quality wines and towards beer or higher quality wine. Traditional wine consuming countries such as France, Italy, Spain, and Argentina saw large declines in overall per capita consumption, but this was also accompanied by a substantial increase in the consumption of fine wines as some consumers of traditional wines started consuming fine wines while others switched to other alcoholic beverages. Figure III.1 shows the general decline in the consumption of wines across these countries. At the same time, new consumers of wines emerged in countries such as the United States, Australia and New Zealand. Consumers in these countries tended to consume fine wines made according the new world criteria. Figure III.2 shows wine consumption in these countries over time. In particular, the United States and the United Kingdom became very large markets for wine. Consumption in the former grew from 1.1 liters...
per capita in 1965 to 16.9 liters in 2002, while in the latter consumption grew from 1.8 liters per capita to 7.7 liters over the same period. Wine consumption in both these countries increased among people who were previously consumers of other beverages.

Source: Faostat

Figure III.1: Decrease in wine consumption (liters per capita in select countries)

Source: Faostat

Figure III.2: Increase in wine consumption (liters per capita in select countries)

Source: Faostat
As a result of differences in consumption patterns and the emergence of new world wines, the international production of wines have shifted, providing new world producers a larger share of this market. This shift has continued even over the last decade as old world producers continue to lose market share to those using new world techniques. Figure III.3 demonstrates the loss of international market share by traditional wine exporters. Traditional producers such as France and Italy have lost market share to new world producers such as Australia, the US, Chile, South Africa and Argentina. It is particularly important to note that France’s share of worldwide wine exports dropped 7 percentage points from 1995 until 2003, starting at 45% of the world market and declining to 38%. This occurred even as some producers in France began embracing new world ways of producing wine. It is also interesting to note that the percentages of both Chile and the United States, two new world producers doubled. Each country saw their share of the world wine market go from 2 to 4%. The largest wine importers are the UK, the US, Germany, Japan and Belgium, in that order. The first three accounted for more than 50% of all wine imports in 2003.

**Figure III.3: Market share of the wine industry by countries**

![Market share of the wine industry by countries](source: Faostat)

Argentina has been a large-scale producer of wines for decades, but production was mostly for domestic consumption. Argentina has been exporting table wines and grape must for decades. The majority of these exports have gone to neighboring countries. Only in the 1990s did exports of wine become a substantial fraction of sales in this industry. In 1991 Argentina exported US$20 million of bottled and bulk wine. This figure has grown almost 15 fold to reach US$299 million by 2005. Figure III.4 charts Argentina’s exports of bottled wine, broken down into exports to neighboring and non-neighboring
countries for 1991 through 2005. Total exports of bottled wine grew at an average annual rate of 23.8% over this period, with most growth occurring in the late 1990s and after 2003.

![Figure III.4: Argentine wine exports (neighboring and non-neighboring)](chart)

Source: National Institute of Wine Production

While exports to all markets have grown, the figure shows that most growth has come from exports to non-neighboring countries. Figure III.5 displays foreign sales of bottled, non-sparkling wine to Argentina’s main destination markets. The largest share of export growth has come from sales to the US, the UK, Brazil and Canada. Exports to these countries have grown steadily since the mid-1990s. Exports to Germany and Japan, which are large wine importers, grew mostly in the late 1990s and have since remained relatively constant. Exports to a number of smaller markets are also growing. The scope of countries to which Argentina exports wines has also grown. While it exported to 41 destinations in 1991, this number grew to 103 in 2005. Exports to neighboring Paraguay, an important export market in the early 1990s, did not grow over the period, while exports to Uruguay grew during the mid-1990s but have since declined.
Argentina is currently the fifth largest wine producer in the world by volume, behind France, Italy, Spain and the United States, and ahead of Australia, South Africa, Germany, Chile and Portugal. Although domestic consumption has declined over the past few decades, it still accounts for a substantive part of overall consumption. As explained below, export growth was driven almost entirely by upgrades to the supply side of the industry. Total wine consumption in the domestic market declined steadily from 67.6 liters per capita in 1981 to 33.7 liters in 2003. The decline has been entirely due to a lower consumption of table wine: Consumption of fine wine grew from 6.5 liters per capita in 1981 to 10.2 liters in 2003. As shown in Figure III.6 wine export growth since 1995 has been driven by exports of fine wine: export values grew from US$ 103.4 million in 2002 to 224.0 million in 2005, a growth of 217% over this three-year period. Table wine exports have also increased over the period, but have lost ground to higher quality wines: table wine accounted for roughly half of export value in 1990, but barely more than 20% of total value in 2005. Table wine exports spiked in 1995 and immediately afterwards due to harvest loss in Spain. Fine wines also displaced table wine in terms of volume, growing from a very low share of total volume in liters to equaling the volume of table wine exports in recent years. Sparkling wines account for a much lower share of foreign sales, and even though exports grew in the late 1990s, they have remained relatively stable since.
Figure III.7 breaks down exports of wine and wine-related products in 1991 and 2005. In addition to growth in the scale of exports, the figure shows that the bulk of exports has shifted from the production of bulk wine, grape juice and must to bottled wine. In particular, the share of grape must, grape juice and wine in bulk declined from 71% of exports in 1991 to 38% in 2005.

Figure III.7: Exports of wine and wine related products for 1991 and 2005

Source: National Institute of Viticulture

Source: Customs data
The decline in exports of bulk wine, must and juice was accompanied by the planting of new types of grapes targeted at the production of bottled wine; Argentine producers did not have to introduce new grapes to continue to produce bulk wines, grape juice and must as the type of grape used is of little overall importance and the transition of planting new grapes can take up to 5 years before they can produce significant harvests. Many grape varieties, such as Cabernet Sauvignon, Syrah and Merlot (red) and Chardonnay, Chenin and Ugni Blanc (white), have been introduced to Argentina over the past couple of decades. While Malbec is one of the most traditional grapes in Argentina used in the production of both table and fine wines, it has recently gained recognition for its use in wines made according to new world criteria. It is now known as this the signature fine wine of Argentina. Figure III.8 shows the percentages of the types of grapes used for the production of white and red wines for 1990 and 2005.

**Figure III.8: Types of grapes used in wine production**

<table>
<thead>
<tr>
<th>Year</th>
<th>Red Wines</th>
<th>White Wines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>Total 33,762 ha.</td>
<td>Total 18,618 ha.</td>
</tr>
<tr>
<td>2005</td>
<td>Total 80,598 ha.</td>
<td>Total 21,731 ha.</td>
</tr>
</tbody>
</table>

Source: Caucasia Wine Thinking

The wine industry’s role as a lead export sector in Argentina is currently well established. More than 210 thousand hectares of grapes were under cultivation in 2006, and 929 wineries are registered with the
National Institute of Viticulture as currently operating in this industry. Not all of these wineries export their products. Those that do export are largely located in the provinces of Mendoza and San Juan. The province of Mendoza accounts for slightly over 90% of wine exports while the province of San Juan produces slightly over 6% of this total.

Figure III.9 shows export shares by the current top ten exporting wineries (in terms of export value in 2005). Peñaflor (Trapiche, Finca Las Moras, Michel Torino and Santa Ana wineries) is the largest exporter, with 13% of total sales, while Catena Zapata (Bodegas Esmeralda) accounts for 8% of export value. Trivento (owned by Chilean winemaker Concha y Toro) is the third largest exporter with 7% of foreign sales. The ten largest wineries accounted for around 50% of total exports, while the remaining 50% is shared between approximately 265 smaller wineries.

![Figure III.9: Export value shares in 2005, by winery](image)

Source: Caucasia Wine Thinking

Export shares mask substantial heterogeneity in terms of sales prices. Figure III.10 shows that Chandon has the highest average retail price per box at a US$ 37, whereas the retail price of boxes by Catena Zapata and Bodega Norton each sell at an average of US$ 31. Peñaflor and Trivento, which are two of the top three exporters in terms of value, have lower average prices per box of wine. Chandon’s high average price follows from exports of sparkling wine: 28.2% of the company’s export value in 2005 consisted of sparkling wine, all of it sold to Latin American markets. Sparkling wine accounted for less than 1% of exports in 2005 for all other wineries on Figure III.10.
Out of these top-selling wines, Catena Zapata owns two of the highest priced labels: *Catena* wines were priced at an average US$64.41 per box in 2005, while *Alamos* wines were priced at an average US$34.97 per box. Diageo’s *Navarro Correas Colección Privada* averaged US$44.86 per box, while Peñaflor’s *Trapiche Roble* averaged US$ 34.50. Smaller wineries also register high export prices such as those on the *Catena* label, for example Achaval-Ferrer, Cheval des Andes, Clos de los Siete, Finca La Anita and Bodegas Caro, among others.

**Value chain of the wine industry**

This section provides a schematic description of the process by which wine is made and sold. Diagram III.1 illustrates the value chain of the wine industry in Argentina. Vineyards are depicted as the original suppliers, providing the key raw material for wineries. Wineries produce wine from grapes supplied by vineyards. Wineries also store wines, an integral part of the production process. The final role is the commercialization of the end product. Wines can be sold in bottles, tetra packs or in bulk. Commercialization is performed by the winery or by third parties such as brokers or distributors. Smaller wineries tend to work with brokers while larger ones generally work with distributors. Some wineries do actually work directly with large retailers such as supermarkets but this would seem to be rather
uncommon in this industry. Customarily brokers and distributors deal with retailers. Technically there is the possibility for wineries to sell directly to end customers but this is indeed rare in Argentina.

**Figure III.11: Value chain of the wine industry**

**Grape production in the vineyard**

Grape farming may be independent of winemaking or vertically integrated in the winery. Independent grape farmers sell their grapes on the spot markets or produce them under contract for specific wineries. Producers of higher quality wines tend to exercise greater control over how their grapes are grown. They do so by either owning the vineyards or working closely with their suppliers through long-term contracts. Usually they use a mixture of both strategies. They almost never own 100% of the vineyards that produce their grapes. Wineries producing lower quality wines tend to buy their grapes on the spot market. Larger wineries that produce both higher quality and lower quality wines tend to produce the vast majority of their own grapes for finer wines and buy the grapes for their lower quality wines on the spot market. The spot market for grapes made according to new world standards is rather limited as quality is not easily verifiable in that market and hence not paid for.

High quality grapes are the critical component of high quality wines. Grape quality depends on the plant and on *terroir*, the particular soil and general climate of a region. Hence, the location of grape production

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22 In many states in the US there is a three-tier system requiring wholesalers to be independent from importers, so the distribution role is divided between these two agents. US regulations also impede domestic wineries from selling directly to consumers.
is a key determinant of wine quality. Although location can affect climate, variations in rain and solar radiation from year to year can affect quality. Growers can control for insufficient rain by irrigating crops, but they cannot control for excess rain or solar radiation. In recent years, enologists have begun working more closely with agronomists to better select the locations and conditions under which grapes are grown. This type of cooperation is not limited to vertically integrated firms, but also occurs between independent suppliers of grapes and wineries. One of the natural assets of Argentina for this industry is the fact that its soils can accommodate a wide variety of grapes as it has vast expanses of territory suitable for the production of high quality grapes. This provides Argentine wineries with a great diversity of potential products.

Suppliers of grapes for high quality wine have to coordinate production closely with potential buyers. Wineries producing high quality wine require specific grapes and growing conditions. Consequently, many wineries producing lower quality products do not want to wait until they are ready to make their wines to actually buy their product. They generally prefer to find their suppliers before harvesting actually occurs. Negotiations between these buyers and sellers are complicated by the fact that it is difficult to discern the quality of a grape before it is actually harvested. A grape which appears to meet certain levels of quality before harvest can diminish in quality by the time it is harvested. This decline in quality can occur through what buyers often claim is the improper use of fertilizers, the application of too little or too much irrigation and too little or too much pruning. Buyers and sellers of grapes often differ with respect to what actually should be done. Some buyers are weary of the possibility that a producer will not do what is necessary after a price is set before harvest while some sellers believe that buyers are trying to unjustly lower the price they are willing to pay. This problem is complicated by the fact that quality can actually vary within the same vineyard. Hence, buyers have to take samples from a variety of locations in the same vineyard when evaluating grapes. Suppliers of grapes are reluctant to cancel such contracts because the spot market does not generally sell grapes of higher quality. Hence, suppliers of grapes are subject to the hold-up problem.

Wine making
The process of making wine begins when grapes are harvested. The production of fine wines requires a careful selection of grapes when they are harvested. This selection begins in the fields with the manual inspection of every individual bunch of grapes on each vine to see if it is suited to be harvested. Then the grapes are either passed over a conveyer belt for further sorting or put directly in a grinder from where they pass to stainless steal tanks. Grapes destined for lower quality wines are sometimes harvested by machine rather than by hand. Such grapes do not go through the selection process on a conveyer belt.
After grapes are selected they are passed into stainless steel tanks in which the fermenting process occurs. After the prefermentation process is complete grapes are passed through numeric presses to separate the residuals of the grapes from the juice. The juice is then put back into a stainless steel tank for the fermentation process to continue. The fermentation process is nothing more than a chemical process in which the natural sugar of the grapes is turned into alcohol as gas carbons over time raise the temperature of the must in the container in which wine is being made. From stainless steel tanks wine can be passed into oak barrels or put directly into bottles, employing machines that can bottle up to a few thousand bottles per hour. Smaller producers do not have to own their own equipment as mobile bottling machines are readily available for rent.

Traditional wineries producing table wines had to upgrade their winemaking processes and equipment in order to start producing high quality wines. To produce high quality wines, wineries need refrigeration systems, grinding centrifuges, numeric presses, pumps, stainless steel containers, oak barrels, filters, fractionation equipment, and bottling equipment. Although the first fine wineries that emerged in Argentina had to buy all the equipment for the processing and aging of grapes from different suppliers, there has recently been a shift toward wineries buying all the equipment they need for a new establishment from a single supplier who helps with the installation of the equipment. These suppliers are usually foreigners who can offer better financing than what the owners can generally find in Argentina. This development has dramatically impacted national suppliers of winery equipment. Nevertheless, there are some producers of equipment in Argentina that import most of the components and produce tanks or sorters customized to the needs of their particular clients.

Wine commercialization, the distribution channel

The manner in which fine wines are sold differs from the way in which table wines are put on the market. The manner in which fine wines are sold internationally is distinctly different to that for table wines. Although both types of wines can be sold either directly to retailers or through a distributor or broker, differences in target consumer markets imply different sales and marketing approaches. While the former have to suit the general tastes of each particular market, the latter can be exported to practically any country. Retailers purchasing fine wine directly from wineries have to ensure that each particular wine will be appealing to a segment of consumers. In contrast, price is the most important issue for retailers buying table wine. A common practice in the table wine market is for distributors to purchase generic (unlabeled) bottles of table wine and apply their own labels. Whereas country of origin is not important for table wines, bottles of fine wine have to specify not only the winery and country of origin, but often also the region where the wine is produced.
History of the Argentine wine industry

Historically, Argentina was one of the largest per capita consumers of wine in the world. Starting in the 1940s the production of fine wines made in the old world style began to be replaced by the production of less expensive wines made with the same techniques. This shift was driven by the growth in internal consumption for such wines. In essence, the industry remained focused on producing these types of wines for the internal market until the 1980s when some firms began experimenting as described above. Until that time, few winemakers had ever traveled abroad and apparently little was known about how other world producers had been changing the way in which they were making their wines. The relative lack of imported wines further limited the ability of local producers to think beyond the ways they had been producing their wines.

The experiments of the 1980s began a shift from quantity back to quality but now made with new techniques. Although the consumption of table wines began to decline in the 1980s in Argentina, economic conditions and policies designed to support this declining industry during that decade made it difficult for producers to adapt to this change. The economic policies of the 1980s produced not only hyperinflation and negative growth but also price controls and output quotas, which actually lead to the destruction of some highly valued grape stocks. At the same time, hundreds of wineries and thousands of small grape producers were being artificially sustained by state-owned wineries. Other policies of the 1980s required producers to dedicate some of their grapes to the production of juice. This situation changed dramatically with the government of Carlos Menem and the liberalization and privatization policies that his government introduced in the 1990s. Inflation was curbed and price controls and output quotas were removed. The 1990s was indeed a double-edged sword for producers of wine in this country. While the economic stability and the convertibility plan helped the wineries by making imported machinery less expensive, the appreciation of the Argentine peso implied a substantial loss of competitiveness for Argentina wineries.

The importance of a stable economic climate for the wine industry is evident from a comparison of Chile and Argentina during the 1980s. Although both countries were witnessing a decline in the consumption of domestic wine, Chilean producers started the conversion process a few years earlier and were able to realize significant exports by 1985 when Argentine wineries were still experimenting. A few wineries were exporting from Argentina during the apparent period of stagnation in this industry until the 1980s but these exports were sporadic, one-time sales of wines produced for the domestic market using old world techniques. The uncertainties generated by unstable economic conditions in Argentina combined
with state policies supporting existing wines made it difficult for wineries to consolidate their experiments and for this information to diffuse throughout the industry. The regulatory climate simply made this upgrade unappealing.

The root of the growth of the Argentine wine industry lies in the transformation of the manner in which grapes were being grown and wine was being fermented outside of France in the early 1970s. The successful experiments that were taking place in California in particular led 11 judges, nine of whom were famous French wine connoisseurs, at an annual wine tasting in Paris in 1976 to judge a Cabernet Sauvignon and a Chardonnay from the United States to be better than French counterparts. This was the first time in the history of this event that French wines had not won this competition. In the past it was commonly assumed that producers outside of France were only capable of producing lower quality wines. This blind tasting effectively opened the door for what are now called new world producers.

In order to make and export this new type of wine Argentine wineries would have to adapt a new export business model which required wineries to change the way they made and sold wines. Although a few wineries in Argentina were experimenting with new technique for growing grapes and fermenting wine in the 1980s, the process of conversion from the production of old world wines to the production of new world ones gained momentum in the early 1990s culminating in the entrance of large foreign wineries to this market toward the end of that decade. The dynamic growth of this industry in the 1990s until now can largely be explained by producers which successfully made this transition. The increase in the number of vineyards dedicated to the production of fine wines is evidence of a shift from growing grapes for old world wines, to growing them specifically for the production of new world wines. While in 1990 only 20% of vineyards were growing grapes for the latter category, this number increased to 43% in 2001. The real surge in this industry occurred after an article in the January 1996 edition of the *Wine Spectator*, the most prestigious trade magazine in this field in the United States, claimed that there were only 10 good wineries in South America, nine were in Chile and one was in Argentina. This one winery was Catena. By the end of the 1990s Argentine wines started gaining recognition as more wines from this country were being evaluated by the *Wine Spectator*. As can be seen in figure III.4, exports in this industry began to grow rapidly after the crisis of 2001/2002. Wineries that had upgraded their manufacturing equipment during the 1990s now had the opportunity to introduce their products to international markets, enjoying the advantage of a favorable exchange rate. After this crisis a substantial number of Argentine wineries began to travel abroad to trade fairs and international wine tastings. Some of these producers even started placing advertisements in the *Wine Spectator*. 
Nevertheless, by the beginning of the 21st century there were still a large number of wineries that had not made the transition to the production of new world wines. In order to address the lack of quality wines available for export top producers, together with researchers from the National Institute of Agricultural Technology (INTA), formed a strategic plan for the industry in 2000 to develop a systematic approach for analyzing international and domestic markets and a strategy for helping lower quality producers to upgrade their products to meet new world standards.

Most of the large new world exporters in this industry are constantly experimenting with new techniques in new regions. Recently, there seems to be a trend for grape producers to move to higher altitudes. Changes in altitude normally produce dramatically different results. Much still has to be discovered as to how such grapes grow under different conditions. Many producers are actually experimenting with traditional Malbec grapes at different altitudes. Such experiments are necessary for winemakers to be able to continually elaborate different types of wines.

**Domestic business model versus export business model**

The transformation of Argentine wineries required these companies to face uncertainties regarding not only how grapes were to be grown and wines were to be made but also the manner in which these new wines would be sold abroad. In essence, they would have to apply scientific rigor to activities that they had previously undertaken based solely on traditions and accumulated experience within the winery. These old methods had to be abandoned and more scientific methods developed because the older methods did not enable companies to produce the type of wines being demanded by the emergence of a new class of wine consumers. This transformation was necessary because the market for traditional wines was declining and French wineries were still considered to be the only ones capable of producing traditional fine wines.

Consumers of new world wines who were looking for wines that were more aromatic and lower in alcohol content than the wines previously available. The only way to make such wines was by introducing techniques in the vineyard and in the winery which had been developed by new world producers largely in Australia and the United States. Hence, in order to succeed in this market Argentine producers would have to adapt these methods to conditions in Argentina. The transformation of this process in the vineyard would prove the most difficult as wineries had to conduct experiments to see exactly what type of grapes were suitable to the climate and soil of specific regions; many mistakes were made in this process as the transformation of this industry was taking place. Only with such knowledge
could they be able to produce wines that would be able to compete with other countries producing such wines. By comparison the uncertainties surrounding the fermenting and aging of wine were less as it largely involved importing the proper machinery and paying careful attention to each stage of the fermenting and aging process. The challenge in this area was introducing a scientific rigor to this process.

Until the 1990s exports of wines from Argentina were limited. Those wineries that did export merely sold the same products designed for the internal markets abroad. These wines were not tailored to the tastes of foreign customers. For the most part this was common practice in this industry throughout the world until 1976 when wineries from the United States demonstrated that new world techniques enabled wineries potentially from all over the world to compete with their French counterparts. Until the 1990s Argentina dedicated limited resources to exporting, choosing to take advantage of sporadic opportunities rather than seeking a systematic manner for penetrating new markets. Market research, for example, was practically non-existent as wineries would simply try to sell their product in a particular country without attempting to actually understand its market. In general wineries were focused on the internal market, viewing exports as merely a manner to diversify sources of income rather than an activity that needed a specific strategy. While earlier exports were largely sporadic sales of existing products, current exports are the result of specific efforts to penetrate foreign markets by upgrading quality and customizing wines to meet the general criteria of “new world” wines. If wineries can successfully make such wines, international markets could become the focus of their business rather than just a means for diversifying it. One foreign market could actually become more important for a producer than the market in Argentina.

Commercialization of wines abroad would provide the greatest challenge for wineries as it required them to establish channels of commercialization, while also requiring them to convince the world that Argentina was indeed capable of producing high quality fine wines made in accordance with new world standards. The new export business model required firms to develop relations with distributors over the long-term. This strategy was radically different from the manner in which Argentine producers had exported. Traditionally Argentine wineries did not develop coherent strategies for foreign markets but rather took advantage of sporadic, on-time business opportunities. This style of exporting did not require producers to actually take the tastes of consumers into consideration, neither did it require them to develop long-term relations with suppliers.
Product upgrade

New world producers target consumers who previously had drunk lower quality wines or other alcoholic beverages. These consumers generally do not like traditional fine wines made in the old world style as they are too bold their alcoholic content is higher than what these consumers are seeking. They are looking for wines that are lower in alcoholic content and more aromatic, fruitier and fresher, namely the type of wines produced by new world producers. Nevertheless, wineries can produce a great variety of wines which meet these general parameters. They can use a variety of grapes and elaborate wines in many ways because the tastes of consumers vary. This represents a challenge as well as an opportunity for wine producers as they have the possibility to produce a wide variety of products but they have to ensure that there are enough consumers of the type of product they are producing to justify its production.

Tastes vary particularly across countries. A new world wine that wins a prize in one country can be seen as being rough by consumers in another. Ideally wineries would like to design a wine based on an analysis of consumer tastes and then produce it but this proves impossible in practice as wineries have to use the raw materials provided to them by the area in which they produce. In the end, wineries have to sell what they produce. Argentina is particularly well suited to produce a great variety of wines as its soil can accommodate 28 different types of grapes. This is a particular advantage over Chilean producers as soil in that country is said to work with only 5 different types of grapes. In order to have the chance of selling a wine, it has to made in accordance with the criteria outlined above, albeit using available grapes. In order to make such wines, firms have to change not only the way they are fermented but also the manner in which grapes are grown.

New methods for grape growing

The production of new world wines starts in the vineyard, not in the winery. When producing new world fine wines, wineries have to pay careful attention to the type and quality of the grapes they are using. First they have to be relatively certain that the type of grape they are producing can be used to make wines desired by their customers. Then they have to ensure that the place where they grow their grapes is actually well suited to that particular vine. Agronomists have to investigate the chemical attributes of soils to understand what types of grapes were best suited to a particular area. Part of this process involves importing new grape varieties to examine which works best in a particular region. In conducting this research, they have to consider that there are significant differences in soil in the same region. This fact holds even between two plots of land located right next to each other. Consequently agronomists and enologists have to have a solid understanding of chemistry in order to successfully analyze soils and
determine what grapes best suite a particular area. Still today vineyards are conducting new research on new terrain in order improve the variety of the wines they produce. They now understand why even a Malbec, a traditional grape used for the production of wine in Argentina, planted in one area tastes different from the same grape planted in a different area. This new way of growing grapes presents a radical break with tradition as it requires wineries to deal with a vast array of uncertainties about how small differences in terroir – the combination of soil and climate – can affect the tastes of grapes.

Differences in climates also have a profound impact on the quality of grapes produced. Since grapes used in new world wines have to receive a minimal amount of water, they are best grown in arid conditions. Grapes for new world wines are best grown in arid regions that are close to mountains which can provide an adequate supply of water. In essence, agronomists have to pay careful attention to how much water their grapes receive. If they receive too little water vines can die. However, if they receive too much water, grapes will not be suited for the production of new world wines. Yields from vineyards operated according to new world standards are lower because agronomists intentionally limit the amount of water these grapes receive and trim the vines so that grapes are smaller and flavors are more concentrated. Old world producers of lower quality wines seek to provide their grapes as much water as possible so that they will grow large and provide higher yields.

New world enologists closely observe the progression of the growth of the grapes to be used. If needed the enologist, usually working together with an agronomist, will manipulate the progress of grapes through irrigation or the use of fertilizers. Fertilizers are commonly used but also have to be strictly controlled as they can alter the taste of a wine. The most important decision is perhaps when grapes should actually be harvested. These are some of the critical decisions that can determine whether a wine can fetch a high price in the market place. Enologists can not make up for mistakes at this phase in the elaboration of a wine. This problem is complicated by the fact that techniques that are successful in other countries may not work in Argentina as climate and soil conditions are radically different across wine-making regions. Even techniques which work in some regions like Mendoza may not work in others like San Juan because of variance in climate and soil.

Although old world producers of finer wines realize that their wines are better when they receive less water, they do not pay careful attention to irrigation. Some of these producers are actually located in regions with varying amounts of rainfall from year to year. Hence, the quality of wines varies from year to year. This is largely the case for producers of old world wines in France. The major reason why the quality of wines made in France varies from year to year is the unpredictability of the climate. The
minimal variation in the climate in some regions of Argentina, such as Mendoza, helps wineries to maintain consistent quality from year to year. Conditions in these regions are arid but generally there is ready access to water from nearby mountains.

Unlike their new world counterparts terroir is considered by old world producers to be a given. New world producers on the other hand seek to understand minor differences in soils and climates and seek to plant the grapes that best suit the terroir of a particular region. As much as possible new world producers try to ensure that the conditions of the terroir in which their grapes are planted are the same from year to year. In dryer years, they irrigate their grapes more. Clearly, they can not control the fact that some years can witness relatively heavy rainfalls even in arid conditions. In the end they attempt to make sure that the quality of their grapes is at least the same if not better from year to year.

Nevertheless, there are no recipes for the elaboration of a good wine. No two years are the same. Enologists basically monitor the conditions under which their wines are grown and then see what type of wine they can produce from the type of grape that emerges from these conditions. There is always some variation. Wines from different years are never the same. Although some observers contend that there are no variations in climatic conditions in Mendoza, there are minor changes every year that can make a difference in the type of wine to be produced. In the past vineyards simply never paid attention to what would appear to be minor variations. Clearly these variations are not as dramatic as what occurs in traditional regions in France, but they are critical for the elaboration of finer wines.

Producers worked according to old world standards do not conduct any scientific experiments on soils to see if they can use different grapes. They simply plant the grapes that have been traditionally used in a particular region. Growers work based upon tradition. They do not know why a particular grape works well in a particular region. Their focus is quantity instead of quality and therefore they often heavily irrigate their crops to make their grapes grow bigger and produce greater yields. They are unaware of why a particular grape grows well in a particular location. The focus on quantity over quality does not require suppliers of grapes to work closely with wineries. There are still a significant number of vineyards that produce grapes according to old world standards and they supply wineries that customarily also work according to these standards. The spot market for grapes that still does exist in Argentina is largely for such producers and suppliers. Producers of fine wines buy grapes on the spot market only for their lower quality wines. The critical difference between producers of lower quality wines and their higher quality counterparts is the level of attention paid to the conditions under which the grapes they use
are grown. Hence, it is not surprising that for lower-quality, new world wines companies tend to rely more on their suppliers and even buy some of their grapes on the spot market.

The level of uncertainty in the production of grapes for new world wines is higher. Wineries have to work closely with independent vineyards in order to ensure that the grapes they grow are exactly suited to the wines that a winery wishes to produce. Some wineries deal with this uncertainty through vertical integration. Unlike their old world counterparts, new world producers have to ensure that the grapes their suppliers are growing suit the particular terrior of the region in which the supplier is located. In general it is advisable for a winery either to work with a supplier who already has a vineyard suitable to the grape they wish to produce or buy a vineyard with vines already planted in a region suitable to the grapes they want to use. To plant new grapes is a long term investment as it takes 5 years after planting before a vine can yield the type of grapes that are really suitable for use. Yields are customarily less that half of what they can produce using old world techniques but this is compensated with a higher price. The fact that wineries are looking for very specific grapes grown under particular circumstances makes it difficult for them to find the grapes they are looking for on the spot market. Nevertheless, the majority of new wineries begin by buying grapes for suppliers with whom they work very closely instead of planting their own. This provides them the flexibility to change grapes and experiment before they actually decide what grapes they wish to plant.

Although most wineries begin by buying their grapes from independent vineyards, they generally end up buying their own land and planting their own grapes in order to reduce uncertainty and have stricter control over how the grapes are grown. Some suppliers can provide excellent grapes for two years but then fall short in the third largely because the supplier starves the vine of water for two years. By the third year, the vine has suffered irreparable damage and can not produce the quality of grapes required. Some wineries in Argentina address this problem by working closely with their suppliers and providing them the training and supplies they need. Another strategy for addressing this problem, sometimes employed by the same winery using the previous one, is for a winery to simply rent a vineyard and take over its operation. Regardless of whether a winery decides to work closely with a supplier, rent a vineyard or simply buy one, the critical difference between the new world style of production and that of the old world is the close cooperation between agronomists and enologists. Close coordination between these two parts of the supply chain is critical for new world producers to be able to produce the types of wine expected by consumers of this product.
New methods for winemaking

Although new techniques for growing grapes had to be tested and adapted to the particularities of different climate in Argentine, technologies and techniques for upgrading wineries were readily available in the 1980s. If firms could grow new world style grapes, all that remained was for them to import stainless steel tanks and 225 liter oak barrels. Naturally, they would also have to have an enologist who was able to produce wine according to this new style. In essence, the approach of an enologist working according to new world standards is more scientific than their old world counterparts. In many ways the actual manner in which wine is made has changed little with the introduction of new world wines. The critical difference lies in the scientific approach to wine making.

As mentioned above the making of wine actually begins with the selection of grapes in the field. This process is customarily done manually in Argentina with workers checking each bunch of grapes to see if it is ready to be picked and in the proper condition for making wine. Grapes destined for fine wines are then passed to a conveyer belt in which they are further sorted. At this time twigs and leaves that happened to have been collected with the grapes are discarded. This inspection can be quite extensive. Some of the highest quality producers in this industry have more than 12 people working on the same conveyer belt to properly select the grapes needed for a particular wine. Other quality producers can have five or six people working on this conveyer belt. After this selection is done, grapes are passed through a grinder. Producers of lower quality wines do not undertake this part of the selection process but rather pass their grapes directly to a grinder. In this process enologists have to pay careful attention to the details of how grapes are actually selected. In the past such careful attention was not necessary.

After the grapes have been selected they are then generally passed into stainless steal tanks for processing. Grapes destined for finer quality wines are lowered into these tanks through specialized designed stainless steal containers. Grapes destined for lower quality wines are generally transferred to these tanks through hoses. Producers of finer wines use the former process as they believe the sucking process required to transport grapes through hoses actually damages the grape and affects the quality of the resulting wine. After a period of pre fermentation in stainless steal tanks, the must is put through a numeric press to eliminate all of the residuals of the grapes and leave a pure liquid. Then, this must is put back in a stainless steal tank in which the actual fermentation process occurs. Before the invention of such tanks grapes were put in 5,000 liter oak barrels in which the pre fermentation and fermentation occurred with residuals being removed at the proper moment. The use of stainless steal tanks, unlike that of 5,000 liter oak barrels, enables enologists to strictly control the temperature of the must during the fermentation process. Old world producers did not use stainless steal tanks and therefore attempted to
control the fermentation process somewhat by putting the oak containers in which this process occurred in cool areas, usually underground.

Stainless steel tanks enable new world producers to closely control how the fermentation process occurs, thereby enabling enologists to better control over the final product. By strictly controlling the fermentation process enologists can better shape the type of wine they produce. The temperature of the fermentation process shapes not only the speed at which this process occurs but also the taste of the wine. To further control the flavor of the final product, enologists can also strains of bacteria to reduce the acidity of a wine. This process was unknown to old world producers yet it is commonly used by their new world counterparts to produce the smooth, lighter wines generally expected by their clients. Enologists have to pay careful attention to these details and adjust the temperature of these tanks on a continual basis. This type of control was unnecessary under the old style of making wine.

The fermentation process is triggered by the yeast. This process produces carbon dioxide and alcohol. Some new world enologists actually introduce yeasts into must as it is being fermented. In general this is not required as grapes already have a natural yeast visible on its outer shell. Fermentation can occur with this natural yeast but the results are sometimes unpredictable as they depend on the nature of the yeast present on the grape. Currently some wineries are experimenting with the use of genetically modified yeasts as a means to gain even greater control over the fermentation process. Hence, enologists making new world wines have to keep up to date on new developments so that they are able to compete with others that are making these advances. In the past, this attention to detail was not necessary as enologists did not exercise this type of control over the fermentation process.

Enologists can control the alcohol content of a wine by carefully measuring the sugar content of the grape to be used. Enologists can use a saccharometer to determine the exact sugar content of a grape and thereby determine the exact alcohol content of the wine to be produced. As mentioned above, this is critical for new world wines as generally customers of these wines are looking for products with lower alcohol content. Naturally if consumers change their tastes and start seeking more alcohol in their wines, enologists working according to new world standards can adapt to this change by carefully selecting grapes that have a higher sugar content. Working with agronomists they can actually change the way in which their grapes are grown so that they produce grapes with higher contents of sugar. Producers of lower quality wines actually add sugar to must in order to achieve higher alcohol content. The critical distinction between new world and old world producers in this context is the fact that old world producers
did not understand the exact chemical processes involved in fermenting wines. They knew simply that alcohol content could be raised by artificially adding sugar.

Customarily new world wines spend a few months in stainless steel tanks even after the fermentation process is complete. Lower quality wines are generally stored in rubber coated cement tanks so as not to occupy space in the relatively expensive stainless steel containers. Wine can be stored in stainless steel or cement tanks as long as desired by an enologist. All wines are actually mixes of different grapes. Varietals, wines that carry the name of the grape on the bottle, have to be made primary from the grape on the label. Lower quality and higher quality wines are actually made from different mixes of grapes and therefore do not carry the particular name of a grape on the label. Enologists who produce high quality wines pay careful attention to the mix of grapes they use in making their wines.

Lower quality wines are generally sent straight from these tanks to bottles. Higher quality wines are stored at least for a few months in 225 liter oak barrels. The highest quality wines can spend as much as 18 months in these barrels. This process enables the wine to take on the tastes from the barrel. Enologists carefully chose the barrels in which this aging process occurs. They are generally French or American oak barrels that are toasted differently, ranging from light to medium to heavy toasting. The enologist selects the origin of the barrel and the degree of toasting based upon the type of wine she wishes to create. Finally wine is put in bottles after the aging process is complete. It does not have to be shipped directly after this process is complete.

**Marketing upgrade**

The techniques for marketing new world wines abroad are dramatically different than those previously used by exporters of old world wines. In the past, wineries exported what they produced for the domestic market and did not focus on adapting their wines to tastes abroad. In contrast, wineries have to follow basic trends dictated by consumers in order to sell new world wines on the global market. These trends change gradually over the years and have to be followed if wineries are to be successful in the international market. Yet, these trends are not very specific. Over time, customers have demanded wines that are less aggressive and easier on the palette. In general consumers are looking for fruity wines that have at least a hint of flavoring derived customarily by aging in 225 liter oak barrels imported from France or the United States; clearly some consumers seek wines with other characteristics but in general the current world market is dominated by demands for such wines. The goal of new world producers is to work within these general guidelines to develop wines with very specific tastes. This task is complicated
by the fact that consumption of the type of fine wines consumed varies over time. Preferences for specific grapes and for general tastes vary over time.

Wineries often experiment with different grapes to capture specific niches within the market. However, they generally concentrate their business on producing one or several of the classic wines in this business, namely Malbec, Cabernet Sauvignon, Chardonnay, Sauvignon Blanc, and Merlot. Syrah, a wine introduced by Australian producers is a relative new comer that is gradually becoming one of these classics. Even within these classic wines enologists working together with agronomists can create wines with distinctive characteristics and tastes by using the same grapes from different areas – differences in terroir, including the altitude of a particular piece of land provide different tastes – and/or elaborating wine in different ways as outlined above. Minor changes in climate prevent even the same enologist from making the same wine year after year The job of the enologist is to fit her wines within this general framework but also provide them an individualistic flavor. At the same time, enologists try to surprise their clients every year with new, if subtle, twists in the wines they make Enologists constantly taste each others wines to seek to understand how they are made. Even if an enologist can understand basically how a wine was made, she can not reproduce it as the conditions under which the grapes are grown is quite different. At the same time, an enologist has to listen to advice provided by their foreign sales representatives so that they can try to adapt their wines as much as possible to trends in their target market(s). Ideally these representatives would like to design a product and have an enologist produce it. Although enologists can adjust the attributes of their wines to different tastes, the limitations of their vineyards and terroir place significant limits on their ability to fully adapt wines to the specific attributes outlined by their sales representatives.

Producers of fine wines find it beneficial for marketing purposes to develop icon wines, a wine that sells for more than $50 a bottle. Quite often the production of these wines is not profitable because despite their high price, the volume produced is customarily very low. It can be as little as a few hundred bottles. Yet, these wines provide a winery exposure in some of the more important wine magazines such as the Wine Spectator. Paradoxically, the average consumer generally does not like such wines. They are radically different from the fine wines they usually drink. Nevertheless, the production of such wines by a particular winery is generally seen as a signal to consumers that it is a high-quality wine producer. Hence, the image generated by the creation of such wines can help to improve the sales of a winery’s “lower quality” wines. Nevertheless, wineries tend to first produce higher quality wines and then move toward lower quality brackets. Although this is more difficult than moving from lower quality wines to higher quality ones from the standpoint of production, it does provide a level of prestige to a winery
which then customarily spills over into their other lines of wines. In essence, an icon wine serves as a driver to communicate the high level of quality of winery’s operation.

While the preferable strategy for wineries is to move from higher quality wines to lower quality wines, the evolution of the taste of an individual consumer of fine wines goes in the opposite direction. They buy lower quality wines of the brands or countries that they believe, perhaps because of the ability of particular wineries to prove their ability to produce icon wines, to be of a high quality. If they like these wines they are likely to move to more expensive wines from the same country or winery. Hence, the reputation of a particular country can prove critical for the sale of wineries from that country. At the time of purchase, consumers are faced with an extremely broad offering of wines from a wide variety of countries. There are good wines that don’t sell because either the winery is unknown and/or because the country of origin is not known by the consumer to be a producer of fine wines. Although consumers like to try different wines, they face a high level of uncertainty when making their choice. Hence, they customarily base their choice on what they know about a particularly winery and/or a particular country. Hence, country of origin is particularly important in this industry. The same is true for the region in which the wine is made. Wineries are generally interested in promoting quality within their region as they are aware the consumers often associate wines with regions. Hence, if they drink a bad wine from a particular region, they are less likely to drink another wine from that area.

Because the country of origin is critical for consumers when selecting the wine they wish to drink, the quality of wines offered by wines from a particular country takes on particular significance. Quality should not be confused with taste. Consumers expect lower priced wines to taste inferior to higher price ones. In essence, they have a general idea, for example, about the taste of a $6 bottle of wine. If this wine does not have the quality of a $6 dollar bottle of wine, consumers are not only less likely to buy a more expensive bottle of wine from the same winery but also may assume that all wines from the same country have a lower quality than what actually may be the case.

Marketing by a winery is a critical tool for convincing consumers that it can indeed produce high quality wines. The same would seem to be true for countries. Naturally, countries and wineries have to make wines that live up to the reputation generated by marketing campaigns. Marketing can be conducted through channels such as advertisements in relevant trade magazines or even wider publicity campaigns targeting a broader audience. However, marketing also occurs when the product is actually consumed. Unlike the majority of products on a lunch or dinner table, wine and beer are some of the few that actually display a label. The consumer does not know the origin of the many products on the table.
Labels on bottles of wine basically act as a means for marketing the product people are drinking. Hence, they are a critical component of a winery’s marketing strategy. People often examine bottles of wine to learn about its origin. Hence, the label has to be attractive and communicate key elements about the wine to the consumer. Consumers pay attention not only to country but also the region of origin. They also expect to find a brief description of the wine that describes its characteristics and perhaps some details about how it is made. If the wine is aged in oak barrels this is generally mentioned as it is taken as a sign of quality. Like any piece of marketing in this industry, the wine has to meet the image portrayed on the label. At the same time, wineries basically try to convince the consumer that they are drinking something that is actually more expensive than what they paid. Naturally, wineries have to ensure that labels do not peel off the bottle. This is a sign to the customer that the quality of wine is lower than what the winery is usually trying to communicate. This was a common problem for the wine industry that has been resolved simply by wineries paying more attention to this issue and making minor corrections in how labels are applied.

The commercialization of Argentina wine internationally is dramatically different than what it was when wineries focused on the domestic market. Now wine producers have to develop the appropriate channels to distribute their wines internationally. International wineries that open branches in Argentina have a particular advantage in this area as they can leverage their existing international commercialization channels to sell their wines produced in Argentina. Wineries that are not owned by foreign companies face the challenge of creating their own network of international distributors. The majority of foreign subsidiaries would seem to use the existing distribution networks of their international owner.

Domestic wineries that are not at least partially owned by foreign companies have two means for selling their wine abroad. They can work through an intermediary that sells their products to different markets throughout the world or they can have an agent in each particular country in which they want to sell. The agents can be importers, consignees or supermarkets. Small and medium size wineries tend to use intermediaries while larger players tend to have their own agent. Sometimes foreign consultants help establish connections for Argentine wineries to sell their products abroad. Commercialization through operators usually involves firms bearing some costs for marketing and distribution in the country to which they are exporting. While table wine producers do not have to necessarily invest in marketing their wines, managing a customer’s perceptions becomes more critical for finer wines. Many of the big distributors want companies to provide them with a wide variety of wines. So it is not worthwhile for wineries to concentrate on the production of just one wine.
Distribution channels are increasingly consolidating. This is especially true in the UK. Like distributors, supermarkets also want a large variety of products to offer their clients. One of the challenges of wineries working for such distributors is meeting the strict controls for quality demanded by these clients. Sometimes these distributors send their own controllers to check the operations of the wineries that supply them. Having a well-made product is not enough to ensure that a distributor or a supermarket will buy it. These companies are increasingly demanding a high quality of service from the back offices of wineries. Supermarkets and distributors demand that wineries meet their particular needs and consistently fulfill their orders. If they find that a winery is unable to do so, they are ready to switch to alternative winery. Too often exporters in Argentina in this business overlook the fact that they have to support their sales. The product is not the only thing that they are selling. They are also selling services to their clients. These issues are particularly important for large producers of lower quality wines as logistical considerations can prove to be quite complicated for wineries focused on sales of volume. This issue is less important for average producers of new world wines that do not have to sell large volumes.

The wineries that export to the United States tend to work with one distributor that manages sales of their wines throughout the country. Laws on alcohol consumption in the United States vary from state to state so it is nearly impossible for a winery in Argentina to directly conduct their sales in that country. As for England, there is an important difference between off-trade, namely sales in supermarkets, and on-trade, sales in restaurants and bars. Wineries that wish to pursue real volume have to sell their wines off-trade. Although most wineries would seem to work through wholesalers some have managed to sell directly to supermarkets.

**Pioneer**

Nicolas Catena Zapata was the first person to elaborate a new world wine in Argentina and successfully sell it abroad. In 1992 he sold his first bottles of fine wine abroad for a US retail price of $15 dollars a bottle, making him the first to reach this milestone for Argentina. Even Chilean producers up until this time had been unable to sell wines at this price on international markets. Thus, Nicolas Catena Zapata was able to set the benchmark not only for the Argentine industry but also for their rivals in Chile producing a wine that he could sell at this price. He effectively demonstrated that it was possible for Argentine producers to reach this level of quality. Shortly thereafter other Argentine wineries followed in his footsteps. In the meantime, Catena continued to work on improving the quality of his wines. In 1997 he was the first Argentine wine producer to sell an icon wine, fetching a price of $80 in the United States.
In this sense, he was pushing the industry to reach even higher benchmarks after his initial success in 1992. In order to make these achievements, Nicolas Catena Zapata had to transform his traditional old world style winery and establish a new network of distributors who had previously not known that an Argentine winery was capable of producing wines that would be appealing to new world consumers. The actual techniques for transforming his vineyards and changing the way in which his winery elaborated wines would come largely through the diffusion of techniques from other new world producers while his distribution network was established through his own efforts of traveling and convincing distributors and leading journalists that his wines were indeed worth the price of some of the higher quality wines in the world.

Nicolas Catena Zapata has strong roots in the wine industry of Mendoza. The Catena family first planted a vineyard in Mendoza in 1902 with the goal of providing wine for the domestic market. Over the years the family was able to increase not only the number of vineyards it owned but also the size of their wineries, making this winery one of the largest and most prosperous in Argentina. Nicolas took control of the family business in 1963, ushering in an expansion and diversification of the firm. By 1976, Catena’s winery was producing over 20 million bottles of wine, making Catena one of the world’s largest wineries. Now Catena has 2,000 hectares and an annual production of 30 million liters. Bodegas Catena Zapata owns parts of Escorihuela, Sacon, Esmeralda and Rutini wineries. At the time when he took over his family’s winery, Nicolas was studying for his Ph.D. in economics from Columbia University in New York. He would travel back and forth from New York on a regular basis while studying for his Ph.D. in order to continue to run the family business. His experience living in the United States would provide him intimate knowledge of the how to do business in that country.

By 1979 Nicolas had transformed his company into the leader in the Argentine market. At that time, the company was selling 38% of the wines consumed in Argentina, being the leader in all categories of wine except for one in the medium price range. In the beginning of 1980 Nicolas decided to sell off his lower quality wineries and focus only on the production of high quality wines. When he sold these wineries, he was not thinking about exporting. He simply sold them to take advantage of over valued asset prices in Argentina at that time. Like many other old world producers at that time, he did not believe that it was possible for wineries to compete with French fine wines. There was a common belief that only French terroir could produce such wines. Clearly the blind tasting of 1976 had shown otherwise. Nicolas was aware of this event but he knew very little about how this tasting was actually in the process of transforming the world wine industry.
In the latter part of 1980 he accepted a position as a visiting professor with the Department of Agriculture and Resource Economics at the University of California, Berkeley. He accepted this position so that he could further his studies on pricing policy and inflation. His position with Berkeley had nothing to do with the production of wine. Nevertheless, 15 days after arriving at Berkeley he decided to take a tour of wineries in the nearby Napa Valley. The first winery he visited was the one owned by Robert Mondavi, one of the wineries responsible for revolutionizing how wine was being made in California. Nicolas became particularly interested in Robert Mondavi’s obsession with quality. On his trip to Mondavi’s winery and his subsequent trips to other wineries in Napa Valley, Nicolas realized that the production methods at his winery in Mendoza were “prehistoric”. The technology and methods used by Nicolas in his wineries in Mendoza were of Spanish and Italian origin and were far outdated according to what Nicolas was seeing in Napa Valley at the time. He had never imagined that science could be important for the production of wine. During his trips to Napa he realized that enologists in Argentina were not as rigorous as those he met in California.

Nicolas would remain at visiting professor at Berkeley until 1984. During his three years as a visiting professor there, he would travel back to Argentina roughly once a month to continue running his family winery. Over his three-year stay in California, he would continually travel to wineries in Napa Valley improving his understanding of how to make new world wines and befriending many of the owners of top wineries there. One of his most important friends during his stay in California would be Robert Mondavi, a person who happened to have a B.A. in economics from Stanford.

Although Nicolas Catena Zapata was often traveling back to Mendoza during his stay at Berkeley, the real transformation of his winery began in 1984 when he returned to start transforming his winery into one modeled after the new world producers he had seen in California. His vision was to transform his family’s wineries into new world competitors that would export a substantial portion of their wine. His decision to transform his winery, according to Nicolas, was not based on a detailed economic analysis of potential markets but rather a desire to emulate the success he had witnessed in the United States. He realized at that time that producers in the United States were competing directly with French producers in the market for fine wines. His goal was to do the same.

After returning to Mendoza in 1984, he began researching the best areas in the province to undertake his experiments while at the same time importing clones of new types of grapes from France and California that he thought would be suitable for the climate in Mendoza. He knew that he would have to select those grapes that would provide minimal yields per hectare. He had learned in California that this was the only
way to produce new world-class wines. During this experimentation phase Nicolas Catena realized that Mendoza was perfectly suited for the cultivation of grapes for high quality wines because rainfall in that region is relatively scarce. He first experimented with Chardonnay and a Cabernet Sauvignon, two grapes that were practically unknown in Argentina but perhaps not out of coincidence were the two grapes used by Californian producers in 1976 to win the blind tasting in Paris. In the process of his experiments he recognized that he was making many mistakes. Although the cost of these experiments were relatively high, he realized that even if the experiments were a complete failure he would not have jeopardized his entire business.

These first experiments lead Nicolas in 1986 to produce his first wine made in accordance with the style of new world producers. This wine was an experiment that he only sold in the domestic market. First he wanted to see if he could do it before venturing into attempting to sell his wines abroad. After producing this wine he realized that his wineries were still far behind those which he had seen in Napa Valley. While he was conducting his experiments on new world techniques he was traveling on a regular basis to California to learn how to improve what he was doing. Nevertheless, the results of his first experiment leading to the production of his first new world wine in 1986 made him realize that he would need the help of international consultants if he was going to be able to produce wines that could effectively compete on world markets. Consequently, Nicolas contracted top consultants on new world wines from Italy, California and France. The first consultant he contracted was Paul Hobbs, perhaps one of the most famous consultants responsible for transforming many wineries in California. For Nicolas his investment in contracting these consultants was the key to his success.

With the help of these consultants, Nicolas was able to develop wines that he could sell on the world market. The grapes that he harvested in 1990 were transformed into the wine that he sold in 1992. By being able to sell his wine at $15 dollars a bottle, he was setting the benchmark for those to come. Now Argentine producers knew it was possible for them to produce wines that were even potentially better than their Chilean counterparts. These new wines, a Chardonnay and a Cabernet Sauvignon, were well received in the United States. His wines were given remarkable reviews, enabling him to sell out his entire production of the wines that he had made especially for export.

To a certain extent, Nicolas Catena Zapata was thinking about the commercial side of his business even before the results of his experiments were clear. He had decided even before the grapes for his 1992 wine were harvested in 1990 that he would attempt to sell his wines at twice the price of the most expensive wines being sold from Chile. His goal was to demonstrate that Argentine producers could produce wines
that were better than the ones that were at that time being exported from Chile. Although he achieved this goal, he would still have to find ways to promote his wines so that he could create the basis for consistent foreign sales. Until his success with his wines in 1992, his winery had taken advantage of specific opportunities to sell their wines. They did not have to consistently work on developing and nurturing their distributors and final consumers. They came to Catena, albeit on an irregular basis for specific transactions. Presently, the receive requests from buyers wishing to conduct such transactions but it is the policy of the winery not to accept them. Now work exclusively with distributors who are interested in selling their products over the long-term.

Nicolas Catena Zapata realized when he first start producing wines for the United States that the key to penetrating this market lie in working closely with journalists writing on wines in that country. This task was particularly difficult at the beginning because Argentine wines were simply not known in that country. Hence, Nicolas had to introduce journalists to his country and demonstrate to them that his country was capable of producing quality goods. Consequently, one of the first events he organized for journalists in the United States was a show with two of the top tango dancers from Argentina. He traveled with this show to seven different cities in the United States to ensure that his winery would become known throughout the country. In general Nicolas believes that commercialization abroad requires independent producers like himself to personally travel to other countries to introduce new products to journalists and potential distributors. Still today Nicolas himself travels to talk to journalists and suppliers because he is convinced that even though his trade mark is relatively established, it is the only way that people abroad will respect producers who are not connected to a larger multinational company.

His efforts to promote his wines and produce them at a level of quality equal to that of many new world producers outside of Argentina led the Wine Spectator to contend in an article published on January 31, 1996 that there were only 10 world class wine producers in South America. Nine of them were said to be in Chile and the other was in Argentina, namely Catena. Shortly after this article appeared international wine producers started setting a foothold in Argentina. However, Nicolas felt that he would have to continue to try to produce better wines even after this article appeared in the Wine Spectator. From the time in which he sold his first new world wines in the United States for US $15 until the time in which this article had appeared, no other winery except Catena had been able to make a wine that fetched more than $50 in the United States. This changed only in 1997 when Nicolas himself sold one of his wines for $80. The famous wine critic for the Wine Spectator, Robert Parker claimed in his review that it was a “great wine”.
Diffusion

The wines developed by Nicolas Catena Zapata in the 1990s set the benchmark for the industry. His success showed wineries in Argentina that they could not only produce new world wines but they could also successfully market and sell them abroad. The ability of Catena to sell his wines at a retail price of US $15 demonstrated that Argentine wineries were capable of competing with new world rivals from Australia, Chile, and the United States. The initial success of Catena Zapata in confronting all of these challenges clearly reduced the uncertainties of those that followed.

Although Familia Zuccardi was also conducting experiments on these techniques in the early 1980s, Nicolas Catena Zapata was the first person to commercialize new world wines from Argentina. Other wineries would wait until the 1990s to make the conversion to new world wines when the regulatory climate was more stable and Catena Zapata and Familia Zuccardi had demonstrated that it was possible to develop wines made according to new world standards. All of the wineries in this sector that sought to produce new world wines would have to transform their existing operations by experimenting with techniques with which they were largely unfamiliar. It is not a coincidence that many of the followers were actually subsidiaries of international wineries as they had already had the experience of transforming their own operations in other countries. Catena and Zuccardi showed them that it was possible to do in Argentina. The companies had the particular advantage of already having established channels of commercialization. The prior existence of these distribution networks, as we will describe, was perhaps the greatest challenge facing new world wineries.

To a certain extent the business model that emerged in the Argentine wine industry was a result of diffusion of emerging techniques for growing grapes and making wine from new world producers in the Australia, the United States and France. As mentioned above Catena initially learned these new techniques largely for his experience in California. Nevertheless, his use of international consultants after his initial stages of experimentation proved critical in helping him to produce the type of wine desired by people in the industrialized world. Hence, in many ways his success was based upon diffusion form other countries. The techniques for growing grapes according to new world standards diffused to others in the industry later also through international consultants traveling to Argentina and enologists from Argentina visiting wineries abroad. The latter traveled to new world producers to see what types of techniques grape producer in these countries were using. Then they returned to Argentina to see if they could use these techniques in this country.
Although developments in Chile showed that South America could produce wines according to new world standards, there appears to have been little contact between producers in Argentina and those in Chile. Furthermore, the majority of Argentine producers in the 1990s were setting their sights on producing wines that were of a higher quality than those being exported from Chile. Foreign consultants played a critical role in bringing critical know-how on the growing of grapes and the elaboration of new world wines to Argentina.

Nevertheless, Catena Zapata was continually setting the benchmark for the quality of new world wines that could be produced in Argentina. Throughout the 1990s he was selling the most expensive wines from Argentina. Only in the beginning years of the first decade of the 21st century would other wineries be able to produce wines of a quality that would fetch similar prices as those reached by Catena Zapata. Moreover, most of the wineries which achieved similar results were only able to do so after having been bought by foreign companies. The only two domestically owned wineries to have achieved similar results as Catena Zapata in this first decade of the 21st century are Famalia Zuccardi and Dominio del Plata. One of the cofounders of the latter winery, Pedro Marchevsky was actually the head agronomist for Nicola Catena Zapata from the early 1980s until he founded his winery in 1999 with Susana Balbo, a person who had worked as an enologist and foreign sales representative for several smaller wineries in Argentina. Now we turn to a discussion of these two wineries before moving on to a description of how foreign wine producers came to Argentina in the late 1990s to build on the success established by Nicolas Catena Zapata.

In the early 1980s Familia Zuccardi, also known as Bodegas la Agricola, began converting its vineyards to the production of new world wines. At that time, this winery also began thinking about starting to export. In the early 1980s the winery believed that the best way to overcome the declining internal market would be to develop products for export. The winery was aware that this would require making an upgrade to new world products. Although they began participating in international trade fairs in 1991, their first wine to be sold in the United States, Santa Julia Oak Reserve, fetched a price of $8, only one dollar more than their Chilean counterparts at the time and $7 less expensive than the wine that Catena sold one year earlier in the same country. Although Familia Zuccardi would continually improve the price and the quality of their wines over the years, they remained behind Catena. Familia Zuccardi sold its first bottle of wine abroad for $20, Familia Zuccardi Malbec Mendoza Q, in 1998, one year after Catena had sold a bottle in the same country for $80. Until now, Familia Zuccardi has not been able to sell a wine for more than $45, an achievement that the winery first achieved in 2002.
Familia Zuccardi actively works to promote the exports of their products. The current president of the winery, Jose Zuccardi contends that their general strategy is to export around 50% of their production, like they are currently doing. For him it is best to attempt to grow their share of both international and domestic markets while maintaining their production roughly divided between the internal and the foreign market. Like Catena, this winery also contracted foreign consultants to help them improve the implementation of new world techniques for growing grapes and harvesting wines. In contrast to Catena, they first started using such consultants in the 1990s. Unlike the pioneer in this industry, the focus of Familia Zuccardi is to work with traditional grapes but to grow them and harvest them with the techniques of the new world. Some of their most famous wines are made with the tempranillo grape, a fruit that has a long history in Argentina and that was traditionally used only to make low quality wines according to old world techniques. They have recently started producing organic wines for export. They currently have 250 hectares that are certified for use in producing organic wines. The goal of this winery is to eventually convert the remaining 400 hectares that they own into certified organic production. Jose Zuccardi contends that this is not difficult for the winery as they have never used fertilizers.

Although Dominio del Plata is a relatively new winery, established in 1999 by Susana Balbo and Pedro Marchevsky, it has come to be an important exporter of wines from Argentina. The founders of this winery have strong roots in this industry in Argentina. As mentioned above Pedro Marchevsky was the lead agronomist for Catena and Susana Balbo is a widely respected enologist who had also worked commercializing wines abroad in the 1990s. Susana Balbo was active in diffusing new world techniques before she started this winery with Pedro Marchevsky. She had worked as an enologist in the 1990s helping wineries to make the conversion to new world techniques. Susana and Pedro established their winery with the explicit goal of developing wines for high-end consumers in the United States and the United Kingdom. They currently export over 90% of their production, 97% of which is sold in these two countries. The first thing that this couple did when they decided to start their own winery was to travel and take courses on wine making. Their winery was created with the explicit idea of first understanding what types of wines consumers in these countries were looking to consume and then finding the grapes and facilities necessary to produce them. Consequently, they started their business first by renting a winery and buying their grapes through suppliers. Although they now currently own their own winery, they still depend heavily on their suppliers for the grapes used in their wines. Susana Balbo contends that they do not have to own their own vineyards in order to produce excellent wines. However, for her it is critical to work closely with their suppliers and ensure that they become practically partners in the business. This is the only means for ensuring that suppliers will provide them exactly the grapes they need.
Large foreign producers of wines and champagne, along with an institutional investor, Donaldson, Lufkin and Jenrette (DLJ), began investing in the production of wines shortly after the article by the Wine Spectator appeared contending that Catena was on of the top ten producers of fine new world wines in Latin America. Although the international producers of wines and champagnes that invested in Argentina had already implemented new world techniques for growing grapes and making wines, there was a certain level of uncertainty as to how they would have to adapt their wine growing techniques to the particularities of the *terroir* in Argentina. Naturally, their level of uncertainty was reduced by the fact that Catena had shown that it was possible. Perhaps the most difficult part of exporting wine from Argentina, namely commercialization, did not present a significant problem for international wineries and producers of champagne because they could tap into their existing channels of commercialization. In this sense, they had a distinct advantage over those wineries that were owned solely by Argentines.

Nevertheless, the investment group DLJ did not have an advantage in this regard as they had no experience in the wine industry before buying a part of Peñaflor in 1997. It is interesting to note the Wine Spectator article in January of 1996 seems to have attracted many foreign investors to open wineries in Argentina as two important wineries, namely Chandon and Trivento started producing wine from Argentina the same year. They were quickly followed one year later by Sogrape and DLJ. First we will turn to the experiences of Chandon before discussing those of other international investors.

Chandon is the most interesting case because they are the closest competitors of Catena and explicitly claim that his winery is their benchmark. Chandon began operating in Argentina in 1961 with the goal of supplying the domestic market with champagne. They continued to produce only champagne for the domestic market until 1996. In that year they created two new products for export, a sparkling wine and a fine wine. While the sparkling wine entered the international market rather rapidly, they would not export their first bottle of Terrazas, their first wine, until 1999. Both of these products were specifically designed with the idea of exporting them to the United States. The company concentrated largely on the sparkling wine product until 2004 when the success of this product began to cut into the market share of other sparkling wines produced by subsidiaries in other countries. Consequently, The Argentine subsidiary was asked by their French headquarters to stop production of this product. This product had been the focus of their export activities up until that time. The canceling of the sparkling wine project caused the subsidiary in Argentina to turn their attention to solely exporting wines.
From the beginning of the wine project, the goal of Chandon was to target upper-end consumers. This group of consumers was chosen as the target for Terrazas largely in order to keep the Argentine subsidiary in line with the general strategy of the larger company. This wine was sold internationally through the same commercialization channels as their champagnes. Although this presented the company with certain advantages, it also proved a challenge as many of their distributors were not accustomed to selling wine, a beverage which does not have the brand loyalty of champagne and hard alcohol, the most important products in the Chandon portfolio. They also had to teach their distributors about the importance of regions and countries in shaping the quality of wine while at the same time providing them information about how wines were actually made. Chandon currently owns 1,500 hectares of land in Argentina, out of which only 850 are currently being used. Hence, it has a lot of capacity for future growth.

Peñaflor is one of the most traditional and largest wineries in Argentina. It has consistently had a large share of the domestic market. Although this winery was one of the first to export old world wine in 1965, it did not seek to develop wines specifically for export but rather merely sold the same wine internationally as it did domestically. Its most famous wine, Trapiche, was first Argentine wine to gain any real recognition outside of Argentina. Despite this success, the owners of the company largely neglected the export of wine. Originally they did not view the exports of wine as a critical part of their company. Hence, the company did not dedicate enough resources to the export of wine, choosing instead merely to take advantage of sporadic export opportunities.

Peñaflor was unwilling to devote resources to the export of wine because wine only represented a small percentage of the total revenue of the company. It was a large, diversified company that practically dominated the market for beverages and juices in Argentina for a significant period. This orientation began to change when DLJ bought a 33% stake in the company in 1997. Although this investment group immediately suggested ways to reorganize this company, real change did not start to occur until it bought another 57% stake in 2002. After gaining control of the company, DLJ focused the company solely on the production and export of wine, selling off all of the other beverage units and investing the resulting capital in upgrading the grape growing and wine making facilities to resemble new world producers. Today the company owns 3,000 hectares spread across Mendoza, San Juan, Salta, Catamarca and La Rioja and the machinery to fill 52,000 bottles per hour. Together, the seven wineries that now make up Peñaflor employ 1,300 people. It currently exports its wines to over 60 countries.
Sogrape is an example of a larger international winemaker that decided to establish a foothold in Argentina by buying Finca Flichman, one of the oldest traditional producers of wine in Mendoza that traces its origin back to 1873. Sogrape bought this winery in 1997 with the idea of converting it into a new world winery. After buying the winery it imported stainless steel tanks and all of the other equipment needed to make a new world winery while also updating the manner in which grapes were grown to meet new world standards. Sogrape began looking all over the world to buy a new winery because the firm was prevented by Portuguese law from buying more wineries in that country; it already had 45% of the market in Portugal. Top executives decided to buy Flichman because they knew that Argentina had the capability to produce good wine but they were unsure whether the Argentines actually knew how to sell what they made. One of the reasons why Sogrape decided to buy Flichman, an important producer of Argentine wines, in 1997 was the observation by one of the executives of this company that Argentineans in this business spoke very poor English. They could not be exporting successfully if they did not speak English well. This strategy seems to have paid off. Now 50% of their production is dedicated to exports, earning the company over USD $5 million in 2004, a 60% increase from the year before.

Trivento is another example of a large foreign wine producer that decided to set up operations in Argentina. This company is part of one of the most important producers of wine in Chile, Concha y Toro. Unlike Sogrape, they decided to set up their own wineries instead of buying existing ones. In 1996 they began operations in Argentina. The wineries of Trivento enable Concha y Toro to complement their own range of wines with those that are generally not grown in Chile. At first Trivento sold its wines through the channels of commercialization that had been established by Concha y Toro in Chile. Top executives at Concha y Toro decided to have Trivento create its own channels of commercialization a few years later after discovering that the wines they were producing in Argentina were competing directly with those that they were producing in Chile. They currently export to the United Kingdom, Scandinavia, Holland, Canada, Switzerland, Brazil, Germany and the United States. They have two establishments that are capable of producing 27.9 million liters of wine a year.

Counterfactual case

Although Bodegas Lopez was one of oldest and largest wineries in Argentina, they still have not yet fully upgraded their operations to introduce many of the important techniques of new world producers. Despite the fact that they do use stainless steel tanks to control the temperature at which their wine is fermented, they do not produce wines that have the taste of the new world. Instead they continue to produce wines that are bold and heavy rather than light and fruity as is desired by new world consumers. Although the
nature of the market has changed, this winery continues to export the same wines that they produce for the domestic market. To a larger extent their business remains connected primarily to the domestic market. They only export 10% of their production and apparently do not have plans to either increase this percentage or transform their operation to meet new world standards.

This winery was founded in 1898 by Jose Lopez Rivas, an immigrant from Spain. Carlos Alberto Lopez, a member of the third generation of this family acts as the president of this company overseeing its operation with the help of his son. Even the higher quality wines that this winery produces are still made in the tradition of the old world. This winery even continues to use the same style of bottles that were popular in Argentina 20 years ago for some of its wines. These bottles have long necks and thick bottoms rather than the more standard bottle commonly found in most stores across the world. In terms of production the winery has introduced the use of stainless steel tanks to ferment its wine even while maintaining the use of 5,000 liter oak barrels to age some of its finer wines. As mentioned above, new world producers use 225 liter barrels to age their fine wine.

The top management at this winery seems unwilling to change its model for doing business. In September of 2003 The Exxel group decided to sell their 33% stake in this winery after the family refused to develop new product lines and launch an aggressive marketing campaign. Nevertheless, the company has more than enough capacity to continue to produce the same wines. It has a 12,900,000 liter capacity in stainless steal tanks, 5,240,000 liter capacity in 5,000 liter oak barrels and 40,000,000 liter capacity in rubber lined cement tanks. It currently exports the same products sold in the domestic market to 25 countries, 14 of which are in Latin America and three of which are located in Eastern Europe.

The role of government and associations

Many Argentine wineries have yet to fully upgrade the manner in which they grow their grapes or the manner in which they make their wine. Some wineries have not changed any of their techniques in this regard. Nevertheless, there is general consensus in the industry that it is in the interests of even higher end producers that more wineries make the upgrade to more sophisticated techniques. As mentioned above, low quality exports by such firms in Argentina could potentially hinder the possibility that consumers would try better wines from this country.

One of the major problems for producers who have not changed the manner in which they make wine or grow grapes is the lack of consistency. If wines are not consistent from bottle to bottle or year to year –
meaning that sometime the quality is much lower and sometimes higher for the same wine – consumers will stop drinking that wine and turn to other producers that can deliver consistency. Since wines are marketed under countries and or regions, consumers are unlikely to try wines from regions or countries which are unable to meet this demand. The fact that consumers usually begin drinking wines of lower quality before moving to higher quality ones, it is essential that lower quality wines are consistent. A $5 dollar bottle of wine has to taste like a $5 dollar bottle of wine. If it tastes less expensive, the customer looses confidence in the region and/or country from which it came.

Producers of lower quality wines that focus on sporadic exports are not necessarily interested in improving the quality of their wines. They can simply find new clients when their quality is sporadic from year to year. Consequently, all wineries in the industry should be interested in having even lower quality wine producers develop longer-term relations with their suppliers. In essence, all wineries in Argentina would benefit if those who were producing and exporting according to the new model would shift to the new export model. There are several organizations in Argentina that help wineries to upgrade the way they grow their grapes and how they make their wines. Paradoxically, there are not organizations that help wineries to actually improve the way in which they commercialize their wines abroad.

One example of an organization dedicated to diffusing information among grape producers is The Regional Consortium of Agricultural Experimentation (CREA). It seeks to spread knowledge among growers of grapes throughout Argentina. The division of this non-profit organization dedicated to this industry coordinates monthly meetings of different groups of grape growers, usually made up of 12 members each, to discuss common problems they are facing. This organization has helped both medium and large vineyards solve problems and improve the quality of the grapes they produce. Participants in CREA contend that they are not giving away the secrets to their wines or loosing their competitive advantage by participating in meetings organized by this organization. It is merely a forum for grape producers to share information and experiences in an attempt to improve the productivity and quality of all its members. The willingness of big and medium sized vineyards alike to participate in such groups is linked to the fact that they believe that the industry as a whole should work to increase the number of international consumers who buy Argentine wine. If more people buy Argentine wine, everyone will benefit. The focus on quality arising from these organizations has actually led to the improvement not only in the production of grapes for fine wines but also in the production of tables wines. Even the quality of table wines has improved over the past decade thanks to experiments originally undertaken to develop fine wines.
The National Institute of Agricultural Technology (INTA) also works with producers to develop new techniques for growing grapes. The information provided by INTA is more technical in nature than what is normally generated by CREA. INTA actually generates detailed mappings of micro climates in different wine producing regions of Argentina. Unlike CREA, INTA also researches new techniques for elaborating wines. INTA conducts research for many different wineries, including those producing some of the highest quality wines in Argentina; even Bodegas Catena Zapata contracts them to do research. Since, INTA is dedicated to promoting the industry and not specific wineries, it only agrees to conduct research that will be shared with others in the industry. Diffusion is part of the contract.

To some extent wine producers in Mendoza, Argentina have always worked together informally to diffuse information regarding the growing of grapes and the elaboration of wines. The advisory council of INTA in Mendoza has served as a general forum for grape producers and wine makers to meet to discuss their concerns in Mendoza. In 1999 they began to formalize the coordination of the activities of various support agencies, such as INTA, CREA, the Department of Agricultural Sciences at the National University of Cuyo in Mendoza, and the Federal Council on Investments. After studying the case of the success of Australian wines, the advisory board of INTA came to believe that the strategic plan formulated by the important actors in this industry in Australia was one of the key to the success of the wine business in that country. Hence, they began formulating a strategic plan for Argentina in 1999 and finished developing it in 2000. Like their Australian counterparts those who formulated this plan in Argentina decided to include associations of wine producers and representatives from the public sphere. The advisory council of INTA formed teams made up of representatives from public and private institutions as well as important wine producers to benchmark Argentine products and policies against those of competing countries such as Australia and Chile. In its initial stage, the advisory council of INTA decided to include grape and wine producers from San Juan. The advisory board’s specific goal with regards to exports was to increase the worldwide market share of Argentina from 2% to 10% by the year 2020. The producers and civic associations involved in the formulation of this plan realize that they will have to cooperate on a wide range of issues in order for this goal to be reached.

In essence, the goal is for Argentine producers to cooperate to take market share from other countries rather than simply compete with each other and potentially undermine the overall growth in the market share of the country as a whole. Many wineries in Argentina believe that it is important for the members of this industry to have a common vision of where it should go. This vision and the cooperation it entails do not require wineries to abandon their different strategies or even target markets. The idea of the strategic plan emerged from local companies and institutions which specifically wanted to form a new
way of interacting with the national government. They were aware of similar plans that had been
developed and promoted by the government for the meat industry, which failed because the
administrators did not actively interact with the actual producers to understand their needs. Instead, they
developed programs without consulting the firms or social actors involved in this industry. Their
programs proved a little use to actual producers in this industry.

The strategic plan served as the basis for the passing of a law by the national government of Argentina in
November of 2003 to form COVIAR, The Argentina Wine Corporation. This new public/private entity
was funded by a tax on sales of wine and grape juice. COVAIR was charged with implementing the
strategic plan developed by the advisory council of INTA. This new entity has only one administrative
manager, a technical manager, a spokesman, a legal advisor, an administrative assistant and a secretary.
In essence, COVAIR serves as an umbrella organization to coordinate activities and set priorities for the
industry and then contract out organizations to undertake the programs and investigations that are deemed
necessary for the growth of the industry. In general Wines of Argentina serves as the mechanism for
coordinating the promotion of Argentine wines abroad, the viniculture fund serves as the mechanism for
improving the internal market for wine, while INTA is charged with investigating and disseminating
information regarding technical issues.

Wineries from San Juan were intentionally provided more representation on COVIAR than what pure
statistics on production would justify. They were given 50% of the representative seats on the board of
COVIAR despite the fact that this province only accounts for roughly 30% of all national wine production
and 6% of all exports from this industry; by comparison Mendoza accounts for roughly 60% of all
national production and 90% of all exports. Although San Juan has always been seen as the smaller child
to Mendoza in this industry, it was thought that by giving them equal participation in COVIAR
production in that region could be upgraded. There are indeed some producers of fine wines with
wineries in San Juan but for the most part production in that region is largely still dedicated to table
wines. Nevertheless, some observers in the industry believe that eventually that region could produce
some excellent wines in the future. What is needed is simply more investigation into what types of grapes
raised in what type of manner would best fit the terroir of that region.

It is not surprising that the idea for the strategic plan emerged out of a local group in Mendoza.
Historically, this province has always prided itself on its independence from the national government.
Furthermore, the ethnic background of its inhabitants is rather diverse with immigrants coming from Italy,
Spain and even France. No one political party ever fully dominates this province, so the democratic
tradition is quite strong. In San Juan, the second largest exporter of wine (6% of the national exports) behind Mendoza (90%), immigrants largely came from Spain and the government in that city has traditionally looked to the national government for help and guidance. Hence, there is little tradition of different groups working together

Wines of Argentina and ExportAr offer wineries help in establishing contacts with potential foreign clients. They organize wine tastings in other countries or in Argentina so that potential clients can sample a variety of wines from this country. The former organization customarily organizes tastings for larger, higher quality wines while the latter generally focuses on smaller producers. ProMendoza, a semi-public organization charged with promoting exports from this province and intricately involved in the strategic plan and COVIAR, developed a system for evaluating whether a particular firm was actually capable of performing well in the trade fairs it sponsored. Wines of Argentina facilitates connections between Argentine wineries and potential clients but does not get involved directly in any negotiation. They also provide wineries with information about consumption patterns in particular foreign markets to help them evaluate whether or not they should target a particular country. In addition, Wines of Argentina also promotes Argentine wines abroad by speaking with journalists and manning stands at trade international trade fairs. This organization carefully selects the wineries that it represents at such events. It conducts blind taste tests before every event and selects the top wines from that test to represent at a particular event.

The rational outlined in the previous paragraphs rationale does not assume that Argentina will not export table wines. The goal for all producers is to improve quality and not necessarily move into the production of fine wines. With that said it is important to note that new production practices generally associated with fine wines help to improve the quality of lower quality wines. The active promotion of diffusion of knowledge could improve the overall profitability of the industry more than what would occur if each winery were acting on its own. This logic underlies the desire of important wineries and supporting institutions to form a strategic plan for the industry.

Clearly the development of a country brand is important for this industry. If more international consumers come to know Argentina as a country that produces high quality wines, all the wineries in this country could potentially benefit. The goal is for Argentine wineries to work together to take market share from producers of other countries. If that can be done, there is room for many to prosper. One observer of this industry who is rather skeptical about the strategic plan and COVAIR believes that in the future consumers will switch from identifying the quality of a wine with a particular country and will
switch to associating quality with a particular company. They will not care where a wine is produced but rather what company actually produces it. Clearly, this potential development has to be troubling for those who support COVAIR and the strategic plan. However, such a development may be years away. Until then, it may well prove beneficial for wineries to join together to promote the production of high quality wines in this country.

Public policy

If it is true that the country of origin will continue to be important for consumers in selecting the wines they choose to consume, it would seem critical for Argentine producers to continue working together to promote the upgrading of this industry. Such cooperation can help even those targeting the lower end of the market to produce better quality wines and thereby potentially attract these customers to buy higher-end wines made by different wineries. Thus, the success of higher end producers would seem to depend, at least partially, on the quality of their lower-end counterparts. At the same time, the great variety of grapes and the different ways in which they can be grown and turned into wine in Argentina would seem to offer many different market niches for a wide variety of producers. Finally, the success of the Australian strategic plan would seem to indicate that this type of cooperation could lead to further growth in this industry.

Clearly INTA has proven to be one of the critical organizations for diffusing information in this industry. Its contracts with specific wineries to conduct research on methods for growing specific grapes, seems to be an interesting model that provides the winery signing the contract with excellent research while also insuring diffusion of the knowledge gained. Although the national government reduced the funding of INTA in the 1990s, it would not be advisable for the government to simply reinstate this funding as the retraction of these funds could have been critical in making this organization work more closely with wineries. This policy recommendation does not deny the fact that the work undertaken by INTA was critical for the success of this industry.

If the government were to choose to provide further financial assistance to this industry, it would be advisable for it to provide funds directly to COVAIR as this organization understands best where money should be allocated. In this manner, the government could move toward a new public management approach in which they seek to stop funding specific programs and direct funds to umbrella organizations that are more familiar with the particular needs of an industry. Nevertheless, the government should ensure that COVAIR does not simply turn into a mechanism for seeking the government and its agencies.
The fact that it has representation on the board of this organization should help prevent this from occurring. Nevertheless, the government should work closely with this organization to ensure that any funds it is providing are well used. Perhaps it could set specific goals in cooperation with COVAIR as a means for ensuring its accountability.

The most important challenge facing wineries in Argentina today is commercialization. Wines of Argentina is currently working on a campaign to promote the consumption of Argentine wines in foreign countries. This campaign should help familiarize consumers in targeted countries with the great variety of wines Argentina has to offer. At the same time, the work they have done in organizing tastings of different wines from this country surely has helped spread awareness of the high quality of wines produced in this country. Their policy of selecting wines to represent at trade fairs through blind taste tests would seem to be the only way to ensure that Argentina becomes known as a producer of high-quality wines. This policy also serves to push wineries in this country to continually improve the quality of their products. It would not be recommendable, nor practical, for Argentina to somehow forbid the exportation of low quality wines.

Although Wines of Argentina has sought to help wineries in a variety of ways, one area in which they are apparently lacking is some type of assistance in helping firms to develop long-term relations with potential and existing clients. Perhaps Wines of Argentina could create forums such as those undertaken by CREA to help wineries exchange information and experiences about building such relationships. Like CREA, wineries would not have to reveal any trade secrets in such meetings. Such assistance could help those wineries who are still conducting sporadic exports to reevaluate their strategy for exporting. At the same time, INTA would have to work closely with such wineries in order to ensure that they would be able to deliver a consistent product to their clients. Without quality on the production side, long-term relations with distributors would seem difficult to achieve.

In general, greater cooperation on issues related to commercialization may prove beneficial to the industry as a whole. One mechanism for promoting further exports in this sector could be the formation of alliances or cooperative arrangements between some of the smaller producers in this industry. Such agreements between independent producers could either seek to export their products jointly or simply meet to exchange information about best practices for commercializing their products. It may even be the task of national or state governments to encourage firms to form such agreements.
Case IV: Wooden furniture

Studies of the wooden furniture industry from the perspective of exporting countries should provide interesting insights into how small and medium sized enterprises in countries like Argentina can position themselves in highly competitive industries in which products are not differentiated according to brand names but are still highly differentiated both horizontally and vertically. The growth of exports from this sector in Argentina demonstrates that developing countries do not necessarily have to focus on the production of low-end furniture in order to gain market share in advanced industrialized societies. Some Argentine companies are even directly competing with high-end producers from Italy, the leader in this segment.

The vast majority of firms can for the most part easily adapt their production to meet the challenge of producing high-end furniture. Such changes are possible because of the flexible nature of production in this industry as a whole. Producers seem to have little difficulty in changing the size of their products and the component parts that go into them. Although this industry in Argentina has the proper technology to produce high-end furniture, many firms in this sector do not pay careful to the quality of the products they are producing. This difficulty arises from the fact that such careful attention to details, described below, is not required for the domestic market. Solving this problem does not require new machinery but rather a new way of working.

Firms also can not simply sell products they produce for the domestic market in other countries. For the most part, these products have to be adapted to the tastes of the particular market being targeted. One of the critical elements in this process would seem to be having access to designers who are able to help these firms adapt their products to the tastes of consumers in other countries. As these tastes change, firms have to be capable of changing their designs and production while ensuring that their new products do not cannibalize their existing ones. In order to consistently penetrate foreign markets firms need to develop close working relations with their distributors. However, many of the companies in this industry, as of yet, have been unable to move beyond one-time, sporadic deals. When firms are able to forge long-term relations with distributors in foreign countries, they sometimes are unable to meet the volume and variety of products which these distributors demand over time. It should be noted at the outset that we contend that an export business model, and the product and market upgrade it entails, is just beginning a process of diffusion in this industry. We contend that there is one person in this industry that understands the model and is in the process of attempting to implement it. International buyers are interested in buying furniture from Argentina, but only if it meets very specific requirements that are related more to
how something is designed and built rather than a dramatic change in the actual production process or the machinery involved. Changing the manner in which a firm operates, we contend, is an investment that, at this level of development in the wooden furniture industry, is the key component that is generally missing.

Overview of Argentine exports

Argentine exports grew relatively steadily from 1993 until 2001. However, the real boom in exports from this industry started after the devaluation of the Argentine peso in 2001, growing from $10 million in 2001 to $25.9 million in 2005. Figure IV.1 shows the sector's total export values from 1991 to 2005. It can be observed that exports grew approximately 15% per year from 1991 until 2001 while this growth was roughly 40% per year between 2001 and 2004. The decline in the growth rate from 2004 until 2005 may indicate that the competitive advantage generated by devaluation has dissipated over time. In other words, the rapid growth rate after 2001 could be explained by decline in the price of Argentine furniture products bought about by the devaluation of Argentina’s currency.

Source: Customs Data

We define this industry as the 6-digit positions of HS 940330, 940340, 940350, 940360, 940161 and 940169.\(^{23}\) In other words, within this group of firms we find producers of “other furniture”, stuffed and

\(^{23}\) The wood furniture sector is defined by combining four 6-digit positions (HS 940330, 940340, 940350 and 940360) from the 4-digit furniture code with two 6-digit positions (HS 940161 and 940169) from the 4-digit code for seats. Although the metal furniture sector is included in the same 4-digit category as wood furniture, it is excluded from our analysis as this industry has a very different production process and far more concentration. Furthermore, the metal furniture industry exports primarily to
unstuffed chairs as well as makers of office, kitchen, and bedroom furniture. As can be observed in figure IV.2, the category of “other furniture” (HS 940350) has consistently exported more than the other categories and has the highest level of growth. It consists mainly of dining room tables. The second largest exporting within this group is bedroom furniture (HS 940350). Exports in 2005 consisted of 82% wooden furniture (45% other, 20% bedroom, 9% office and 9% kitchen) and 18% seats (14% upholstered and 4% not-upholstered).

![Figure IV.2: Wooden furniture exports from 1999 to 2005](image)

The primary destination of exports from Argentina is currently the United States. Out of the $25.9 million exported in 2005, the United States accounted for 42.8% while 30.1% went to countries within Mercosur and 7.2% to Spain. Figures IV.3 shows how destinations for wooden furniture from Argentina changed from 1999 until 2005. Although the United States in 2005 accounted for a lower percentage of exports from Argentina than in 1999, it still remains by far the largest importer of wooden furniture from Argentina. The percentage of exports going to countries belonging to Mercosur (Uruguay, Chile and Brazil) has remained relatively constant, albeit with a dramatic decline in exports to Uruguay – from 20% of total exports in 1999 to 5% in 2005 – and a dramatic increase in exports to Chile – from 8% in countries in Mercosur and other regional markets. The sector was also defined to include wooden seats because they are often

*Source: Customs Data*
1999 to 22% in 2005. It is interesting to note that the destinations for exports from Argentina have grown more diverse, even as Latin America remains by far the largest continental importer of Argentine wooden furniture. In 2005, eighty-two percent of furniture exports were to countries in the Americas. Within this continent, the United States is the main importer, followed by Chile, Uruguay, Mexico, Panama and Brazil. Within Europe, most exports go to Spain, followed in order by Italy, France and the United Kingdom. Exports to Asia account for only 0.01% of this total.

Source: Customs Data

**Figure IV.3 Wooden furniture exports by destination (FOB)**

<table>
<thead>
<tr>
<th>Country</th>
<th>1999</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>58%</td>
<td>43%</td>
</tr>
<tr>
<td>Uruguay</td>
<td>20%</td>
<td>5%</td>
</tr>
<tr>
<td>Chile</td>
<td>8%</td>
<td>22%</td>
</tr>
<tr>
<td>Brazil</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Panama</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Mexico</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Italy</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>South Africa</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Spain</td>
<td>7%</td>
<td></td>
</tr>
</tbody>
</table>

Main exporters in Argentina

The structure of the wooden furniture sector in Argentina mirrors that of the worldwide sector as a whole. Globally 90% of firms in this sector are SMEs with less than 20 workers. In Argentina there are 2640 companies, 90% of which are SMEs. The average company in Argentina has 7.1 employees. Within Argentina 50% of firms are located in the Province of Buenos Aires, 16% in the province of Santa Fe, 12% in Cordoba, 9% in Misiones, 5% in Mendoza while the remaining 4.5% are scattered over the remaining provinces. Out of the top 10 exporters identified for our study one was partially owned by a Swedish company, while another was partially owned by a U.S. company.
Figure IV.4 shows the evolution in the value of furniture (FOB) exported in 2005 by the top 18 exporters in Argentina to countries outside of Mercosur. As can be seen in this diagram, exports outside of Mercosur have more than tripled when compared either to 1999 or 2002.

Figure IV.4: Value (FOB) of the top 20 wooden furniture exporters from 1999 to 2005, not including exports to Mercosur

Source: Customs Data

International trade

As a whole, worldwide production of furniture grew from an estimated amount of $107.37 billion in 1999 to an estimated $129.97 billion in 2003. Figure IV.5 shows the shares of the main worldwide furniture producing countries in 2003. Surprisingly, some of these countries are also some of the main importers of

24 It should be noted, however, that the data presented in Figure IV.5 might not be completely accurate due to the fact that in many cases producers sell their products through intermediaries. Although Blanco Marcelo and Ketras Cargo rank as two of the top 20 exporters, the former was not included in this figure because it is an exporter of antiques and the latter was excluded because it is merely an export company, it does not manufacture anything.
furniture. This list includes countries from the developed world, namely Italy, Germany, Japan, and the
United Kingdom as well as some from the developing world, specifically China, Poland and Brazil.

Worldwide imports grew from an estimated $14.9 billion in 1999 to an estimated $21.5 billion in 2003, an
average annual growth rate of 9.59%. For the most part trade within this industry occurs between
industrialized countries (US, Canada, European countries, Japan and China). In 2003 all of the top five
importers of wooden furniture were advanced industrialized countries. The United States imported $9.29
billion followed by Germany with $2.03 billion. The other importers were the United Kingdom, close
behind Germany, at $2.1 billion, France with $1.59 billion and Japan with $1.15 billion. Except for
China, all of the countries within the top 5 importers in 2003 were also advanced industrialized countries.

![Figure IV.5: Share of world furniture production (by country for 2003)](image)

Source: Customs Data

Surprisingly, Italy has remained the top exporter of wooden furniture for the past five years. Italy
accounts for 19% of all exports followed by China with 17%. These countries are followed by Germany
with 13%, Canada with 12% and Denmark with 9%. Although over the past five years these rankings
have not been the same, these countries have represented the top five exporters over this period.

Italy’s focus on the production of high-end furniture enables it to maintain its leadership position. Italian
furniture firms are characterized by a high degree of horizontal integration in a market composed mainly
of small and medium producers working together in networks. This structure enables them to quickly
alter their production processes to produce different styles of furniture; differences in these models are
discussed in greater detail below in the section on the supply chain of this industry. Vertically integrated,
mass-producing firms like those found in Canada, Germany, and China, find it difficult to quickly adapt their production to changing styles. Like all of the other top five producers in this industry, Italy depends on imports of wood from foreign countries. The focus of Italian producers on high-end wooden furniture requiring constant adaptations of changing styles and tastes enables them to avoid the pressure of competing directly with the other top three producers.

Other countries generally can not protect their industries from competition originating in Asian countries. The fact that its production in Germany and Canada is highly mechanized with world-class machinery does not offer them any protection from competitors with lower labor costs because producers in other countries with lower labor costs also have the latest machinery. Consequently, it is not surprising that production in the low-end sector of this market has moved to other countries. Production in Canada has come under increasing pressure from Chinese producers because they are both focused on the lower-end of the market and produce their products with dedicated production lines that follow the precepts of mass standardized production. Firms in both countries depend heavily on imports of hardwoods from the United States. Despite its lack of proximity to the U.S. market, the Chinese have come to replace the Canadians as the top exporter to that country; now Canada only has 20% of the U.S. market. One potential explanation for this shift in production to countries like China is the fact that labor accounts for 40% of production costs in this industry worldwide. Clearly labor is less expensive in China than in Canada.

Lower labor costs have enabled China to become the second largest furniture exporter in the world. By the end of 2005 it had almost gained the same market share as Italy. Its main destination is the US, where it has an estimated 40% share of the home furniture market. It specializes in unassembled furniture made of pressed wood. Although Chinese products are relatively inexpensive they are not known for their design.

The pursuit of lower labor costs in this industry has caused a shift from production first from Taiwan to Malaysia, then to Indonesia. Recently, Vietnam has come to be a major competitor based primarily on lower labor costs and the installation of the latest machinery. The only apparent strategy available to those countries which do not want to enter into this race to the bottom would seem to be a focus on semi-

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25 Argentina, by comparison has a distinct advantage in being one of the few world producers of furniture that actually does not have to import wood. Although Argentine producers do have to pay international prices for the wood they use, they do have the advantage of having lower shipping costs.

26 China’s case is the result of an industrialization process that took part in the nineties, through foreign direct investment and joint-ventures’ development. Many firms have been established in Chinese territory with foreign capital. Some of the investing countries are the US, Italy, Germany, Denmark, Spain and Singapore.
customized products that can be adapted to changes in consumer tastes. This is evidently the avenue being pursued by the majority of Argentine firms in this sector.

Globally, the furniture industry is characterized by a diversified demand that results in the existence of a variety of distinct market segments. Moreover, the demand for furniture varies considerably with changes in styles and trends, so producers have to have flexible organizations that are capable of changing designs and production with changes in the market. Secondly, patent protection is weak in this business. Therefore, firms face difficulties in capturing returns from innovations. Finally, economies of scale do not play a significant part in comparison to other industries. Although there are a few exceptions, firms in this industry worldwide, as mentioned above, tend to be small.

Value chain of the wooden furniture industry

In this section, we provide a schematic description of the value chain of the wooden furniture industry. We have included the main roles in this value chain from the growing of trees to the end-consumer. Figure IV.6 shows this value chain.

![Figure IV.6: Value chain of the wooden furniture industry](image)

In this Figure some roles have been grouped together, such as that of the manufacturing of other materials, while others such as the suppliers to the manufactures of other materials have not been included at all. This simplification was made to facilitate the description of the most relevant roles. Some roles were excluded because they were not considered to be determinant factors in either the value chain or the discovery-diffusion process. Next, we describe each role of the wooden furniture value chain.

**Tree Growing**

There are two main types of trees used in manufacturing wooden furniture, conifers and laticifers. Dark tropical and light woods in the latter are most frequently used for furniture manufacturing. These trees
yield high quality woods and are sourced from natural forests. Traditionally woods such as eucalyptus, which are neither dark tropical or light woods but which are part of the laticifer category, are used for industrial purposes. Improvements in the quality of wood from eucalyptus trees, along with the fact that they are generally harvested from planted pieces of woodland, have caused them to be increasingly used in the production of wooden furniture. Environmental restrictions related to the use of most laticifers, have caused manufactures to begin making more furniture from conifer. Traditionally fast-growing tropical pines were shunned by the industry because of their low quality. Today, producers of wooden furniture are increasing turning to them because of restrictions placed on the use of other woods. In general eucalyptus and pine trees are preferred because they are planted and harvested and not simply taken from existing forests.

Argentina’s geography is suitable for growing conifers. Thus, this country has a distinct competitive advantage as it is able to go against the general trend of using lower quality pine. Nevertheless, wooden furniture manufacturers are reluctant to switch from carob wood, the traditional preference of firms in Argentina, with eucalyptus or pine because neither is as noble or as stable as the former. Ivope, one of the leaders in this industry has recently started experimenting with using eucalyptus wood but currently believe that it can only be used for certain models of furniture. Hence, they can not use it to fully replace carob. Part of their problem in using eucalyptus wood is the fact that their clients are accustomed to a certain style of furniture that is made with carob. Furthermore, the later is much sturdier than eucalyptus and sturdy, large furniture is one of their hallmarks. Mehring, another one of the leaders in this industry uses pine for almost all of its furniture and is not interesting in switching to other types of wood. Ivope is the only exporter in Argentina that certifies that its wood comes from planted forests. One major consultant in this industry has said that clients in Germany are practically the only ones which want to be assured that the wood in the furniture they buy comes from certified forests. There are only a few environmentally conscious people who worry about this issue at the time of purchase in the United States.

Wood board manufacturing

Wood board manufacturers buy logs and product boards from growers. In the manufacturing process, logs are sawed in different ways to obtain wooden boards. The sawing process produces scrap, consisting of mainly wooden chips that are then used to make pressed wood. Both types of boards are the main inputs for the furniture manufactures. Generally, wooden board and furniture part manufacturers are located close to forests. The transportation of logs on special trailers can be considerably costly. The fact that there are few producers of wooden boards and pressed wood in Argentina causes buyers to be at a relative disadvantage.
Furniture parts manufacturing
We consider furniture parts to be those components that are central to the furniture manufacturers. Such parts can be critical in convincing the final consumer to buy a piece of furniture. There are other materials used for wooden furniture manufacturing such as stains and glues that do not have a significant impact on the end-customers purchasing decisions. Since they are not critical for the production of wooden furniture, they are not specifically discussed.

Furniture parts can be made by the furniture manufactures or they can be sourced from a supplier. Furniture parts include wooden parts and other parts made of metal or plastic. Manufacturing furniture parts requires equipment and skills that these manufacturers generally do not possess. Consequently, wooden furniture manufactures tend to rely on close cooperation with these suppliers, even to the extent of sharing design specifications with them. Since parts are tailored made for every particular piece of furniture, manufacturers in this industry need to coordinate their production with that of their supplier. In general, these suppliers provide wooden furniture manufacturers with economies of scale that they could not enjoy if they decided to do these operations themselves. For the most part, wooden furniture manufactures in Argentina tend to rely on suppliers to produce particularly intricate parts. They chose to outsource such production largely because they do not own the numerically controlled machines required to make such components. They can potentially make such parts by hand but this simply requires too much time. In the general region of the province of Santa Fe in which three of the major manufacturers are located, there are three small shops that specialize in using numerically controlled machines to make such parts.

Wooden furniture manufacturing
There are two general organizational models for wooden furniture producers throughout the world. The first model, the German style of organization, is dominated by large and medium-sized companies that outsource little if any of their production and focus on the economies of scale using advanced machinery. The second one, the network-based Italian model, consists largely of smaller firms that outsource the production of components parts to closely linked suppliers. Both are addressed below.

Networks of suppliers and producers in the Italian wooden furniture industry generally consist of firms that design, furnish and assemble furniture and those that supply component parts. By working closely with a large number of suppliers within the network, helping them to upgrade their production and resolve technical issues, the first type of firms are able to rapidly adapt their products to changes in consumer
tastes while also ensuring that the component parts meet particular specifications and levels of quality. Occasionally these networks include a lead firm which designs and exports furniture assembled and furnished by others in this organization. Such firms negotiate with foreign buyers on behalf of the other firms in the network, thereby enabling lead firms to provide their clients with a wide variety of different products. Hence, these networks are able to supply markets with a wide array of products adapted to the latest trends while also being able to deliver the volume of goods generally sought by distributors. With the help of the Italian embassy in Argentina, Mehring, one of the lead firms in this industry in this country, recently began forming such a network in order to be able to achieve similar results.

As mentioned above, Germany is the second worldwide producer and the main European consumer of furniture. Its imports exceed its exports due to high per capita income that allows the German population to maintain high levels of consumption. In contrast to the Italian case, German producers are considerably vertically integrated. They tend to dedicate their operations to a few product lines and offer a limited variety of furniture models. The largest 10 producers account for over 25% of total production in Germany. Their competitive advantage lies in economies of scale in production, commercialization and financing. The products of these companies are considered to be high quality, durable and functional. Although the quality of the production is indeed world-class, the production system does not enable manufacturers to adapt easily to changing styles.

*Distribution*

Wooden furniture manufacturers tend to sell their products to distributors and not directly to the end-client. Larger distributors tend to specify the design of the furniture they are seeking while smaller ones buy products designed by the furniture manufacturer or an agent contracted by that party. Some smaller scale distributors work with manufacturers to help them design furniture. There are no international distributors that actually have offices in Argentina. International intermediaries in general are not interested in establishing a foothold in Argentina because the quantity of furniture sold from this country simply does not justify it.

*Retailing*

There are a variety of retail outlets. Generally these stores tend to specialize in selling practical furniture, do-it-yourself furniture kits, medium-range furniture, or high-end products. While higher priced furniture is mainly sold through specialty stores, the lower end products such as practical furniture and do-it-yourself furniture kits are sold through home-improvement retailers. The latter tend to impose design, marketing, quality, labor and environmental standards on the manufacturers of the furniture they buy.
These stores prefer “ready to assemble” or “do it yourself” lines as they have lower shipping and assembling costs. The former look more for independent producers who are able to design their products on their own. As discussed below, this would appear to be the market segment best suited to the capabilities and limitations of Argentine exporters.

**Design**
Traditionally, design has been a key differentiating factor for higher-end furniture. However, it has recently become an issue for lower-priced items as well. At present, even do-it-yourself furniture kits need to have to some sophistication in order to be accepted by end-customers. Moreover, to some extent all manufacturers have to take into consideration particularities of the country to which furniture will be exported. Dimensions of products have to be adapted to the particularities not only to the particular tastes of people in the target country but also to the particular dimensions of the people themselves. Furniture designed for the small, but luxurious, apartments in Japan, will not fit the spacious rooms of the houses of the upper-middle class in the United States. Even within a country, differences in styles and dimensions can be significant. In the end, one of the key elements for successfully exporting furniture to other countries is the adaptation of this product to the particularities of a particular country or region. If such adaptations are not made, even a high quality product will not sell in the target country. Details regarding how vary across countries and how they change over time are discussed at greater length under the section entitled product upgrade.

**The evolution of wooden furniture manufacturers in Argentina**

Although the manufacturing of wooden furniture has a long tradition in Argentina, it has traditionally not been an important export sector in this country. When firms in this sector did export, they customarily were simply taking advantage of sporadic, one-time opportunities rather than seeking a more systematic way of developing this potential source of revenue. Consequently, they tended simply to export what they sold in the domestic market. In the 1990s some companies started to take advantage of opportunities to simply produce furniture designed by a specific client without seeking to leverage such opportunities to generate further exports by either actively seeking more clients or diversifying the type of products they actually produced.

Argentina has the proper factor endowments to be an exporter of wooden furniture. Contrary to most of the leading manufacturers of wooden furniture in the world, Argentina companies have ready access to wood. Although some companies in this sector are currently looking to purchase some machines to
improve the performance of specific tasks, firms in this sector generally possess the necessary equipment to produce high-end furniture. This sector is dominated by small-scale producers. Except for Platium, a producer of low-end furniture with practically no exports outside of Mercosur, Argentina has not had any firms that resemble the German model. Argentine producers of wooden furniture, like their Italian counterparts, traditionally began as small carpentry shops that move into the production of furniture by purchasing machinery.

Although the vast majority of the owners of factories in this sector are well versed in technical aspects of production, their skills in designing, marketing, and selling new furniture to foreign markets is lacking. These latter type of skills are missing because the needs of their potential international clients are simply different than those of their clients in the domestic market. The latter customers are not accustomed to dramatic changes in the styles of furniture as they do not change their furniture as often as customers in the advanced industrialized world, the preferred target for exports in this sector. Manufacturers in this sector are also accustomed to producing the same product for a variety of clients, while international distributors in the advanced industrialized world are accustomed to having their suppliers provide them with a variety of products. As we will see under the section on product upgrade, these differences presents a distinct challenge to Argentine producers seeking to sell their products to countries like the United States in which consumers tend to change furniture more often. This is particularly true for consumers of high and medium incomes. As we will see, this is the market which most Argentine exporters in this sector are targeting.

The convertibility plan, the pegging of one peso to one dollar, in the 1990s in Argentina had a profound impact on the operations of wooden furniture producers in this country. Although it enabled firms to import new machinery at relatively low costs, it also exposed firms to increased competition from foreign producers. Imports from Brazil in particular served to undercut many producers causing some to go bankrupt. Many producers disappeared during the 1990s because of such foreign competition. This problem was only exacerbated by the decline of the economy in the late 1990s, in part driven by the Brazilian devaluation. Some of the firms that survived were only able to do so because they were exporting. The companies that took advantage of the peg of the Argentine peso to the U.S. dollar to buy new machinery were particularly well positioned to export. The upgrade in quality of these machines enabled firms to cut and mill wood more precisely, thereby enabling them to target higher-end markets abroad as even higher-end consumers in Argentina do not pay as much attention to details as similar clients in foreign markets like the United States, the major importer of Argentine products from this industry.
The firms that exported during the 1990s generally viewed this activity not as one requiring a separate strategy, but rather an activity to be undertaken merely to survive until the internal market recovered. In essence, manufacturers in this industry viewed foreign markets as secondary to the domestic ones. Hence, they tended to export excess stock or take advantage of specific opportunities that may have happened to appear. The vast majority of firms did not have a specific export strategy nor did they produce products that were only for export. In the cases in which they did make furniture only for export, the business seems to have arisen out of sporadic opportunities and not out of a specific strategy. The furniture that they did export that was not part of one of these opportunities was generally the same as what they were selling domestically. They did not adapt their products to foreign markets but instead sold abroad the same furniture that they made for the internal market. It was common for firms in this industry to view exporting merely as a means for overcoming the declines in the domestic market resulting from recessions. They would concentrate on exporting simply until the crisis passed and then they would turn their attention to the domestic market. Many firms still have not changed their overall strategy in terms of exports despite the fact that it could prove more profitable if firms began working closely with their international distributors seeking to develop products that are oriented toward their particular needs. Naturally, this type of relationship with a distributor would require firms to differentiate themselves not only through their products but also the services that they provide their clients.

Nonetheless, the crisis of 2001/2002 was apparently a turning point. It convinced a growing number of firms to develop specific export strategies that went beyond merely relying on foreign markets as a means for surviving fluctuations in the domestic market. They began to see these markets as a potential source of consistent growth and revenue. To fully tap into these markets these firms realized that they would have to develop products targeted specifically at certain foreign markets and seek to establish consistent contacts with distributors. Although some firms in this industry have this vision, many of them do not know quite how to implement it. As will be demonstrated below, there are firms and a broker in this industry that understand better than other companies what they actually need to change to realize a new strategy for exporting. In general many producers in Argentina know how to produce high quality furniture and they have the proper technology and training to do so. What is missing for the vast majority of these firms the ability to adapt their products to the styles and demands of different countries and to actual sell their products abroad to a limited number of distributors on a consistent basis.

The potential orders that firms can receive from exporting can be substantially larger than what they could hope to get in the internal market. Ivope and Mehring, two of the leading firms in this sector outlined below, occasionally have to turn to other firms in the industry to help them meet such orders; once Ivope
actually had to ask Mehring for help with an order for a hotel for Disney in Florida. If done well, some firms in the industry believe that exporting can be more predictable than selling furniture on the domestic market. As we will see with our counterfactual case below, those firms which do not make the necessary upgrade tend to view more stability selling on the internal market.

Many firms are unwilling to make the long-term commitments needed to develop on-going relations with foreign distributors working from their particular countries. As outlined below, firms need to change some critical details in manner in which the produce products for export in order to meet the high levels of quality demanded from the most attractive markets like the one in the United States. Even after making such changes, it customarily takes over a year before a company can even sell its first container of furniture. Many companies try once or twice to export in this new way and then relinquish because they do not have immediate success. Furthermore, once they are initially successful, they have to work hard to meet new demands of this same client. To a large extent what wooden furniture manufactures that want to tap into the potential of demanding markets in advanced industrialized countries need to change the way they understand how business is conducted and what quality actually means for clients in such countries. The changes required to properly serve such international clients require investing in change, not in new machinery.

Although some firms are receiving more demands for greater volume and variety of products in Argentina, this has not caused leading firms to seek to move toward the German model of greater scale through mass production using automated machines. This type of production simply does not suite the high-end products that most exporters in this sector produce. Like the Italians, these firms have to be able to change their production quickly to meet changes in styles and dimensions. Mass standardize production simply makes this type of flexibility difficult if not impossible. Even our counterfactual case has not shifted to this type of production despite the fact that the changes they make to their products to export are quite minimal if any. The fact that they receive orders for a wide variety of dimensions rather than a wide variety of styles makes combined with difficulties in financing any large-scale project to make such an “upgrade” makes the firm reluctant to even think about such a dramatic change in their production style.

Some of the initial growth in exports after the economic crisis of 2001/2002 in Argentina can be explained by firms that saw no alternative but to export what they had originally intended for the domestic market. As the economy began to strengthen in 2003 these firms tended to reduce their exports and shift back to producing primarily for the domestic market. Such firms clearly did not embrace the new export model. Nevertheless, now some of these firms have started thinking about embracing this
new export model as the domestic market has started to level off. Clearly, they are behind those firms which embraced the export model after the crisis of 2001/2002.

Domestic business model versus export business model

The crisis of 2001/2002 presented firms an opportunity to reexamine the manner in which they were conducting exports. Many firms in this sector did not take advantage of this opportunity but rather reverted back to traditional practices once the internal economy recovered. Those companies that did take advantage of this crisis to reexamine their export strategy are still largely in the process of fully understanding and implementing a new export business model. The challenge of this new model is understanding the need to change the way firms understand what they need to do to export consistently over time. Firms have to change the way they work and not the actual machines they use. They have to pay attention to details, whether these involve ensuring the finish on a table top is consistent or ensuring that they are able to meet the wide variety of demands of their clients. In short embracing this model involves firms upgrading their products as well as their marketing.

Contemporary furniture would seem to be the proper market segment for wooden furniture manufacturers in Argentina. By focusing on this sector they could avoid competing directly with countries with significantly lower wages. A focus on this particular market segment would enable manufacturers to tap into the traditional carpentry skills of workers in this sector as well as the institutional structures that emerged over the 20th century to support this type of work in Argentina. In order to compete effectively in this market segment firms have to be able to consistently develop new products. By focusing on developing new products rapidly wooden manufacturers can move up market within the contemporary furniture niche and avoid competing with lower cost producers in this segment. The particular challenge for pursuing this strategy is the ability to continually design furniture that meets the changing styles of consumers in selected target markets. Although Argentina is not well known for its designers, it would seem to have the capacity to produce designers with the capacity to develop new products in this manner. Now we turn to a discussion of what is involved in upgrading products and marketing in this sector.

Product upgrade

The majority of exporters in the Argentine furniture business focus on upper-end of this market, namely contemporary furniture. In recent years consumers in the upper end of this market in advanced industrialized countries have started changing their furniture with shifts in style. Consumers of
contemporary furniture with more limited resources do not tend to change their furniture as often. Consequently, this latter type of consumer is likely to buy furniture by producers outside of Argentina that are more likely to have a system of production resembling the German model. Argentine producers would seem well suited to produce furniture for the upper end of this market as their production system is more flexible than countries with more mass-standardized systems of production. Argentine manufacturers simply can not compete with the scale of production that firms in these countries can produce. Consequently, Argentine firms have to build on the strength of their flexible production system by seeking clients that want smaller batches but more value added. Argentine firms in this sector simply can not compete with this scale of production nor the low wages paid by their main competitors, namely Brazil, China, Vietnam and Malaysia. Firms in Argentina are under the added pressure of more flexible producers in these countries that are able to copy designs and produce the same furniture at lower costs. Hence, the vast majority of Argentine producers have to focus not only on manufacturing high-end furniture but also changing the designs of the furniture they make.

In essence, Argentine manufactures of wooden furniture have to develop their own designs and work seriously over time with their distributors. Only by developing such relationships with their international buyers can they avoid the possibility that a distributor will not act in an opportunistische manner that proves to the detriment of the manufacturer. Firms that simply pursue sporadic, one-time sales are more likely to be victims of this type of behavior.

Designers are critical for wooden furniture manufacturers in Argentina. They have to know how to adapt furniture to the particular tastes of a target country while at the same time keeping up to date on the changes that are occurring in the living habits of people in other countries. Thus, they also have to be perpetually developing new products for a company’s target markets. This task is complicated not only by the fact that tastes and styles can be dramatically different from those in Argentina but also by the fact that they are changing over time. One example is how the introduction of plasma televisions in the United States - a product which is just starting to significantly penetrate the Argentina market - impacted the production of living room furniture. When these televisions were introduced in the late 1990s, firms had to create furniture to fit them. They also had to find ways to highlight the size of the television in the furniture designed to hold it. As this market became relatively saturated within the medium and upper end of the market, firms had to design new types of furniture to hide these televisions. Another example is the recent trend for people in the United States to buy furniture that looks like antiques. To give their furniture this look does not require any change in production but rather a person striking the furniture with a sharp object before it is stained. Some consumers in the United States are looking for dining
room tables that reach up to three meters in length. Making such a table does not require firms in Argentina to use different machines but rather to calibrate their existing machines differently. Nevertheless, it does require firms to find ways of designing such tables so that they do not warp over time. The problem resides in the design, not the production.

Tastes and styles within a country can also differ. Within the United States, for example, tastes and styles vary across regions. People in Chicago generally will not buy the furniture sold in New England and people in these regions generally do not like the type of furniture sold on the West Coast. Ivope, for example, sells almost all of its furniture on the west coast. They have tried to sell their products on the east coast but largely to no avail. Part of the reason behind their relative lack of sales is related to the particular style of their furniture. Their furniture is very large and dark while at the same time having hints of an American Indian style, traits that are not highly valued on the East Coast.

In general it is difficult for manufacturers in Argentina to sell pieces of furniture designed for the U.S. markets on either their domestic market or other foreign markets. The dimensions of the furniture are simply much larger than those found in Europe and Argentina. The large size of living quarters in the United States as compared to these other countries is one of the reasons why there are such differences in styles. Because of such differences even across Europe, firms that seek to sell their products in more than one foreign country have to adapt their furniture to each country. The tastes and styles of some countries can actually prove to be similar to that of consumers in Argentina. Mehring actually discovered that they could sell table and chair set in Spain that they sell in Argentina. Firms need to study their potential markets carefully, as such cases are indeed rare. It is more than possible that a firm can fail in exporting a particular piece of furniture even when the quality is exquisite simple because it does not fit the current tastes of the target country.

Manufactures seeking to export on a consistent basis are under pressure to develop new products rapidly. While Mehring attempts to develop new products every 2 years, Ivope tries to have at least one new product ready for the world renowned trade fair in High Point, North Carolina that happens every six months. This trade fair is the most important in the world with over 750,000 square meters of showroom space. Manufacturers and buyers from countries around the world travel to High Point twice a year to learn about new development in the industry and make commercial contacts. The innovations which firms make for this trade fair are not necessarily radical ones. Sometimes they are nothing more than new variations on older products. Ivope, for example, recently introduced new tables with metal instead of wooden legs. Mehring recently started producing chairs with leather instead of its traditional cloth.
covers. In developing such products companies have to pay careful attention that they do not cannibalize their existing products. Ideally firms would like to continue selling their older products while at the same time expanding their market share with new ones.

Although Argentine universities are producing qualified wooden furniture designers, only recently have producers demanded trained professionals who know how to design furniture for other countries. In the past, companies sold Argentine designs, so there was no need for professionals with these skills. It is important to highlight that the quality of the designs in Argentina would appear to be relatively high. They are simply not the designs that foreign customers want to buy. Quality in designs is not the issue but rather the type of design is the problem. Most local designers would seem to simply lack the skills necessary to adapt products to the tastes and styles of different countries. IVOPE works closely with its sole client in the United States to design products for that country. Other firms work with Jorge Etchebehere, and his sales representatives in the United States to adapt their products to this market. These sales representatives actually sell the furniture of these producers in the United States. They travel to Argentina to provide local producers general advice about styles and trends in that country. With this information, designers seem more than capable of producing designs of the types of products desired. In the end Argentine designers would seem to be capable of learning how to adapt furniture to the particular styles of people in advanced industrialized countries. These designers do not need new skills but rather, like the firms for which they work, they need to develop a new way of approaching what they are designing. In this sense, what they are missing is information and very specialized training in the particular customs and habits of the country for which they wish to design furniture.

In order to produce the type of furniture being demanded by consumers in advanced industrialized countries, wooden furniture manufactures do not have to make investments in new machinery. Changes in designs only require changing the calibrations of machines to produce products with different measurements. For example, the dimensions of chairs and beds are simply larger than those found in Argentina. Hence, producers simply have to make pieces a little larger. In developing a new product, a company may decide simply to change its legs. Hence, the need to make new matrices for this part is the only change that needs to be done. These matrices are simply put in standard machines that cut or mill along the given pattern. The actual work of the operator of the machine does not change nor does a producer need new machine to make this part. If the part is particularly complicated requiring a numerically controlled machine, firms tend to outsource the production of the particular part to suppliers that have such machines. Even for such companies the actual work varies little. It just involves an individual programming the machine to perform a particular operation. Once a person has learned to
program the machine, they can practically produce anything required for a piece of wooden furniture. The actual assembly process for a chair with larger dimensions or a table with iron legs is basically the same.

As far as production is concerned the critical difference between furniture produced for the domestic market and those produced for export lies in the attention to detail paid by the workers performing a particular task. Producing products for export in this sense does not require workers to have new skills but rather to have new ways of operating that focus on small details that make the difference between a product for the domestic market and one for export. In this sense quality is produced not with different skills or with different machines but rather with workers that are trained to pay attention to small differences.

Workers in Argentina are not accustomed to paying particular attention to the exact size of the pieces of wood they are cutting. If it is one half of a centimeter more or less than what is stipulated in the design, consumers on the domestic market will still buy it but foreign distributors will reject it. The same is true for staining. The domestic market does not require a particular piece of furniture, more or less two separate pieces in the same set, to have a consistent color. Variations even in color of the surface of a table are acceptable in Argentina but not on the demanding international markets in the advanced industrialized world. Differences in color across the same surface in a piece of wood result not from problems in the staining process but rather customarily from problems in the drying process. Those firms that can export in Argentina generally have their own machines for drying wood. Their workers also know how to use them. The problem results from workers not paying careful attention to the drying process. Workers also can not use wood that have knots in them for products that are intended to be exported. For the domestic market this detail is not important. Despite the fact that packaging is not customarily thought to be important for products such as wooden furniture, it proves actually to be an important issue for exports. In the domestic market firms do not have to worry about how their products are boxed but for exports it is an important issue. The client wants nice boxes with no marks indicating that somehow the furniture has been thrown about. In general international customers would seem to be more critical about the details than the usual customer found in Argentina.

Customers in Argentina simply do not pay attention to such details. Even people who have been working in this industry in Argentina sometimes do not detect minor flaws that are obvious to people in countries like the United States. Hence, it is generally important for firms to have some feedback from consultants familiar with these issues before they attempt to export to advanced industrialized countries. All of these
details have to be addressed for a distributor to consider buying a piece of furniture from an Argentine producer. The problems are relatively small but as we will see if they are not addressed firms can have difficulties in consistently making sales to a particular country. As we will demonstrate, the person we have identified as our Jorge Etchebehere is working on diffusing this knowledge throughout the industry. Potentially such quality upgrades can prove to be a positive spillover for the domestic market as companies learn to produce furniture with higher levels of quality. Nevertheless, for this upgrade to occur, workers have to get accustomed to working in a different way. Once these workers have developed “quality habits”, working in this way can become a routine.

Manufacturers in this industry in Argentina also have to ensure that their suppliers are producing component parts that meet these requirements. In this sense, the formation of an industrial district on the lines of that which exists in Italy could help address the problem of diffusing this information to suppliers in this industry in Argentina. Although some suppliers can produce component parts at the level of quality required for exported furniture, they are usually reluctant to invest in matrices. One of the leading export firms claimed that their suppliers do not have difficulty producing necessary components. The difficulty emerged in convincing the supplier to invest in the production of specific matrixes necessary to produce these components. The quantity of parts demanded by this particular client does not justify the investment in making these matrixes on the part of the supplier. This lead firm says that sometimes they can convince suppliers to produce the necessary matrixes by explaining to them that other firms exporting to the United States will need the same component parts. In essence the problem of scale requires firms to seek ways to convince their suppliers to make the investments required for them to properly supply what the firm is demanding. With greater coordination between suppliers and their clients in this industry, perhaps through an industrial district, this problem could be addressed.

Marketing upgrade

In addition to the problems associated with designing and producing products properly for export markets, firms in the wooden furniture export business in Argentina also face a significant problem in moving beyond mere sporadic, one-time exports to a consistent export strategy. As outlined above, this switch involves a dramatic transformation of the manner in which the vast majority of exporters in this business are accustomed to conducting transactions. They can no longer simply export excess stock. They simply are not accustomed to working closely with a limited number of distributors to develop a variety of products over time. They may have a few clients abroad to whom they sporadically sell the same product, but they have not transformed the way in which they conduct business with foreign clients. Although
Argentine producers have traditionally handled limited volumes of production for export, they are nonetheless not accustomed to meeting specific demands of their distributors. If an Argentine firm can prove to a distributor that it can meet their requirements, this person is likely to work with this firm in the future. If not, the distributor will look for another manufacturer. What appears to be a one-time contract for specific goods can be turned into a long-term relation if the manufacturer takes the time to ensure that a contract is fulfilled in the way desired by the customer. There would appear to be sufficient distributors looking to work with wooden furniture manufacturers from Argentina. The challenge for firms in this country is not only to change their quality habit in manufacturing, as outlined above, but also to change their perception about how they work with their distributors. They have to invest time and money in developing relationships with them instead of just seeking sporadic deals that can be terminated quickly.

Once an Argentina factory starts working closely with its distributors, they often find that these distributors are demanding volumes and variety beyond the capacity of a single Argentine factory. In the past they had simply sold what they had or made specific products to order. Now, they are confronted with distributors who want a large variety of goods from the same producer. If the wooden furniture manufacturer is unable to deliver the variety desired, the distributor is likely to look for a different partner. Even firms that have the resources or can potentially obtain them are reluctant to increase the size of their operations due to fears that foreign demand may not be stable or that macroeconomic conditions might change.

Hence, leading firms in this sector often turn to other manufacturers to help them meet the demands for quantity and variety demanded by distributors. Organizing the production of these goods can prove just as difficult as adapting products to the tastes of a particular country. Problems arise because many companies simply either do not fulfill their obligations or they send products that do not meet the quality standards in terms outlined above demanded by consumers in the developed world. The export manager of Mehring works very closely with the other companies he contracts for foreign orders to ensure that they are making products that meet these quality requirements. He works to ensure that the size, color and consistency are correct. He often tests firms with small orders to see if they can meet their quality requirements. He monitors their operations closely to ensure that they are manufacturing products the way they should because he knows that if bad products are sent under his name, it can damage his reputation and lead to a decline in their international sales. Jorge Etchebehere’s operations in this regard are similar to those of Mehring. The only difference is the fact that he is an intermediary and not a producer.
In order to work more closely with the firms that supply them with pieces of furniture for export, Mehring has started to form an industrial district based on the Italian model in order to resolve this problem. This company contends that the industrial district is one of the keys to Italian success in this business. Except for these districts, Argentine furniture manufacturers would seem to possess almost all of the resources to directly compete with Italians in this market. They have the raw materials and knowledge to produce furniture at this same level of quality as their Italian counterparts. The prices that some Argentine manufactures have fetched for their products in this segment would seem to indicate that they are more than capable of competing directly with the Italians. Besides the structure of an industrial district, Argentine manufacturers also have to contend with the fact that the Italians designers are widely recognized in this field. In general within the contemporary furniture segment, manufactures tend to associate themselves with a well-known designer. Clearly, the latter strategy proves more difficult in Argentina. Nevertheless, intermediaries like Jorge Etchebehere are attempting to develop designers capable of making designs similar to their Italian counterparts. Clearly Argentine is decades behind their Italian competitors. However, they are undertaking initiatives to catch up. In many ways, Jorge Etchebehere already operates an industrial district, albeit in a virtual form.

There is general agreement in the industry that firms have to seek to develop distributors who act as their partners in foreign countries. Companies have to move beyond the mentality of looking at each sale as an isolated event. The key is selling greater quantities and varieties to the same distributor rather than looking for new clients. Firms can even chose to work with just one distributor in a particular country. Although the vast majority of wooden furniture makers in Argentina are targeting the upper end market, brand names are customarily not important. The final customer usually is not even aware of the name of the company that produced her particular piece of furniture. Clearly a brand name can help generate business with a distributor but it is not necessary for wooden furniture manufacturers to invest time and money in developing and marketing their brand name in the traditional sense of undertaking advertising campaigns. Instead they need to build a reputation for their company through their ability to meet the varying demands of their clients in a timely way with products meeting the quality standards demanded by consumers in the advanced industrialized world.

Despite the fact that brand names would appear not to be important for this industry, the idea of having a country trade mark is appealing to most companies in this industry. If Argentina became known for producing good furniture, there is the potential for all the firms in this sector to grow. The market in the United States alone could more than accommodate all manufacturers in Argentina. Even smaller markets can potentially be big markets for this sector. The fact that many leading companies are helping firms to
upgrade the quality of their production in terms outlined above, indicates that firms are not afraid of diffusion knowledge within the sector. Their greatest fear would seem to be the possibility that companies which are not serious about exporting can undermine the image of those that are. Paradoxically the diffusion of information about how to improve the quality of wooden furniture made in Argentina and improve relations between distributors and their Argentine clients, could lead to larger sales for all of the businesses in the sector.

This is an issue that The Argentine Federation of Wood Industry (FAIMA) is attempting to address. While they do not want to prevent firms from exporting, they do not want to undermine the success of those who have established themselves as quality producers. The top management at FAIMA believes that some type of quality certification is necessary for furniture exported from Argentina. They are working with a group of Italians to develop this type of certification. In contrast to people at the Federal Council on Investments, some participants in this industry believe that not all Argentine producers should be allowed to display their products at the internationally renowned trade fair of wooden furniture manufacturers in High Point, North Carolina; attendance at this biannual trade fair is almost obligatory for any company that wants to export to the United States as it serves as the main arena for companies across the world to demonstrate their new designs and meet with U.S. distributors. The observers contend that companies have to prove they can make new designs and produce good products at reasonable prices. If any firm is allowed to participate in this trade fair, it has the possibility of undermining the producers that are producing to these standards. Argentina has to be associated with a high quality product.

Those firms in this sector that obtain contracts to export to a foreign country and do not fulfill these contracts with furniture that meets the quality standards of that country can undermine the possibility that the distributor involved will work with the firm in the future. Companies in this sector that operate according to the old business model sometimes look for export contracts when their sales on the internal market decline and then abandon these contracts in mid course when their sales on domestic market pick up. This behavior clearly undermines the possibility that the distributor involved will work with the company in the future. Adapting the new business model also requires firms to change the way in which they fulfill their contracts. In the domestic market delivery and payment times are often negotiated after a contract is signed and even after these terms are set, it is understood that there is some flexibility. So a manufacturer can delay shipping products and buyers can delay paying without severe repercussions. This is simply a custom in the domestic market. However, such behavior in the international market is intolerable. Hence, firms have to learn how to work in a different way when they chose to export. This could appear to be minor issues but it can make the difference in the success or failure of a company’s
exports. These issues revolve more around customs than the lack of some type of infrastructure. It is just an accepted way of doing business on the domestic market. Apparently, wooden furniture manufacturers that can adapt their products to the styles of a particular market can be successful without changing their back office procedures. However, those companies that have been successful realize that they need to turn their attention to these issues if they are to continue exporting consistently to countries like the United States.

In the end, firms in this sector have to make a long-term investment in changing the ways they operate their back office operations and in the ways the address quality concerns of their potential clients. Investments in new machinery would not appear to be a critical issue. However, firms have to make concrete capital investments in developing their foreign markets. They have to be willing to travel, spend money, participate in trade fairs and even send some of their products free of charge to potential clients abroad. Yet, building a new export business model goes beyond merely attending trade fairs. Firms also have to deliver quality products in a manner that accords with the specific demands of their clients. Many firms either do not understand that they have to make such investments are abandon the new export model when they realize how much time and effort it takes to convert their operations to meet the specific demands of foreign clients.

**Pioneer**

Jorge Etchebehere is a commercial agent who not only fully understands the new export business model but also helps firms to implement it by directly working with them to upgrade the quality of their production and upgrade how they market their products abroad. His personal experience in this industry exporting furniture for a number of Argentine manufacturers of wooden furniture provided him the vision of what firms need to do to compete effectively on the global market. His experience in helping firms to implement this business model in the areas of design and production has helped him to further refine this model. His first experience selling furniture in the United States taught him that wooden furniture manufacturers need to pay attention to small details in their production in order to effectively export their products, while his interest in the U.S. culture and contacts with people from that country taught him that the people from the United States are obsessed with quality in their products and the services that back them up. His experience with a designer he hired to evaluate the prototypes of his clients taught him that small details in a design can be critical in determining the successful export of a product. Finally, his work with sales representatives he hired from the United States to help manufacturers adapt their furniture
to the tastes of upper-end consumers of wooden furniture in the United States enabled him to begin training Argentine designers to adapt furniture to the tastes of consumers in that country.

Although he is technically a commercial agent working to export wooden furniture, he is in reality more like a consultant. His only direct source of income from these manufacturers is the commission on the sales that he makes in the United States. He offers his “consulting” services to his potential clients because he believes that if these firms do not adapt the new export business model, he will not be able to export any of their furniture. In this sense, he is acting to diffuse knowledge about this export business model while at the same time trying to benefit from the diffusing of this knowledge. He often visits the factories of his clients to help them make the product and market upgrade. With regard to the former he shows them how small mistakes in the production process lead to quality problems that will not be tolerated by customers in the United States. He also explains to them that they have to be careful about the way they dry their wood as this affects the consistency of the staining process. He also brings his sales representatives from the United States to show his clients how to adapt their products to the tastes of consumers in that country. As for the market upgrade, he works directly with the owners of these companies to convince them to commit themselves to an export project and to fulfill their promises. Etchebehere is still in the primary stages of establishing his business. Although he represents a number of different companies in this industry, his total sales for any particular year would not equal more than that of the 10th largest exporter in this sector. The most significant problem he faces in expanding his business is convincing the firms he represents to be committed to the project of fully implementing the new export business model.

Jorge Etchebehere’s experience in dealing with people from the United States began in 1969 when at the age of 16 he was an exchange student in New Jersey for 3 months. It was at that time he began to understand the way of life of people in that country. He used the knowledge he gained about the U.S. culture in a job he had when he was working for Argentine company selling seeds and fertilizers provided to them by Monsanto. Although he did not work directly for Monsanto, this company provided him training in sales and marketing on a regular basis by their representatives that traveled to Argentina from the United States for that purpose. Usually they used translators but they did not need them to interact with Jorge. He also helped these representatives with presentations they made in Argentina and interacted with them on a social basis as well. He eventually stopped working for Monsanto when he had to take over 500 hectares of farmland; some of his clients were not able to pay him so he took the land as a means for covering their debt with him. He had to sell the land after he had a bad year.
In 1991 he began working for Genoud, an important manufacturer of furniture in Argentina, as a sales assistant. In the first two years he worked with this company he traveled around Argentina selling furniture. Two years later the president of Genoud decided to send Etchebehere abroad to sell furniture for his company. Even though he had not had any previous experience in exports, he soon found himself taking a 6-month course from a local university and leaving for his first trip to the United States as a sales representative for this company. On that trip he realized that the products he was attempting to export would not sell themselves. His potential clients were asking for a lot of technical information that he could not provide. Consequently, on his initial trip he did not sell anything. Although other Argentines in this industry have come back from similar trips thinking that the companies that they met simply did not like their products, Etchebehere’s experience working and socializing with people from the United States taught him that this was not the case. The people he met on his trips just wanted to have more information about his products. Etchebehere did not have this information and so he returned to Genoud’s factory to familiarize himself with every step in the production process. At this time, he also took advantage of the fact that the president of Genoud at that time was also the president of FAIMA, the Argentine Federation of Wood Industry, to travel around the country with him visiting different wood furniture producers. Six months after his return to Argentina to familiarize himself with how furniture was produced in this country, he returned to the United States and began selling furniture for Genoud.

As a result of his visits and the number of different orders for a variety of different furniture products he made when working for Genoud in the United States, he realized that he did not have to limit himself to selling furniture for just one Argentine company. He could represent many of them in the United States. In 1997 he decided to create his own company, moving from Pergamino, where Genoud is located, to Buenos Aires to establish it. Shortly there after taking this decision he decided to put an advertisement in a trade magazine in the United States indicating that he was looking for sales representatives in this business. He received 20 resumes. He sent pictures of the furniture being produced by various Argentine companies to all of the people who responded to his advertisement and one of them, a designer, wrote him back contending that none of these products could be sold in the United States. He told Etchebehere that the furniture was well made but was not designed in a way that would make them appealing to consumers in the United States. Etchebehere contracted this person to come to Argentina to help companies adapt their products to the styles and tastes of the United States. While he was undertaking this activity he also managed to help Fontenla, one of the leaders in this industry outlined below, to sell its first shipment of furniture to the United States. He has also helped make commercial contacts for Mehring in the United States.
In 2001 he developed a project with the Federal Council on Investments (CFI) to start helping manufacturers to learn how to upgrade the design of their products so that they could export. He organized meetings with groups of companies and two specialists on U.S. furniture to teach Argentine manufacturers of wooden furniture how to make products suited to the tastes of people in that country; this project is detailed below in the section on diffusion. In 2003 Etchebehere contracted two sales representatives in the United States who have more than 30 years experience in the industry in that country. Together they formed Argentine Resource Goods (ARG) to sell furniture in the United States. This company operates a warehouse in Washington DC in which they store products of various Argentine producers. They also represent the interests of eight Argentine wood manufacturers. Although Mehring is one of the companies that they represent, Etchebehere basically just acts as an agent for them. ARG has a 300 square meter showroom that distributors can visit to see the furniture of the 8 Argentine companies that they represent. Their warehouse in Washington DC enables potential buyers to purchase merchandise from several different Argentine companies without having to wait for the delivery from Argentina. His partners in ARG in the United States also work on commission. Even when his partners come to Argentina to provide advice to potential clients, they are not charging their potential clients. They work with them with the hope of being able to sell the manufacturer’s products in the United States. In many aspects Etchebehere’s commercial structure resembles that of the industrial district that Mehring is in the process of creating. Mehring, like Etchebehere, exports furniture produced by other companies. They are also work with these companies to help them make the necessary product upgrade.

These representatives come to Argentina on a regular basis to provide general advice and help Argentine firms adapt their furniture to the tastes of people in the U.S. market. In these meetings, they provide general advice about how these firms can improve quality, packaging and even pricing. However, they also provide very detailed advice about styles and tastes in the United States. Although they provide these producers advice on measurements, dimensions, sizes, weights and general appearance, their help goes beyond these technical issues. Their assistance is critical because they often detect the type of quality errors outlined above in furniture that Argentine producers are seeking to export. They also provide local designers an understanding of how their potential clients live, what criteria they have for choosing furniture, what colors they like, etc. It is even important to understand how they eat and how they place furniture within their homes. These details help designers to properly understand the particular tastes of the end-client in the target market. In these meetings Etchebehere attempts to create a dialogue between these representatives and the firms he represents. This interaction enables firms to produce unique pieces of furniture that they can position well in the market. Etchebehere contends that it is important to start the process by thinking about what design and quality characteristics clients abroad are
seeking and then going back to the design and production process to see how these issues can be addressed. Etchebehere believes that it is critical to involve managers from every part of the production process in these meetings. As mentioned above, this is a long-term investment that can take years to yield results. Some producers are just unwilling to commit the time to make these changes. Etchebehere contends that firms have to understand that it may take a lengthy period of time before a firm actually sells anything abroad. Nevertheless, many producers stop trying to export if they do not succeed after their second attempt.

Because Etchebehere is a commercial agent, his source of income are commissions that he collects on sales. His partners in ARG in the United States also work on commission. Even when his partners come to Argentina to provide advice to potential clients, they are not charging their potential clients. They work with them with the hope of being able to sell the manufacturer’s products in the United States. In many aspects Etchebehere’s commercial structure resembles that of the industrial district that Mehring is in the process of creating. Mehring, like Etchebehere, exports furniture produced by other companies. They are also work with these companies to help them make the necessary product upgrade.

**Diffusion**

No firm in this industry fully understands all of the components of the new export model we have outlined above and therefore no firm has fully implemented it. Although Etchebehere fully understands every part of this model, he is still in the process of convincing firms to implement it. In this sense, diffusion is not complete.

Nevertheless, there are some firms in Argentina who have implemented parts of this business model. As we will demonstrate below, Mehring appears to be the firm that has most fully implemented it at this time. This company understands and has fully implemented the components of the product upgrade. However, it has yet to fully understand and implement components of the marketing upgrade. It has yet to develop long-term relationships with distributors to which it can consistently supply a diversity of furniture. Ivope, on the other hand, has pursued a business model distinct from the one we have outlined above and its model has not diffused within the industry. It is distinct from other companies because the company does not conduct any sales from Argentina. They only produce furniture form this country. The designs of its furniture are largely done in the United States. Its sole distributor is its majority shareholder who lives and works in the United States as the owner of a distributor that sells furniture from Ivope and another company in Peru. Each case is discussed in turn.
Gerardo Mehring founded his company in 1953. In 1980 he went to Italy to buy machinery and upgrade his plant with the machinery he would need to export. At that time, he did not have any international clients but he knew that he would have to upgrade his facilities to be able to export in the future. Shortly before his trip he recognized that the buying power of the Argentine consumer was declining while at the same time the exchange rate of the Argentine peso made the purchase of machinery abroad relatively inexpensive. With the machinery bought in Italy he created the first production-line factory in this industry in Santa Fe. Until that time, all of the producers in that province were organized like traditional artisan shops.

The process of developing foreign clients took some time. By the late 1980s Gerardo Mehring tried to gain access to foreign markets by taking some of his chairs to foreign embassies with a hand-written letter by him explaining what his company was producing. His idea was that the embassies would send the furniture back to their home countries and hopefully make some contacts for his business. The first real experience with exporting did not come until 1988 when the company sent its first shipment to Uruguay, making them the first furniture company to ever directly export from the province of Santa Fe. Gerardo had realized that some wholesalers from Uruguay had been buying his furniture from shops in Buenos Aires and shipping it to their country. Hence, he decided to try to ship his furniture directly. He stopped exporting to Uruguay shortly thereafter due to the high tariffs and the bureaucratic difficulties imposed by Argentine customs.

In 1990 Mehring was approached by Reno, a producer of kitchen furniture manufacturer detailed in our counterfactual case, Mehring agreed to produce this bed despite having never produced a futon sofa bed before. The company with which Mehring made the contract sent a designer to their factory in Argentina to help them design this product. They still export sofa beds today. However, their market share in the United States declined significantly in the late 1990s due to competition from companies in Asia. Although this product was unknown on the domestic market before they started exporting it, the company actually sells more of this product on the domestic market than it exports. Up until this point, Mehring had not made the transition to specializing in contemporary furniture.

The greatest problem Mehring faced during the 1990s, and to some extent still today, is the volume of furniture demanded by clients in the United States. They have actually lost U.S. clients because the factory had not been able to meet the volume demanded by these clients. Gerardo felt he needed time to
grow but the orders were coming in too fast and he knew that with his existing capacity he could not meet this demand. At this time, Mehring continued to export even though it was loosing money. Hence, they had recognized at this time, as outlined in the section on marketing upgrade, that exporting was long term investment. In the late 1990s Mehring would start tapping into the resources of local firms as a means for attempting to provide clients with a greater diversity of products. Still today they have trouble trying to find other producers who can upgrade their production to meet the requirements laid out in the section above on product upgrade. By relying on sporadic sales, the firm is unable to sustain a constant level of sales and perhaps for this reason is unwilling to make an investment in a further expansion of its operations.

During the mid 1990s Mehring learned a lot about the U.S. market by attending, the internationally renowned trade fair in High Point, North Carolina. This biannual trade fair is the most important one in the United States for this industry. It is where manufacturers meet distributors. At this trade fair Mehring met some potential clients and learned how to adapt their products to meet the particularities of that market. Nevertheless, the company would have to return to Argentina to see how they would be able to change their production to implement what they had learning. In essence, they were just beginning the learning process. Upon receiving a contract to make folding directors chairs they learned that people in the United States like to assemble their own chairs. Hence, the people at Mehring learned to write instructions for assembling their chairs, make drawings illustrating how to put them together and separate different parts into different types of bags. Although this type of work was totally different for this company, it gave this manufacturer a taste of what they would have to change in order to continue to export.

The clients that Mehring contacted in the mid 1990s, including the one for the directors chairs, made prototypes and worked with Mehring to adapt them to the particularities of their production process. At this time they were still not designing their own products for foreign markets. One of the most important problems Mehring faced at this time was dealing with differences in standard measurements for furniture between these two countries. These differences are what required the firm to have to adapt the prototypes made by their clients to their production process and that of their suppliers. Differences in these standards and the nature of the machinery possessed by Mehring caused them to often have to adapt such prototypes to meet their capacities and the components provided by their suppliers. To have reproduced the prototype would have required totally different machinery and Mehring realized that it was not really necessary to have it. They could simply adapt the product to their capacities. The buyers seem to have tolerated the differences in measurements.
Mehring learned the importance of integrating design into its export business model after a trip its export manager made to Puerto Rico in 1997. After having sent some designs to Mehring, the client told them that their quote was too expensive. He claimed that he could have someone produce it in Brazil at a much lower price. However, the contact was willing to buy products that Mehring itself would design. In 2000, three years after the initial contact, Mehring started exporting chairs it had designed itself to this client in Puerto Rico. These shipments were soon followed by tables and then bedroom units. They were able to make such sales because they had hired two designers to work on this and other projects. It is important to note that Mehring does not make bedroom units or tables. They contract other firms to make these items. They produce solely chairs. This experience demonstrated to Mehring that they could not compete with the Brazilians. They would have to move up market and begin competing directly with Italians.

At the High Point traded fair in October of 2000 the Association of North American Furniture designers awarded Mehring and Saloon, a U.S. manufacturer of tables to which Mehring had sold chairs since 1998, their highest award for their Dynasty Collection. The chairs that Mehring sent to be part of this collection were the same that they were selling in the domestic market. Nevertheless, the winning of this prize caused Mehring to start working together with Saloon to develop new models every year for the stand that Saloon has at this trade fair.

In 1998 Mehring began working with a local designer, Elisabet Arn, to adapt their products to the tastes and changing styles of people in foreign countries. She had been trained in Argentina and Italy and was therefore more than capable of approaching design from a foreign perspective. This designer works on commission for Mehring. She contends that it is necessary for designers to be involved in every part of the production process. In essence, she helps Mehring and other firms make the product upgrade described above. She has worked for FAIMA and CFI on projects with Jorge Etchebehere to diffuse information about how to adapt furniture to the styles of other countries. Shortly after they started working with her, Mehring sent Ms. Arn to Italy to learn about Italian industrial districts. Mehring believed that this type of organizing production and sales could help them meet their challenge of selling a greater volume and variety of products.

Enrique Mehring, the production manager, had gone to Italy in 1992 to buy new machinery and had returned interested in Italian industrial districts. This model was appealing to the managers of Mehring because it showed how a group of independent firms could work together to manufacture and sell products. Now, for example, part of the production of some of Mehring’s tables is done by one of the
firms in the industrial district created by this company. They began with 5 companies and now there are
28 in this district. The Italian embassy has been involved in helping them to construct the industry
district. Over the past three years, eight Italian experts have visited them to help them construct it.

Mehring is in charge of the design of products and production of products done by firms in the district.
Each firm produces the products and/or does the production processes for which it has expertise.
Furniture produced through the district is then sold under the Mehring name. In essence, it works as the
broker by coordinating production and selling the final products. Being a member of this district does not
prevent firms from selling their own products under their own name. Furthermore, working in the district
can help firms to improve the products that they sell under their own name. Mehring demands high level
of quality and shows the firms how to meet it. This knowledge spills over into the production that a firm
undertakes on its own for the internal market.

Ivope

The business model of Ivope is distinct from what others are doing in this sector and would seem to be the
result of pure happenstance, not out of a careful analysis of markets and production capabilities by
either Ivope or their partner in the United States. Hence, the business model of Ivope is quite distinct
from that of others in this industry. Ivope never successfully exported furniture on their own. All of their
exports were funneled through their business partner in the United States. The success of this partnership
enabled Ivope to discontinue selling their furniture in the domestic market and to dedicate 100% of their
production to solely exporting furniture through their partner to the United States. The company never
developed other channels of commercialization. Although Ivope had to upgrade their products to meet
the specific demands of their U.S. partner, it never upgraded the marketing component of their business
model as this end of their business was handled by their distributor in the United States.

Ivope started as a small carpentry shop in 1985 when the domestic demand for furniture made with carob
wood was just beginning. Although their shop was using this wood, they quickly found that consumers in
the domestic market were generally not interested in the high level of quality of their product.
Consequently, they decided to export. The company made its first shipment to the United States in 1990.
However, the buyer of this container stopped payment on the $30,000 check she had sent as payment for
this furniture. They meet their future partner in attempting to recover their container. Like them, their
future partner, Gerry Cooklin, had also had a similar problem with the same person who had bought
furniture from Ivope. Gerry Cooklin is a person of Peruvian dissent who owns Southcone, a distributor of furniture for a Peruvian company Exportimo.

In 1991 Mr. Cooklin agreed to invite Ivope to share a stand with him that he had in the trade fair in High Point. After successfully selling some of the furniture of Ivope at this fair, Southcone agreed to become the distributor for Ivope in the United States. The style of the furniture sold by Ivope was similar to that sold by Exportimo. In 1995 Mr. Cooklin bought 20% of Ivope after one of the three founding partners decided to leave the company; they remaining 13% was split between the two other owners. Two years later Mr. Cooklin bought another 40% of the company, making him the majority share holder. Southcone has one showroom in Los Angeles and another in San Francisco. They had to close a showroom in New York shortly after opening it because of the lack of sales in that region. Ivope had never sold to anyone in the United State until beginning to work with Mr. Cooklin.

Production between the factories of Exportimo and Ivope are coordinated by Southcone. In general, Ivope produces chairs and tables for dinning rooms, while Exportimo produces bedroom sets. Ninety-five percent of the chairs sold by Southcone are manufactured by Ivope. Although the factory in Peru does produce some tables, the vast majority of them are made in Argentina. Ivope does produce some lines of furniture for bedrooms and dinning room collections together with Exportimo. However, the scope is limited as coordination between these two plants is rather difficult. Problems in coordination arise for small details such as the type of wood used by each factory. In general, it is difficult to produce two pieces of furniture in different factories in different countries that have the same consistency. Although Ivope does employ two designers, the basic designs of the furniture are made by Southcone.

The majority of the sales of Southcone are in California where the firm is based. This particular state is well-known for having a variety of legal restrictions on firms especially in regards to issues involving the environment. Ivope was actually forced to stop its operations in 2000 when the California state legislature passed a law requiring chair manufacturers to use fire-proof foam. Consequently, Ivope had to stop operations for three months to find a supplier of this type of foam that could get its product certified in the United States. In constructing export business models companies should attempt to ensure that their sales are not limited to one particular state within the United States as such difficulties can arise. Other companies in this industry contend that it is advisable to actually not focus on exporting products to one country as such a focus makes a company too dependent on the economic situation of the country to which they export.
Counterfactual case

Despite the fact that Reno was one of the first companies to export from Argentina, this company has not developed a new export business model. It continues to export practically the same products in practically the same way that it did more than 25 years ago. The business model of Reno is not advisable for other companies in this sector as it is rather unstable. Foreign competitors can quickly emerge to reduce a company’s market share if, like Reno, it focuses on market segments with thin margins.

The company was founded in 1956 and was the first Argentine producer to offer modular kitchen furnishings. This sector is particularly difficult because kitchen furniture is generally customized to the space of the client or imported in standard relatively inexpensive pieces from low-end producers like China. The founder of this company traveled to Europe in the 1970s to understand the design and production of kitchen furnishings. In 1981, the company started exporting to the United States. Shortly thereafter their exports to Spain began. He had a warehouse in Los Angeles in the first half of the 1980s. He was forced to close it in 1986 because his firm was loosing competitiveness. The Company’s second experience with exporting came in 1990 when it opened a subsidiary in Spain. From there it bought parts from all over Europe and sent them back to their plant in Argentina to be assembled. Their operations were later expanded in Spain to manufacture kitchen furniture for that country. Through their office in Spain they were also able to gain financing for their projects at much lower interest rates than what they could obtain in Argentina. Currently international invoices represent 5% of their total sales. As mentioned earlier, Reno helped Mehring gain a foothold in the United States.

The products which it commercializes internationally differ little from what they sell on the domestic market. The manner in which it customizes its products, namely changing colors, finishing and details such as draw handles, is the same for the internal as well as the external market. Furthermore, it has not moved up market to produce higher-end kitchen furniture. Consequently, the high level of competition in its particular market segment means that its margins are rather slim, making it susceptible to changes in governmental policies in the area of exports. Those manufacturers in this industry that find themselves producing higher end products have higher margins and are therefore better able to absorb reductions in their margins resulting from changes in governmental policies regarding exports. The fact that the margins of this company are rather thin, has caused the owner of this company to decline to dedicate more than 20% of his domestic production to exports. He contends that dedicating any more of his production to exports could put his whole company at risk.
The export strategy of this company is partially shaped by the first export experiences of its founder, Arcadigni Reno. In one of his first attempts to export furniture to the United States he was forced to open a warehouse in Los Angeles and fill it with a six-month supply of furniture so that the buyer in the United States could be certain that Reno would not simply stop supplying him if Reno received a better offer. Reno decided to open this warehouse even though it caused him to lose money on the deal made with his client in Los Angeles as he was hoping that he could develop a long-term relationship with this buyer. This project lasted only two years, after which time the buyer simply started working with a new supplier. Similar skepticism about the reliability of Argentine manufacturers of wooden furniture by a buyer in Spain caused Reno to change his strategy by opening up a factory in that country. Unlike other leading producers in this industry, Reno is actively developing a brand name at home and abroad. Like one of the leaders in the wine industry, he contends that in the future people will be interested in brand names than the country of origin of a particular product. He believes that it is even possible in the future for him to close his factory in Argentina and start supplying this market from another country.

The role of government, associations and a broker

The government only appears to be peripherally involved in promoting this export sector. It is indirectly involved through institutions such as ExportAR and the Federal Council on Investments (CFI), two important institutions for wooden furniture exporters in Argentina. Yet these are not the only institutions helping with exports in this industry. The Argentine Federation of Wood Industry (FAIMA), an umbrella organization of different chambers of commerce in the wood processing and wooden furniture industries also provide assistance to firms in this sector. While ExportAR seems to concentrate solely on the commercialization of products abroad, the latter two organizations are directly involved in diffusing knowledge throughout the industry. These three institutions and the CFI are dealt with below. First we turn to the role of CFI before turning to the role of Jorge Etchebehere in promoting diffusion in this industry and examining the importance of the other two organizations.

The Federal Council on Investments (CFI) is an organization born out of an agreement between the provinces of Argentina to work together to promote research and recommend measures for improving investment and development in the country. One of the goals of this council is to bring technology and knowledge to groups that normally do not have access to these sources of growth. The goal of this organization is the fostering of social networks to promote diffuse technology and knowledge. This organization has played a key role in diffusing knowledge about ways in which firms can upgrade their design capabilities. This organization tapped into the expertise of one of Mehring’s designers, Elisabet
Arn and Jorge Etchebehere, to demonstrate to six groups of wooden furniture producers from five different provinces how they can adapt their furniture to the tastes of potential clients in the United States. Then they brought buyers from the United States to view these products and help them to develop prototypes. The success of this program inspired the CFI to support a trip by these groups to the international trade fair in High Point, North Carolina. CFI rented 300 square meters at this trade fair to demonstrate the products developed with the help of the U.S. designer. At this trade fair, some of these firms were able to actually sell some of the products they developed with the help of this organization.

The CFI is forbidden by its statute from repeating such programs over the long-term. Recognizing the value of this program, FAIMA decided to take it over. Now FAIMA is putting firms into contact with designers to help them adapt their products to foreign markets. These firms, working with FAIMA, develop designs with an expert in the area, develop prototypes on their own and then return to evaluate them with the designer. Like the plan developed by CFI, the idea of this project is to help firms go to the trade fair in High Point. There are about 15 companies participating in this program. Apparently, there are many companies in this sector that are looking for well-trained designers. FAIMA is also working closely with Elisabet Arn, Mehring’s designer, to train Argentine designers in this industry how to adapt their designs to international markets. They are drawing on the skills that she learned in Italy.

In general those working for FAIMA believe that wooden furniture producers have to take advantage of the current economic situation in Argentina to undertake programs to develop the sector so that firms will be ready when economic conditions are not as favorable. In addition to helping firms gain access to designers and developing a program to train designers, FAIMA is also working to help firms update their machinery and form export consortia. These export groups enable firms to join together to travel to trade fairs such as High Point. They are really only intended for such purposes and do not involve any type of formal interchange on other issues. FAIMA also has a program to help firms share consultants who address a range of common issues. This organization has made an agreement with two Italian companies to recondition numerically controlled machines in Italy that are no longer being used by Italian producers. According to the criteria set down by FAIMA, the machines have to have been made after the year 2000. The two Italian firms that sell these machines also provide firms training on how to use them.

While FAIMA seems to be primarily concerned with issues of design and production, ExportAR deals exclusively with the issue of commercialization. It is a semi-private organization that promotes exports for practically every industry in Argentina. It helps firms make the types of contacts that can help them learn the importance of adapting their products to the needs of international clients. ExportAR provides
firms with detailed reports on international markets and financial assistance for firms to travel to international trade shows, thereby not only diffusing knowledge about the sector but also help firms to build their commercial contacts. They also help firms to form export consortiums, for which they cover the full salary of a coordinator for the first six months. Their contribution to this person’s salary declines by 25% every six months so that by the end of the first two years these groups are self-financing. Their export group for wooden furniture does not appear to be very active in this industry. The coordinator of this group actually believes that it is impossible for wooden furniture manufacturers in Argentina to sell their products in the United States. He concentrates on selling furniture directly to retailers in Chile, Ecuador, Guatemala, Panama and South Africa. This export group would seem to concentrate on smaller producers as none of top exporters participate in this group.

Etchebehere plays a critical role in diffusion knowledge and know-how in this industry. He has worked with the program sponsored by the CFI for designs and is currently working with the program that FAIMA created to continue this type of training. At the same time, he is actively trying to help Argentine designers learn how to adapt products to the styles and tastes of people in other countries. In the meetings that he has with firms and his sales representatives from the United States, he always tries to invite at least one designer so that they can learn how to adapt furniture for the styles and tastes of that country. He believes that one day these designers will be able to design furniture without this type of help. However, for this to occur first they have to learn how to do it. It would be easy for Argentine companies simply to take designs from U.S. designers but Etchebehere is interested in developing Argentine designers who are capable of making them.

Public policy

Public policy in this sector should be directed at diffusing the export business model. This would ensure that more manufacturers of wooden furniture would be able to export their products on a consistent basis and thereby provide these firms, and the economy as a whole, a steady source of revenue. The unwillingness of firms to dedicate time and resources to the development of a sustainable export business model causes them to rely primarily on sporadic sales that do not generate incentives to sufficiently upgrade their marketing techniques and products. In essence, firms need to change their approach to exporting and become aware that exports could be more sustainable if they were to adapt the emerging business export model described above. Hence, policy makers should demonstrate the benefits of this new export business model and show them how to implement it. Once firms are convinced of the benefits of this model, policy makers can help them to change the way in which they design and make products
while at the same time helping them to learn how to build long-term relationships with their potential clients.

The ability of those firms that adapt a new export business model is inherently linked to the behavior of other firms in this sector. Firms that seek to adapt the new business model by working closely with suppliers and fulfill the contracts that they make often run into difficulties with distributors who have had bad experiences with other Argentine companies. Those firms in this sector that obtain contracts to export to foreign countries and do not fulfill these contracts with furniture that meets the quality standards of that country can undermine the possibility that the distributors that work with these companies are likely to work with other Argentina firms in this sector. Some firms do not fulfill these contracts because they do not view exporting as a critical part of their business. Consequently, they look for export contracts when their sales on the internal market decline and then abandon the contracts in mid course when their sales on this market pick up. In general Argentine companies in this business are not known for fulfilling their contracts and for this reason many distributors simply refuse to work with them or they impose conditions, such as a firm establishing its own warehouse in the country to which a product is to be exported, as a means for dealing with this uncertainty. Such behavior undermines the possibility that distributors will see value in working with Argentine companies. Consequently, it hurts the country trade mark. Although the Argentine government is in the preliminary stages of trying to develop a country trade mark, such efforts would seem to prove in vein if companies do not live up to some basic standards. Hence, public policy at this time needs to be directly at actually changing the behavior of firms rather than at promoting a country trade mark.

In order to effectively deal with distributors in advanced industrialize countries firms also have to change the way in which they are accustomed to conducting transactions. As mentioned above, firms are accustomed to changing conditions of contracts, such as payment schedules and delivery dates, after a contract is signed. This is relatively and accepted practice in the domestic market but customarily proves problematic in contracts involving customers in the advanced industrialized world. Hence, policy makers need to make firms aware of this difference in customs and show them how they can change their operations so that they can fulfill their contract in the manner expected by their clients in this part of the world.

Clearly quality is also an important issue for international clients in advanced industrialized world. Hence, it is important for policy makers to work with firms to improve the quality of their products in the manner described above. Although quality would seem to be an issue only to be addressed at the level of
the individual firm, it is also an issue when governments seek to promote exports by subsidizing participation at international trade fairs such as the one at High Point in the United States. If policy makers choose to provide subsidies for any firm that wishes to participate in such trade fairs, they run the risk that low quality producers will display their products and thereby create the image that Argentina is a producer of low quality goods. This problem is particularly acute for countries like Argentina that tend to display products from different firms together at such trade fairs. Subsidizing the participation of low quality producers is also a rather expensive way for them to learn basic ways to improve the quality of their products. One small producer of furniture for televisions returned from High Point without selling anything. Nevertheless, they were happy that they learned that furniture for televisions is much bigger in the United States than in Argentina. They could have learned about this critical difference between their products and those in the United States in Argentina. They did not have to travel to the United States to learn about this basis difference. Hence, policy makers wishing to help such producers would be advised to do so by helping them realize how to upgrade their products in Argentina before actually providing them subsidies to participate in such trade fairs. Consequently, policy makers should evaluate the “quality” of a manufacturer’s furniture before providing them subsidies to participate in such trade fairs. If they see that the quality of a particular producer is lower than these standards, they could provide subsidies that would help them upgrade their quality.

Nevertheless, policy makers should not focus solely on how to improve the quality of goods produced by firms in this sector. They also have to be sure that firms are able to produce products that meet the tastes of consumers in advanced industrialized countries. If the quality is good but the design does not fit these standards, clients in these countries will not buy the furniture being offered. Consequently, policy makers should work to promote the diffusion of such knowledge while at the same time ensuring that there are enough designers with the appropriate skills to adapt products to such markets. Perhaps they could promote exchange programs with Italian universities as this country would seem to be the most adept at designing furniture to meet the needs of specific clients.

Even if the quality and the design of a product meet the demand of markets in an advanced industrialized world, distributors will not work with Argentine wooden furniture manufacturers over time if they do not change the manner of conducting business. As mentioned above, they have to change their orientation toward foreign markets while at the same time changing the way in which they are accustomed to doing business. Hence, policy makers should work to ensure that firms in this industry are aware of these differences.
Once firms in this industry make the type of product and marketing upgrade illustrated above, they can find that they will be unable to handle the potential demand for volume and diversity demanded by a particular distributor. Italian industrial districts successfully address this problem. Hence, policy makers should consider advocating the formation of such districts. They could work to promote the formation of other firms like ARG or industrial districts like the one constructed by Mehring. The former would provide relatively small firms with little knowledge about foreign markets an efficient mechanism to upgrade their designs and tap into these markets. The latter would enable firms to jointly meet the demand for volume while at the same time providing a forum in which firms could share a designer and knowledge about upgrading production techniques. Mehring is currently trying to have the national government pass a law which would enable him to formalize the industrial district he is creating. Companies that seek to operate such districts confront many bureaucratic and tax problems that could be resolved if such a law was passed. Mehring contends that the Italian law governing industrial district is a good model. This company is basically trying to get the national government to adapt the same law.
References


Appendix

This appendix presents a brief statistical analysis of export performance in Argentina at the sectoral level. The objective of this analysis is to identify sectors that have been successful in exporting differentiated goods to developed economies.

We start with a database of Argentina’s exports at the 6-digit level of the Harmonized System (HS). There are 5427 HS 6-digit categories. We then aggregate data at the 4-digit level and use this level of aggregation to conduct the statistical analysis of sectoral export growth. Aggregation at the 4-digit level reduces the number of sectors to 1328. In the majority of cases, we think that 4-digit categories best group sets of firms and products that share similar technologies, labor-skill needs, distribution channels and marketing requirements.

We consider export growth between the average of the periods 1991-1994 and 2002-2005. The Argentine economy underwent a period of drastic trade liberalization that was mostly complete by 1991. Therefore, the choice of base period attempts to minimize the identification of sectors with emerging export activity driven by sectoral reallocation in response to trade liberalization. Averaging over four years prevents exceptional peaks – sometimes driven by measurement error – from dominating the measure of export growth.

We impose the following quantitative filters on the database. First, we require exports in 2005 to be above the threshold value of US$ 10 million to exclude sectors that have insufficient economic significance. This amount represents 0.025% of total Argentine exports and 0.091% of industrial manufacturing exports in that year. This criterion leaves 267 out of 1328 4-digit sectors in the database. Second, we rank the remaining 267 sectors according to export growth between 1991-1994 and 2002-2005, and select only those in the top 40 percentiles. This threshold is conservative, but it has the advantage that it keeps in the list non-outstanding 4-digit sectors that might include 6-digit categories with outstanding export performance. Applying this criterion narrows the list to 106 4-digit sectors. Finally, among the 106 sectors, we select only those sectors that shipped more than a third of their exports to OECD countries. The application of this last filter results in a list of 30 sectors.

The identified sectors were classified into differentiated and non-differentiated following Rauch (1999). Of these sectors, 13 can be classified as differentiated (listed in Table 1) and 17 as non-differentiated (listed in Table 2).
Export performance criteria narrow the number of 4-digit sectors considerably, from 1328 down to 30. Of the three sectors that are studied in this paper and for which customs data is available (customs data is not available for exports of TV programs), two appear in this list: Wines and Wooden Furniture.

Harmonized system classifications (at four or six digits) can only provide an approximate identification of relevant economic sectors: a given sector may be more closely identified at six or more digits, or may span more than one 4-digit category (as is the case for wooden furniture and chairs, in this study). A finer classification may still fail to identify a relevant sector, as classification may become more specific along a dimension that does not distinguish between sectors. This is the case for the Light Ship industry, since Argentina’s 10-digit harmonized system classification does not discriminate by tonnage or length. Once properly classified, the Light Ship industry passes all the criteria established here. Classification into differentiated and non-differentiated products is also approximate and dependent on aggregation. All wine exports are grouped together and classified by Rauch – and therefore also here – as non-differentiated. As shown in the case study for that industry, however, all wines of quality above table wine are highly differentiated.

For a number of sectors listed in Tables 1 and 2, growth is primarily driven by the increasing exploitation of resource-based comparative advantage in response to trade liberalization and deregulation. For instance, this is the case of copper ores (HS 2603), leather (HS 4107) and wood boards (HS 4407, 4409 and 4421). A few are highly idiosyncratic: Nuclear reactors (HS 8401) are exported by only one government-owned agency, while “Reaction initiators and accelerators and catalyst preparations NESOI” (HS 3815), “Turbojets, turbo propellers and other gas turbines and parts” (HS 8411) and “Aircraft” (HS 8802) correspond to sales of used equipment, previously imported. Netting these sectors from the list and reclassifying wine as differentiated puts wines, seats and seat parts, and furniture at the top of an export-ranked list of differentiated products with high export growth and substantial orientation towards OECD markets.
### Table 1. High growth, high value sectors with large exports to OECD. Differentiated

<table>
<thead>
<tr>
<th>HS4</th>
<th>Exports 2005 (US$ M)</th>
<th>To OECD Growth†</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9401</td>
<td>76.3</td>
<td>85</td>
<td>18 seats (except barber, dental, etc), and parts</td>
</tr>
<tr>
<td>4407</td>
<td>74.0</td>
<td>59</td>
<td>44.6 wood sawn or chipped length, sliced etc, over 6mm th</td>
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<tr>
<td>8802</td>
<td>49.5</td>
<td>58</td>
<td>7.2 aircraft, powered; spacecraft &amp; launch vehicles</td>
</tr>
<tr>
<td>3815</td>
<td>41.0</td>
<td>36</td>
<td>13.1 reaction initiators &amp; accel &amp; catalyt prep NESOI</td>
</tr>
<tr>
<td>9403</td>
<td>36.3</td>
<td>36</td>
<td>5.0 furniture NESOI and parts thereof</td>
</tr>
<tr>
<td>4409</td>
<td>30.4</td>
<td>93</td>
<td>49.3 wood, continuously shaped (tongued, grooved etc.)</td>
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<tr>
<td>6907</td>
<td>27.2</td>
<td>94</td>
<td>32.4 unglazed ceramic flags &amp; paving, hearth tiles etc</td>
</tr>
<tr>
<td>8401</td>
<td>17.6</td>
<td>100</td>
<td>6.6 nuclear reactors; fuel elem (n-i); mach isotop sep</td>
</tr>
<tr>
<td>8455</td>
<td>17.5</td>
<td>51</td>
<td>5.7 metal-rolling mills and rolls therefor; parts</td>
</tr>
<tr>
<td>8516</td>
<td>12.5</td>
<td>35</td>
<td>4.6 elec water, space &amp; soil heaters; hair etc dry, pt</td>
</tr>
<tr>
<td>4421</td>
<td>12.0</td>
<td>89</td>
<td>16.7 articles of wood, NESOI</td>
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<tr>
<td>8411</td>
<td>11.9</td>
<td>50</td>
<td>11.8 turbojets, turbopropellers &amp; oth gas turbines, pts</td>
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<td>6109</td>
<td>10.4</td>
<td>47</td>
<td>14.7 t-shirts, singlets, tank tops etc, knit or crochet</td>
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<td></td>
<td>39,876.0</td>
<td>69</td>
<td>2.4 Total exports</td>
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</tbody>
</table>


### Table 2. High growth, high value sectors with large exports to OECD. Non-differentiated

<table>
<thead>
<tr>
<th>HS4</th>
<th>Exports 2005 (US$ M)</th>
<th>To OECD Growth†</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2603</td>
<td>1026.9</td>
<td>42</td>
<td>318783.3 copper ores and concentrates</td>
</tr>
<tr>
<td>2204</td>
<td>303.7</td>
<td>67</td>
<td>6.8 wine of fresh grapes; grape must NESOI</td>
</tr>
<tr>
<td>4107</td>
<td>268.1</td>
<td>41</td>
<td>57.8 leather of animals NESOI, no hair NESOI</td>
</tr>
<tr>
<td>7210</td>
<td>166.6</td>
<td>51</td>
<td>6.3 fl-rl iron &amp; na steel nun600mm wd, clad etc</td>
</tr>
<tr>
<td>7108</td>
<td>145.4</td>
<td>70</td>
<td>16.2 gold (incl plat plated), unwr, semimfr or powder</td>
</tr>
<tr>
<td>2008</td>
<td>130.5</td>
<td>70</td>
<td>5.4 fruit, nuts etc prepared or preserved NESOI</td>
</tr>
<tr>
<td>2905</td>
<td>110.0</td>
<td>65</td>
<td>5.3 acyclic alcohols &amp; halogenat, sulfonatd etc derivs</td>
</tr>
<tr>
<td>0806</td>
<td>75.7</td>
<td>60</td>
<td>5.2 grapes, fresh or dried</td>
</tr>
<tr>
<td>7224</td>
<td>54.0</td>
<td>99</td>
<td>1144.5 alloy steel NESOI in ingots, oth pr frm &amp; semif pr</td>
</tr>
<tr>
<td>2302</td>
<td>52.1</td>
<td>91</td>
<td>5.1 bran, sharps etc from working cereals &amp; leg plants</td>
</tr>
<tr>
<td>7214</td>
<td>39.6</td>
<td>64</td>
<td>8.5 bars &amp; rods, iron &amp; na steel NESOI, h-r etc</td>
</tr>
<tr>
<td>2827</td>
<td>38.0</td>
<td>70</td>
<td>149.2 chlorides etc; bromides etc; iodides etc.</td>
</tr>
<tr>
<td>2901</td>
<td>30.1</td>
<td>60</td>
<td>27.1 acyclic hydrocarbons</td>
</tr>
<tr>
<td>0810</td>
<td>28.9</td>
<td>99</td>
<td>126.8 fruit NESOI, fresh</td>
</tr>
<tr>
<td>3913</td>
<td>24.9</td>
<td>34</td>
<td>166.4 natural (inc modified) polymers NESOI, primary forms</td>
</tr>
<tr>
<td>2836</td>
<td>19.4</td>
<td>62</td>
<td>21.6 carbonates; peroxy carbonates; comm amm carbonate</td>
</tr>
<tr>
<td>0811</td>
<td>11.1</td>
<td>72</td>
<td>434.6 fruit &amp; nuts (raw or cooked by steam etc), frozen</td>
</tr>
<tr>
<td></td>
<td>39,876.0</td>
<td>69</td>
<td>2.4 Total exports</td>
</tr>
</tbody>
</table>