

12-1-1999

Final report on the Greater Tampa regional international trade : an analysis performed by Brian S. Jacobik, in cooperation with The Center for Economic Development Research, College of Business Administration, University of South Florida, and The Center for International Business, College of Business Administration, University of South Florida ; for The Greater Tampa Chamber of Commerce Committee of One Hundred

Brian S. Jacobik

University of South Florida. Center for Economic Development Research

University of South Florida. Center for International Business

Greater Tampa Chamber of Commerce. Committee of 100
Follow this and additional works at: http://scholarcommons.usf.edu/business_pub

 Part of the [Business Commons](#)

Scholar Commons Citation

Jacobik, Brian S.; University of South Florida. Center for Economic Development Research; University of South Florida. Center for International Business; and Greater Tampa Chamber of Commerce. Committee of 100, "Final report on the Greater Tampa regional international trade : an analysis performed by Brian S. Jacobik, in cooperation with The Center for Economic Development Research, College of Business Administration, University of South Florida, and The Center for International Business, College of Business Administration, University of South Florida ; for The Greater Tampa Chamber of Commerce Committee of One Hundred" (1999). *College of Business Publications*. Paper 52.

http://scholarcommons.usf.edu/business_pub/52

Final Report on the Greater Tampa Regional International Trade

An Analysis Performed by

Brian S. Jacobik, Consultant
Department of Business and Economics
Florida Southern College

In cooperation with

The Center for Economic Development Research
College of Business Administration
University of South Florida

And

The Center for International Business
College of Business Administration
University of South Florida

Prepared for
The Greater Tampa Chamber of Commerce Committee of One Hundred

December, 1999



Final Report on the Greater Tampa Regional International Trade

An Analysis Performed by

Brian S. Jacobik, Consultant

Department of Business and Economics
Florida Southern College
111 Lake Hollingsworth Drive
Lakeland, Florida 33801-5698
Office: (941) 680-4352



In cooperation with

The Center for Economic Development Research

College of Business Administration
University of South Florida
1101 Channelside Drive, 2nd Floor N.
Tampa, Florida 33602
Office: (813) 905-5854

And

The Center for International Business

College of Business Administration
University of South Florida
4202 E. Fowler Avenue
Tampa, Florida 33620

For

The Greater Tampa Chamber of Commerce Committee of One Hundred

December, 1999

Executive Summary.

This study develops a marketing plan for locally produced exports based upon a survey of exporting firms in Hillsborough County, and describes a plan to develop the area's long-range potential in its current export markets. The study identifies the following:

- 1) Hillsborough County and Tampa manufacturing exports are heavily concentrated in firms with SIC code descriptions of 34 and 35, indicating that the area might have a potential advantage in the production of goods in these two industries.
- 2) Export sales currently account for about 11% of the revenue of County firms.
- 3) Survey respondents currently project expansion of their export activities despite a strengthening dollar.
- 4) Local companies identify relatively few obstacles to their export programs.
- 5) Hillsborough County businesses identify direct sales calls on foreign customers as very important to their export activities.
- 6) Few County businesses use government assistance programs to facilitate exports.
- 7) Trade shows are the most common source of foreign contacts.
- 8) Profit margins do not appear to be higher in foreign markets. Profit margins, along with risk of nonpayment, are the principle considerations of exporters.
- 9) County firms mitigate risk by refusing, in general, to extend trade credit. The majority of firms receive payment via letters of credit and/or banker's acceptances.

- 10) Tampa and Hillsborough County companies export to a variety of private foreign customers. These include manufacturers, retailers, and wholesalers.
- 11) Exporting firms seek repeat customers and invest in increased production capacity to achieve growth.

I. Background.

Analysis of a database compiled by the GTCC-C100 reveals that businesses in Hillsborough County engage in significant export and import activity. To utilize this information and to encourage a still greater level of international activity in the County, GTCC-C100 and economic development officials in the County must obtain a clearer understanding of those factors that determine the size and scope of international exports of County businesses. Development officials must learn how to support existing exporters and encourage non-exporting firms to market their products internationally. To further this goal, the Greater Tampa Chamber of Commerce Committee of One Hundred (GTCC-C100) commissioned a survey designed to isolate those factors leading to active export programs and to assess opportunities to develop overseas markets for goods manufactured in the County. Center for Economic Development Research (CEDR) at the University of South Florida, in cooperation with the Center for International Business (CIB), have worked with an international business consultant to perform the analyses reported below. We hope that the results of this report will contribute to GTCC-C100 efforts to develop a state-of-the-art international marketing plan for the years 1999-2000.

II. Purpose of the Report.

The report initiates processes to acquire, organize, and analyze information about international trade opportunities open to Hillsborough County and City of Tampa businesses. Its principal mission is to provide information to assist the GTCC-C100 develop its international trade strategy. Research of this nature is nonexistent in the Tampa region at this time.

Comparative Advantage as a Source of Business Export Activity.

The study methodology is based on several concepts related to the individual business's international competitiveness. One of these is the economic concept of comparative advantage. Comparative advantage occurs when each region exports the goods and services that it produces at lower cost and/or higher quality relative to other goods and services than do its trading partners. In return, each region imports goods that other regions produce relatively cheaply and efficiently. With comparative advantage, all trading partners trade to their mutual benefit. The mutually beneficial arrangement relies on the individual efforts of its business community to generate comparative advantage. According to the concept of comparative advantage, manufacturing firms in Hillsborough County can expect to specialize in and export goods for which the relative cost of

production, hence price, is less than the price of other goods that are imported. If, then, one region has a comparative advantage in the production of any good, and another region has a comparative disadvantage in the production of the same good, the region with the comparative advantage will find a potential export opportunity with the other region. The implication is that the foreign product price for the firm's exported commodities is above the domestic price. Conversely, the prices of imported goods will be lower than prices of similar goods supplied by domestic suppliers and/or the quality will be higher.

Both exporting and importing country businesses enjoy benefits from international trade. The exporting region will benefit from selling the good that it produces relatively well (at lower cost than the world price), thereby securing a profit. Importing businesses lower costs by importing goods produced relatively more efficiently abroad.

Transportation Costs and the Firm's Export Capacity.

International shipping costs constitute a second factor considered in this study.

Transportation costs affect exporting businesses in two ways. First, restrictions on transportation services and the imposition of high transportation costs may restrict the numbers and types of products that can be exported from Tampa and Hillsborough County. Such goods will be non-traded because the cost of transportation now makes exporting unprofitable. Local businesses must be able to produce a good for less than the price charged in the foreign market. The importing region's industry may be able to

produce the good at the foreign market price, but the foreign production cost plus profit margin must exceed the delivered cost of domestic exports at least by the difference in transportation costs involved.

Competitive Advantage of Businesses in Global Industries.

A third concept used to develop the survey is the concept of industry structure. We define an industry as a collection of firms producing related goods or services that compete directly with one another. Industry structure and a business's position within the industry will determine that business's choice of its competitive strategy. Competition derives directly from the threat of new firms entering the industry, the threat of new goods that will directly compete with the firm's product, and the bargaining power of input suppliers and purchasers of the good. It also depends upon existing rivalries among firms in the same industry within the County and the Tampa Bay region. The relative importance of each of these factors is determined by the particular characteristics of the industry, and may differ from industry to industry. Industry structure is dynamic and can result in new opportunities for Hillsborough County firms to compete internationally as the structure evolves over time.

Businesses in a competitive industry are in a process of perpetual positioning in order to compete effectively. There are essentially two ways in which firms may gain an advantage over one another within an industry. A company may be able to produce goods more cheaply than other firms, thereby enjoying a larger profit margin. Companies may

also differentiate their products from those of their competitors. This means either real or perceived differences must exist between the firm's product and the products of competitors. These differences will attract buyers, and give the business a competitive advantage.

Firms must determine the scope of the competitive environment that they desire to enter. They can either find a small market segment in which to compete, or broaden their scope, competing in a variety of products throughout an industry. The nature of the advantage that the firm focuses on and the scope for competition elected by the firm will determine the appropriate competitive strategy of the firm.

Regional Industry Linkages and Firm Exports

A fourth factor contributing to a business's international competitiveness is the nature and extent of intra-firm and inter-firm linkages. It is crucial when analyzing a business to understand both the linkages between different departments within the enterprise and the linkages between the firm and the rest of the industry. When a business chooses to adopt a new production technology, areas of the firm peripheral to the production department are affected. The decision may affect the logistics of product delivery, the quantity and skills of human resources employed, and the marketing strategy due to pricing considerations. The decision may also affect the inputs required of suppliers, the receiving procedures of buyers, and the decisions of end users, among others.

A number of factors are responsible for the competitive position of a firm within its industry. Changes in external factors change the business's competitive advantage. Development of new technologies that lower cost, differentiate goods, or shift the scope of the firm's products and services has accelerated in the past several years. Changes in the customer's requirements may create competitive advantage. A new segment within an industry can re-position the businesses within the industry. Changes in the price and/or quantity of inputs may confer a competitive advantage. Finally, changes in government regulations commonly provide an impetus to competitive advantage.

Competitive advantage is not static, and each new structural change within an industry provides opportunities for firms that move early to adapt to the change. Some advantages are sustainable but others are not. Factors that make advantage sustainable are advanced skills, sustained and cumulative investment in intangible assets, and constant improvement and upgrading of firm operations and products.

International competition ranges from industries that compete for local markets almost exclusively to those that enjoy truly global economies of scale. There are two key ingredients in a firm's global competitive strategy. First, the enterprise must configure activities to be performed efficiently. Larger, multinational companies face the challenge of coordinating the activities of their geographically dispersed business units.

Configuration may call for either a concentration or dispersion of activities depending on the nature of the industry. Whatever the characteristics of the industry, the firm must be willing to locate wherever advantage lies. Coordination is essential to firms in industries

that are dispersed. As international dynamics change, a geographically dispersed firm must be able to coordinate in order to enjoy the benefits of the change.

Michael Porter and others argue that businesses whose advantages lie purely in the area of cost rarely gain competitive advantage. Rather, differentiation is required. In order to sustain a competitive advantage the company continually must upgrade the sources of competitive advantage.

The Determinants of Hillsborough County's Competitive Advantage

Four conditions contribute to every region's ability to create competitive advantage. All four are related to the structure of industry in the region. To determine the nature and extent of Hillsborough County's international competitiveness it is necessary to learn about the County's industrial structure.

The Regional Resource Base

First, Hillsborough County and the Tampa Bay region must contain certain factor inputs required by local industry in order for the local industry to compete nationally and internationally. Factor inputs that a region can specialize in encompass human resources, physical resources, knowledge resources, capital resources, and infrastructure. The region's special mix of these inputs will determine the specific industries that the region can support competitively. County firms will gain competitive advantage if the region

possesses in sufficient quantities the low-cost or high-quality factors that the industry requires. Not only must Tampa possess the appropriate factors, but the factors must be deployed efficiently and effectively. The more advanced the factor, the more useful it is in gaining businesses in the County a competitive advantage. Furthermore, the more specialized the factor, the more successful it will be in creating a sustainable comparative advantage. Factors are created by investment at the individual, firm, and governmental level.

The role of private businesses in the creation of productive inputs is indispensable to the development of factor advantage since firms are best positioned to know what resources their industries require. Disadvantages in basic resources can be a motivating force in the development of specific factors. A local disadvantage drives the region to develop specific factors efficiently and to upgrade those developed factors. High relative cost of a factor can lead a region to innovate around this problem.

Demand Conditions

Second, demand conditions in the local market can lead enterprises to innovate through pressures from their customers. If customer demand in the County for a specific, differentiated, and segmented market product is greater than demand elsewhere, Hillsborough County will be likely to gain a competitive advantage in sales of that product. On the other hand, exposure to a broad spectrum of products in a segmented market may lead to competitive advantage. If Tampa is home to sophisticated and

demanding buyers, firms will be driven to compete to such a level in the market that the industry will gain a competitive advantage. This occurs frequently in industries that supply industrial products to businesses that are themselves experiencing a high level of competition in their industries. If regional buyers are the first to identify and develop a need for a product, the region's supplier firms gain a competitive advantage. Regions with large home markets will gain competitive advantage if the production process experiences either economies of scale or of learning by doing. A region with a large number of independent buyers provides a better stimulus to innovation. Rapidly growing industries provide a better impetus to both investment and to technological development. Early saturation of the domestic market provides firms with the necessary incentive to develop new products. Domestic buyers that take products overseas can create an advantage for local businesses. Having an existing competitive advantage can increase demand for a company's product, lead competitors to emulate the successful firm, and grant greater advantage.

If supplier industries or related industries are competitive, an industry can gain a competitive advantage. Regional suppliers that are internationally competitive will work closely with their customer base, thereby helping their regional customers to innovate and upgrade. This outcome is not automatic, but it represents a potentially beneficial condition.

Industry Structure

Regions tend to compete successfully in industries where there is a good match between the regional style of management, determined by cultural characteristics of the business community and the general population, and the needs of the individual industry. Specific industries succeed regions in that supply competitive advantage when there is unusual commitment to investment and development of the industry. The culturally diverse population of Hillsborough County, the relaxed yet professional nature of its business community, and the region's mild climate are assets in attracting "footloose" businesses that provide the source of cluster economies in today's information-based economy.

Company goals are determined by ownership structure, laws pertaining to corporations, owner motivations, cultural values, and managerial motivations. The motivations of individuals working for or managing firms play a significant role in the firm's ability to compete. Industries that are viewed as prestigious, or which are able to gain widespread support from the population at large, will enjoy competitive advantages. Commitment to development of an industry must be sustained if a region is to compete globally, as continual investment is key to competitive success. Domestic rivalry can push the competing firms to develop beyond the level of the world. This rivalry encourages continual upgrades and development of higher-order sources of competitive advantage. This intense rivalry depends upon new business formation.

It must be noted that, as with anything else, chance plays a significant role in the determination of competitive advantage. If an area's firm gets into an industry first, the region may enjoy the advantage accruing due to rivals entering locally and their

employees informally or unwittingly exchanging trade secrets. What region is the first to develop a new invention is somewhat a matter of chance. Regions can legislate a safe haven for inventors, but no region is able to endow would be inventors with inspiration or genius.

The Institutional Framework

Local government, in cooperation with local development organizations may create an institutional framework in which firms may be able to pursue a regional competitive advantage. An institutional framework of protected property rights can assist a region's firms to innovate, invest, and upgrade its productive facilities. However much government action may assist firms in competition, officials must remember that their role is supportive, not dominant.

The sources of competitive advantage differ widely across industries. Some activities of the value chain are performed in foreign markets by globally competing firms.

Improvement, innovation, and upgrading are the tools by which firms gain competitive advantage.

These interrelated factors lead, in varying degrees, to regional development of competitive advantage in an industry.

Dynamic Regional Advantage

Competitive advantage is not spread evenly throughout a region's industries, but tends to cluster around one or more groups of interrelated businesses that reinforce each other's competitive advantage to various degrees. All regions invest in factor creation. What sets one region apart from another is what factors they concentrate on creating, how well they administer the creative function, and the rate of investment in factor creation. Favorable demand conditions provide incentive to firms to acquire factors necessary to establishing competitive advantage. The most important factor determining the size and composition of demand is the level of rivalry existing among the region's firms. A high level of competition aids the development of efficient production and higher levels of investment and innovation. A high demand for one regional industry's products can contribute to demand for products in related industries. A region's factor conditions contribute to demand for regional products.

Crucial to the success of a region's industry is the existence of supporting firms to supply an industry with its needs. The level of specific factor creation is paramount to the entry and development of new rival firms. Technological spillover is the main contributing factor in the local development of related and supporting industries to a region's competing industry. Specialization of function follows the rise of supporting industries. The degree of specialization is in turn affected by the nature of demand. This demand is also somewhat responsible for the regional industry structure.

Rivalry is directly responsible for innovation and improvement. All sources of advantage are not requisite for development of competitive advantage, but advantage is sustained by

continual upgrading and broadening of the sources of the existing advantage. Competitive industries tend to cluster both geographically and in terms of industrial relationships. The most advantageous conditions for competition are to have a group of related industries simultaneously competing and sharing information. This exchange of information is facilitated by geographic proximity. National policies play a facilitating role in regional advantage.

While sustained regional advantage requires all sources, rarely are they all in place in an area when competitive advantage begins to develop. Factor inputs frequently play an initial role in the acquisition of competitive advantage. Likewise, the existence of prominent related firms provides a conducive environment to developing an advantage. These firms then must innovate and improve to obtain and maintain their position. The firm that gets all sources of competitive advantage in place first will often become the dominant firm.

The development of one competitive industry tends to act to spawn related and supporting industries to form a cluster. Conversely, regional advantage will be lost when a region's firms lose their incentive to invest and innovate. Factor conditions need not remain the same, local needs may evolve until they no longer support the advantage on the world level, buyers may become less discriminating, and innovation leads to disadvantages or the need for support institutions that fail to materialize. A region's goals may change so that investment is curtailed. As firms grow larger through success, they

may cease to be able to respond to new opportunities as quickly as before. As firms enjoy their success, they may not compete as vigorously as before.

Need for Reliable and Adequate Region Specific Data

While all of the sources of comparative and competitive advantage discussed above are well understood, there are shortcomings in the data necessary to develop an understanding of the Tampa/Hillsborough County economy. Review of the available data shows that we can calculate labor productivity measures with some degree of certainty. Unit cost of output is more elusive. With the unit cost of output we can calculate the industries for which the region has a comparative advantage relative to the world. Due to the existence of transportation costs, it is necessary to identify a specific foreign market against which to compare unit production costs, in order to calculate the degree of advantage. We can then consider production cost differentials and compare them to transport costs. To do this accurately, data must be obtained from export markets. Currently, such data is not available for Hillsborough County. In this study we have collected additional data, which will assist in the determination of Hillsborough's competitive advantage.

The degree of specialization and advancement of factor inputs in the Tampa region is difficult to determine. We currently have little data on human or knowledge capital inputs. Physical capital, financial capital, and infrastructure can be rudimentarily

approximated by extrapolation of existing data into the future. Better data would be desirable to make accurate estimates. This study collected data pertaining to financial capital and infrastructure factors that will aid in their evaluation.

Local demand estimates are virtually nonexistent. These will need to be performed before any accurate identification of regional industries can be attempted. This study gathered some data that will help determine what industries to target for demand structure estimates.

Data exists at CEDR on industry employment, wages, and number of firms. These will help in identifying firms that may exist in local clusters. However, no data exists publicly on which specific industries in the County interact with each other (although educated guesses could be made as a first step), or what their level of interaction is. This study's contribution in this area is negligible.

The level of rivalry of local firms becomes problematic when attempts are made to quantify this source of competitive advantage. The logical proxy would be a measure of the degree of advertising. However, not all firms or all industries advertise in the same way or at the same level. Manufacturing firms that produce capital goods may not advertise on local television, nevertheless, they may vigorously compete in the number of sales calls they make on their buyers. However, this measurement would be difficult to obtain. Another suggested proxy might be a measure of the dispersion of wages in the regional industry relative to the state, nation, or world. The underlying assumption is that,

if local firms are vigorously competing, they will be competing to recruit and retain the best employees. This would drive up the high end of the wage scale, giving a significantly larger deviation in wages than a larger unit relative to which competition is high. This assessment is beyond the scope of this study.

International Trade in Florida

While county-specific data may be in short supply, there is an abundance of data on state trading patterns in Florida. Tampa is Florida's third largest city, and Greater Tampa is not atypical of the state itself. Therefore, it is reasonable to examine this data in order to identify industries in which Tampa may enjoy or obtain competitive advantage.

While the US has its strongest trade ties with Canada, Florida shows a strikingly different picture. The state's strongest trade ties are with Latin America, which amounted to 44% of total state exports in 1995. Brazil is the leading export destination for Florida produced goods in general and the leading export destination for 13 of the top 31 export commodities from Florida.

In the US, Florida's chief rivals in exports to Latin America are California, New York, and Texas. Florida leads the nation in its exports to Brazil, Columbia, the Dominican Republic, Argentina, and Paraguay. Outside of Latin America, Florida doesn't stand out as significantly. California dominates the US export landscape. It is the leading exporter to 8 of the top 10 US export destinations. These are Japan, the United Kingdom, Korea,

Germany, Taiwan (tied with NY), the Netherlands, Singapore, and France. While geography may play a role in lowering transportation costs to Asian countries, it is unlikely to be a contributing factor in their leading role in exports to Europe. New York is in the top three exporting states to 8 of the ten leading US export destinations, and the leading exporter to Taiwan (tied with California). Again, this is unlikely to be due to geographic considerations. Texas is in the top 6 states in exporting to 9 of the 10 leading US export destinations, and the leading exporter to Mexico. The possible reasons for these states leading in exports to their respective destination remain an important area for future research.

As far as export commodities go, Florida closely mirrors the US. Not only do exported commodities tend to be relatively high value-added products; they also represent many of the same product categories. Among these are tractor and motor vehicle parts, motor vehicles, and office machinery. Undoubtedly, some of these goods, such as motor vehicles, are transshipped through Florida rather than produced in Florida. Because the state is known not to produce many of its own exports, has a small manufacturing sector, and has a large number of wholesalers and shippers, it is estimated that only about 51% of Florida's exports are manufactured within the state.

Among the leading sectors for growth and job creation, as projected by the Florida Department of Labor, are social services, health services, engineering/management, business services, food stores, and agricultural services. Investment in these industries will have the potential create a competitive advantage for the State's economy.

Trade activity and foreign investment are regionally correlated. The three leading US exporting states are also the three leading states in the share of US employment by foreign-owned firms. This fact indicates that foreign-owned business recruitment may be a priority item to increase Florida's and Hillsborough County's exports. As noted above, private firms are best positioned to know their industry's cost structure and need for specialized factor inputs. If a firm decides to locate a branch or subsidiary within the state, it will more likely to export the final goods from the state. Thus, the GTCC-C100 can utilize foreign ownership of firms to identify firm specific factor endowments to be developed. The leading foreign-owned companies in the US are in the manufacturing, retail trade, and services sectors. Specific sub-sectors identified for Florida are industrial chemicals, synthetics, drugs, metal products, industrial machinery and equipment, electronic and other electric equipment, food, hotels and lodging places, computer and data processing services, and television tape and film.

Among the aims identified for Florida's economic leadership are to improve the ability of Florida firms to do international business; increase the number of firms active in the international economy; promote exports of Florida-produced goods and services; increase the amount of foreign direct investment in the state; and improve the state's image as an international business location. Recommended specific actions include improving and expanding trade assistance services; establishing regional business-to-business trade linkages; strengthening Florida's trade advocacy; restructuring Florida's foreign market presence; focusing Florida's foreign direct investment strategy; and building an

internationally competitive workforce. The state has been advised to provide trade advisors in the form of economic developers to assist firms with technical information on foreign market opportunities.

International Trade in Hillsborough County

As a partial outcome of these recommendations, Enterprise Florida, Inc. (EFI) implemented a Targeted Market Pilot Project Grant Program designed to match local businesses with opportunities in international trade. Under this grant GTCC-C100 commissioned CEDR to review data on businesses in Hillsborough County. CEDR completed this project in June of this year. The project identified products manufactured in Hillsborough County, the local firms engaged in international trade, and the international markets in which these goods are traded. The analysis found:

- 336 firms in the database engaged in international trade.
- The County supports 921 manufacturing firms producing in excess of 250 products.
- Firms engaged in international trade employ approximately 12,000 manufacturing workers.
- Exporting manufacturers pay higher wages than manufacturers that do not export. Manufacturers pay wages that are nearly 10% higher than the County average. The average wage in manufacturing in 1997 was \$29,989 compared to \$27,503 for all employers.
- Nearly 1/3 of County industrial and commercial machinery manufacturers export.

- Latin America was the leading export destination region, with the Bahamas, and the Cayman Island the top two export destination countries. Venezuela and Ecuador lead in South American export destination countries. The United Kingdom was the County's leading European export market. In general, the County exported similar products to Canada and Mexico.

CEDR did not find that international trade activity was concentrated around any industry or group of industries. The firms engaged in international trade, however, were mature firms averaging 33.5 years in business. This indicates that our economy's internationally oriented firms have developed through a process of investment and upgrading. This conclusion is borne out by the average wage in these industries being above County average wages. Hillsborough County manufacturers tend to develop overseas markets in conjunction with domestic activities. Hillsborough County traders are largely responsible for the Caribbean market development due to cost advantages resulting from geographic proximity.

III. Methodology of this Study.

This section describes the data collected and utilized in this study. Empirical methods followed the following action items: Businesses engaged in export activities were identified, a survey instrument was prepared and administered, and the collected data was analyzed. Specific examination of each step follows.

GTCC-C100 database

The current international database maintained by GTCC-C100 has been utilized to identify regional exporters. The database identified the firms name, address, physical location, contact information, primary standard industrial classification code, secondary standard industrial classification codes, year established, employment, export/import activities, and the trading countries involved. We took this raw data and applied a series of filters to obtain a truly heterogeneous sample.

Firms in this database were filtered in three stages. First, the firm had to be an engaged in export activities. This is necessary in order to identify characteristics of firms and markets conducive to exports. Any export marketing plan must be focused around the specific characteristics of the exporting firms and the markets to which they export.

Second, in light of the fact that the nature of comparative advantage necessitates that the regional market characteristics must be compared to those of the potential export destination and that Latin America constitutes the region's largest export destination, it was determined to focus on firms that export to Latin America. Therefore, exporting firms in the database were filtered according to countries to which they export. The resulting sample of firms was all exporters to at least one Latin American destination.

Third, this sample was then narrowed to manufacturers, as defined by SIC code.

Manufacturers were selected to be consistent with the GTCC's international database.

The data are designed to identify local competitive advantage, or potential competitive advantage, in manufacturing. Because manufacturing firms pay higher than average wages, due to higher labor productivity, a focus on business expansions in these firms is expected to increase average wages in the County. In practice, the study has selected all firms identified by Standard Industrial Classification (SIC) codes in the 2 thousand and 3 thousand range.

The data collection process results in a set of firms located in Hillsborough County that manufacture products and then export these products to Latin America. In theory, any characteristics of these firms that are significantly different from the average firm in Hillsborough County may be identified as potential traits upon which to build a competitive advantage. One important item not identified in the database was an exporter's rationale. This topic deserves better development.

The Enterprise's Decision to Export

In order to identify the nature of the Hillsborough County's competitive advantages, useful in a plan to develop exports, it is important to relate the sources of local export advantage discussed above to the rationale behind the firm's management's decision to engage in export activity. Four principle motivations were identified as potential contributors to export activities. First, an exporter may seek to build international trade relationships, and then support increased capital investment, to increase production and long run sales volume. Second a business might turn to foreign markets as an outlet for

goods that are not purchased in the domestic market due to either short term fluctuations in demand or structural changes in the market. Producers of goods that exhibit high seasonal fluctuations in demand may seek overseas markets for offseason sales in order to maintain production schedules across seasons. Finally, a company may sell products overseas that are by-products of their primary products or are closely related to primary products and for which there is a limited domestic market, but for which overseas markets exist.

If an exporter seeks to build permanent relationships with overseas customers, and supports increased production capacity to meet this demand, the firm is engaged in strategies that may lead to regional competitive advantage. If many rival firms are engaged in this process, this bodes well for the areas competitive advantage. Competitive advantage requires continual investment and upgrading, which firms that support increased production capacity are doing. If only a small number of businesses in an industry are doing this, and at the same time are exporting successfully, then it would behoove local economic leaders to promote competition within the industry.

Another alternative is that the firm is only seeking exports as a result of changing market conditions or to correct short-term sales in response to a decline in demand. If domestic conditions change such that local firms turn to exports, this might be a prime opportunity to exploit a competitive advantage. This would occur if the local firm was the first to develop the export market in response to changing market structure.

Firms that seek export markets to adjust for seasonal fluctuations in demand will enjoy the advantage of lowered fluctuations due to seasonal demand. These firms will enjoy lower cost by maintaining resources fully employed year-round. Development of foreign markets for this purpose can also gain the region competitive advantage in these export markets.

Firms that develop new products to market overseas and enter these markets, because of their development as an outgrowth of current production, provide the region with its greatest opportunities to gain advantage in competition. Such firms have a mindset that will lead to constant investment, innovation, and upgrading to obtain and maintain competitive advantage. Again, relevant information and promotion of competition are the key ingredients to maintaining successful regional development on the part of the economic development community.

In order to ensure appropriate information from which to identify the potential of the region, it was determined that the information in the database should be revalidated and updated. In the constantly changing environment of modern business, it seemed likely that some of the information in the database might have become outdated. In the interest of developing the most accurate and meaningful marketing plan for the region possible, current, accurate information is vital.

The Survey

A brief telephone survey was designed to obtain information from local exporters. The survey was designed to be brief (less than 10 minutes) in order to secure cooperation from surveyed firms and to obtain a maximum of relevant information in the allotted time. Consequently, no questions regarding the relevant and diverse topics related to comparative advantage have been asked. Rather, questions have been limited to a few pertinent issues. Questions were also included to encourage respondents to include their own concerns in a qualitative fashion. These questions can be broken into 3 sections. The first section was confirmation and update of the GTCC-C100 database. These questions merely alert us as to the present status of the database firms.

The second set of questions were used to identify characteristics of the exporting firms. Specifically, the questions were designed to elicit information regarding industry factor requirements for human capital, financial resources, and infrastructure, the degree of competition between rivals, and the management rationale in development of export markets. These questions allowed input from firms on their perceived needs.

The last set of questions was aimed at identification of market characteristics in the export region and included information about prices and costs, competition, and foreign buyers. This knowledge is necessary to determine the potential for sustained export development of the foreign region. It is also needed in order to allow the GTCC to develop a sound export market strategy.

While it is desirable in a survey to obtain as much information as possible, asking an active businessperson to take hours to answer a barrage of questions may be highly vexing to all parties involved. Therefore, our information is necessarily limited and the picture developed in this survey is partial. (Only the development of personal, confidential relationships with industry executives coupled with continuous analysis will ever yield a complete picture of the nature of export opportunities and competition in the region.)

The survey was administered to the sample of selected companies. A representative of each firm was telephoned and asked to participate in the study. Respondents who agreed were administered the survey by telephone. At the request of numerous firms, the interviewer contacted those that did not have time to respond via telephone interview by facsimile. As of this time, 19 firms have completed the questionnaire.

The data obtained has been analyzed using probability distributions for discrete and continuous data sets, as appropriate to the nature of the question. The survey questions are included as Attachment 2. The description of the data and analysis are the subject of section IV of this report.

During the administration of the survey, several noteworthy items surfaced. First, a large number of firms reported in the data base to be exporters responded that they had had intentions of exporting but have never brought those plans to fruition, or have never been engaged in exports. Second, a good deal of the information in the database has become

somewhat outdated. To wit, two firms were no longer in business, one contact had sold his firm two years ago and relocated to Texas, and another contact had been deceased for five years. What becomes apparent from these responses is the value of having current and reliable data in the development of a marketing plan. It is therefore recommended that the GTCC-C100 database be updated.

IV. Data Description

- *The first question on the survey determines the primary SIC code of the firm.* Thirty eight percent of the firms that responded to our survey reported SIC codes 34 and 35 as their principal business. This is the first and perhaps the most striking result of the study. This seems to be an unusually high concentration of manufacturing within a fairly narrowly defined group of industries. While it must be cautioned that a small sample cannot lead to indisputable results, this does warrant further investigation. This investigation should focus on three questions. First, are the areas export firms heavily concentrated in these SIC code industries or are these firms just responding more heavily to the survey? Second, if the areas export firms are heavily concentrated in this narrow range of industries, is this due to the fact that the areas firms are more heavily concentrated in these classifications or are these classifications more prone to export? Third, what is the nature and causes of the answer to the second question? (If the area's firms are more heavily concentrated in these industries, is this due to lower cost or more abundant resources, specialized inputs located in the Greater Tampa

area, or chance? Again, if these industries are exporting more heavily, is this due to inability to sell locally, greater demand overseas, higher quality of domestic products relative to those of overseas manufacturers, or some other factor?)

- *All firms reported being organized as a corporation.* This is not surprising in light of the fact that exporting firms need larger resources, pay higher wages, and must deal with the legal structure of more than one nation. Due to the potential risks involved in doing business overseas, this will most likely be the form of business adopted by an exporting firm.
- *What is the firm's employment?* The numbers ranged from a high of 700 employees to a low of 4. The mean value was 85 with a standard deviation of 181. Exporters in the region vary widely in the level of employment they provide. It is unknown whether increasing exports will increase employment levels in the area significantly. However, manufacturing jobs tend to be high wage and therefore may contribute to the standard of living experienced by local residents. Furthermore, high wage jobs will do more to increase secondary employment as high-wage workers have more disposable income to spend on services and goods locally. This has the effect of increasing employment levels further as this expenditure becomes income to others.
- *What was your firm's level of sales last year?* Some firms chose not to answer this question for confidentiality reasons. However, 10 firms did respond. The level of sales ranged from \$75 million to \$850,000. The mean is \$14.9 million with a standard

deviation of \$23.6 million. Exporters not only vary widely in their level of employment; they show significant variation in their level of sales. This shows that exporters do not necessarily represent the largest firms in an industry. This data is pertinent to understanding the nature of financial capital inputs to the County's exporting firms. The implication is that excessive financial capital is not required, or, that if financial capital is necessary it is currently unavailable.

- *What percentage of your total sales was in overseas markets in the last five years?* Answer ranged from none to a high of 43%. The average was 11% with a standard deviation also of 11%. None of these firms has a majority of their sales overseas. This would seem to indicate that these firms are primarily domestic in nature, with exports taking a subsidiary role. This information is important because it may indicate that local demand conditions are spurring these firms to develop a competitive advantage that is making them competitive with firms in international markets. Since our firms are also expanding their export programs despite the ever-strengthening dollar, this seems even more likely. It is noteworthy that several firms indicated that they had discontinued their export programs over the last five years.
- *What percentage of your total sales do you forecast for overseas markets in the next five years?* The values in this category ranged from a high of 58% to a low of 0%. The mean is 13% with a standard deviation of 15.8%. Firms' projections of the future vary more than their past results have been. This represents an increase of 25% in the percentage of sales made overseas. However, the average firm expects a higher

percentage of their sales to be overseas in the future. This may indicate an expected relative increase in overseas sales or an expected decline in domestic sales relative to export sales. The following question gives us the answer to which one is correct.

- *What rate of market expansion do you forecast for the next five years?* Values projected ranged from 0% to 25%. The mean value was 6.07% with a standard deviation of 7.39%. To summarize, we know that firms expect to expand their market by six percent, and they expect their international sales to make up a larger fraction of their sales than in the past. Inevitably, increased exports will increase the foreign exchange exposure of the Tampa region. For example, at a DM/\$ exchange rate of 1.4, a \$10,000 automobile in the U.S. will cost a German citizen DM 14,000. When the dollar appreciates to 1.8 DM, then the same automobile will cost a German citizen DM 18,000. This is a great difference in price and will make U.S. produced goods more expensive than those produced in other countries.
- *What was your rate of market expansion over the last five years?* The values reported ranged from a low of -5% to a high of 15%. The mean value was 4.92% with a standard deviation of 5.62%. These firms expect the next five years to be better than the last five have been. This may not be an unreasonable assumption if the \$US retreats from its strength of the past five years. If the dollar were to depreciate relative to some foreign currencies, this would help foreigners to be able to afford to purchase more of our exports.

- *What impediment does your firm encounter in increasing exports?* None was the most commonly cited answer. Competition (SIC 34) was a noteworthy response. Not surprisingly, cash flow was the second most common response. If competitive advantage develops in an area, the firms frequently experience growth that strains these firms' limited financial resources. Facilitating the acquisition of adequate development capital must be a primary goal.
- *What information would you find helpful in assisting you to further develop your foreign markets?* None, again, was the most frequent response. Other responses are contacts, communication, import/export tariffs, credit checks, and interpreters. None was the response more than half of the time, leading to the conclusion that exporters are finding little prohibition in their overseas sales activities.
- *Which factors encourage your export program? (Very Important, Somewhat Important, and Not Important)* A) financing availability for exports, B) direct sales calls on foreign customers, C) ease of communications. Availability of financing was said to be not important by more than half of the respondents. It received the lowest positive response rate of the three parts. Direct sales calls were cited to be very important by more than half of the firms surveyed. It received the highest response rate of the three. Ease of communications is cited as very important more often than any other category, but there was not a majority of responses in any one category. It can be observed that most of the firms sampled felt that direct sales calls were very important to their export programs, therefore, these firms must incorporate sales calls

into their marketing plans somewhat successfully. It is therefore recommended that the GTCC-C100 support direct sales calls on foreign customers in the export-marketing plan.

- *What assistance from Chambers of Commerce, Economic Development Organizations, State agencies, and/or industrial trade organizations would help you?*

There was not one response to this question. It is recommended that these organizations refer to the question regarding information above, as many respondents may have felt that question to be the most useful function of these organizations.

- *Do you use any government programs to assist you in your export activities? If yes, what programs and to what extent do these programs influence your decision to export.* Twelve percent of the surveyed firms use government programs. Programs used were government information on foreign countries, and a government vendor program. Only one-half of the positive responses said that the program's existence influenced the decision to export. It would seem that the majority of firms make their decision to export without regard to government assistance.

- *What resources does your firm use to locate buyers in foreign markets?* The most frequent response was trade shows (33%) followed by, word of mouth and advertisements. Other responses included direct marketing, leads from foreign governments, internet, and agents and buyers. This leads to the conclusion that trade shows are a common, and perhaps profitable, method of making overseas business

contacts. The Greater Tampa Chamber of Commerce would be advised to continue to participate in trade shows for the export industries that it wishes to develop.

- *Product prices are (higher, lower, the same) in your export market relative to your domestic market.* The most frequent response was higher (44%), followed by the same (38%), and lower (18%). Clearly, a firm has incentive to export to countries where their product receives a higher price, assuming transport costs and other export-related expenses are not prohibitive. It would appear that a large number of the region's exporters are finding higher prices in foreign markets for their products. It is noteworthy that some firms in our sample find it profitable to export to countries even when their product brings a lower market price. Responses to this question are consistent with the operations of comparative and competitive advantage discussed above.
- *Selling costs are (higher, lower, the same) in your export market relative to your domestic market.* Responses were the same (50%), higher (44%), and lower (6%). It is surprising that the cost of sales should be the same for half the firms. However, if these firms are using the same resources to sell overseas, this may not be unusual. One would expect that if selling costs are higher in the export market, and the firm still finds exporting profitable, then these firms must enjoy significant cost advantages that lead to development of competitive advantage. However, the caveat is that this alone is seldom enough advantage to maintain a leader position in the market.

- *Time spent on delivering your product to market is (higher, lower, the same).*

Responses to this item are evenly split between higher (50%) and the same (50%). No firms experience lower delivery time associated with overseas manufacturing facilities, leading to the conclusion that our sampled firms do not have extensive overseas manufacturing facilities. The split between higher delivery time and no difference may reflect the differences in firms that ship directly, and those that either use a freight forwarder or sell directly to an export trade firm.

- *Risk of delays, product damage, or theft is (higher, lower, the same).* Responses were the same (50%), higher (31%), and lower (19%). The fact that a significant number of firms export despite higher risks implies that there are some fairly large benefits accruing to these firms that compensate them for the increased risk. The desire to develop these markets is a substantial benefit to an area in creating and especially to maintaining competitive advantage. Firms that export profitably in the face of uncertainty are applying business acumen in determining long run profit maximizing behavior instead of trepidation with regard to the existence of higher potential losses, provided the expected return to the activity is positive.

- *Brand competition is (higher, lower, the same) with regard to: A) advertising and B) customer service.* It must be observed that in every case the answers to A) and B) were identical. This leads to doubts as to whether the results of each component of the

question are valid. However, our results can be applied to the topic of brand competition in general.

- *Risk of nonpayment is (higher, lower, the same).* Risk of nonpayment was reported to be higher by 44% of the respondents, lower by 31%, and 15% reported no difference. This implies that, like other categories, nonpayment risk varies throughout the County's exporting companies. Nonpayment risk does not seem to deter Hillsborough County exporters. What is unknown is the degree of the increase in risk that is associated with US export activities. The foreign market may have domestic policies that make collection of all debts, foreign and domestic, more arduous or less likely. Although it may seem counterintuitive, it is possible that the lack of local infrastructure that allows debts to go uncollected in the foreign markets facilitates our County's firms in developing these markets.
- *Risk of late payment is (higher, lower, the same).* Fifty percent of firms reported a higher risk of late payment, with 31% saying that it is lower and 19% indicating the same. Apparently, exporters are more willing to tolerate late payment in international transactions. Conversations with firm representatives revealed that the time to collect payment from international transactions is typically longer than that of local or domestic transactions. This is conceivably the cause of the difference. Once firms understand that international financial transactions take a longer amount of time to clear, they are willing to budget for this additional cost of doing business, and proceed if the profits still warrant doing so. This implies sophistication among area

exporters that may lead them to advantageous trade relationships. Perhaps educating potential exporters regarding this situation will lead to a greater number of firms engaging in international trade, further developing our region's competitive strength.

One firm we surveyed manufactures wire products used as structural support for commercial concrete construction. The firm's products are used in the construction of high-rise office buildings, bridges, and industrial construction. This firm reported sales of \$75,000,000 in 1998, approximately \$375,000 of which was in overseas markets. Management projects overseas sales to increase to a level of 5% of sales in the next five years. The company will use trade shows, word of mouth, and direct sales calls to market their products in the Bahamas, Bermuda, and the Virgin Islands. This company reports a lower profit margin for its overseas sales (same price with higher costs) and higher nonpayment risks. Nevertheless, it plans to expand its overseas markets. This firm reports its motivations to be long-term expansion of its production capacity and the development of new, related products. This type of firm would benefit from industry specific (SIC 34) factor development and has the appearance of potential for gaining a competitive advantage.

- *Please rank these factors in order of importance to your firm.* (1 being most important, 7 being least important). Product price, selling costs, time, risk of delay, brand competition, risk of nonpayment, and risk of late payment. In order of importance these factors with their mean and standard deviation were product price (2.5, 2.07), risk of nonpayment (2.92, 2.23), selling costs (3.08, 2.11), risk of late

payment (4.27, 1.56), risk of delays, product damage, and theft (4.92, 2.14), time (5.15, 2.3), and brand competition (5.3, 2.11). It is not surprising that price, risk and cost would be the foremost criteria for firms in deciding whether to export.

- *Do employees of your firm have several ties with foreign countries?* Twenty-four percent of firms in our study reported foreign ties that influence their export program. Although only one-quarter of responding firms report having these contacts, this is likely a much larger than the percentage figure in the total business community. Local ties with foreign markets leads to the competitive advantage our area enjoys by creating labor and entrepreneurial factors with area specific knowledge that facilitates Hillsborough County firms in doing business in these areas. This type of knowledge, knowledge of the language and customs of the export destination, may be just as important as technical knowledge related to production.
- *What form of financing is typically extended to your foreign customers?* A) You offer trade credit. B) Banks extend letters of credit or banker's acceptances, C) Foreign purchasers obtain insurance or you obtain insurance, D) Foreign government promotes/finances imports. Thirty-five percent of firms extended trade credit while 71% dealt in letters of credit or banker's acceptances. This shows a certain level of financial sophistication on the part of local exporters. Six percent of sellers reported insuring goods in transit, while 41% reported purchaser insuring. This would imply that a major part of goods shipped are uninsured, however, it is probable that a larger

number of goods are purchaser insured. 6% of firms reported obtaining assistance from overseas governments.

- *Are your customers typically private firms?* Seventy-six percent of respondents reported exporting primarily to private firms. Of these firms, 41% reported selling their products to wholesalers, with manufacturers purchasing from 35% of our firms, and overseas retailers purchasing from 29% of our firms. More than one classification of private firm was reported by 23% of our respondents, however, the largest portion of our sample was focused on one primary category of buyer. It is recommended that any marketing plan be focused on wholesale firms for two primary reasons. The largest buying segment is currently wholesalers, this indicates that our local exporters are finding benefits of a strategy of selling to wholesales for sale abroad, and that foreign wholesalers are interested in doing business with Tampa manufacturers. Also, this strategy conjoins with the trade shows suggested earlier.

Note: Regarding a firm's customers, an additional data item that should be collected in future efforts is whether local firms sold to local exporters. A case in point is a local manufacturer of pre-engineered metal buildings (again SIC 34). This firm reported having 25 employees and \$5 million in sales last year. Overseas markets represented 20% of total sales over the last five years, a figure projected to remain constant. This means that the firm is doing about \$1 million per year in overseas sales. The firm projects a 5% rate of market expansion over the next five years, a slowdown from the 10% experienced in the last five years. This may be brought about by increased competition--the firm cited

this along with funding as impediments to increasing exports. The firm cited contact information as helpful in export program development. Communications were said to be very important in export programs overseas. This firm reported lower product prices overseas and selling costs the same (again a lower profit margin). The firm reports a longer time required delivering its product to its foreign market relative to the domestic one. Risks of delays, product damage, and theft were also higher. This shows once again that lower profit margins associated with higher risks are proving to be surmountable difficulties for exporting. Advertising and customer service brand competition are both lower, possibly indicating that this firm might have a significant presence in this market and/or a potential competitive advantage. This firm reported that risk of nonpayment was the same in both markets, but was the primary consideration in its decision to export. This firm, therefore, does not extend trade credit. Letters of credit and banker's acceptances are the only financing methods honored in international trade. This company reported selling its goods to developers, contractors, and distributors/exporters. Its export philosophy centers on building a permanent customer base and increasing production capacity in the long run to meet this increased level of demand.

The last set of questions is designed to evoke the firm's underlying export market perspective.

- *Which market strategies do you follow?*
- You seek permanent customers to increase sales volume and you support increased production capacity. Seventy-six percent of the surveyed firms reported this as being their strategy. This indicates that more than three-quarters of the firms surveyed are

engaged in the capital investment necessary for an area to gain a competitive advantage in production.

- You use exports to absorb periodic excess capacity in domestic sales and/or to maintain existing sales. Eighteen percent of respondent firms said that this was a consideration. This implies a growing economy with a long-term outlook when considered together with the previous question.
- You use exports to adjust for seasonal fluctuations in demand. All firms participating in our survey answered no to this question. This implies that there are either no industries in the region that face a seasonal demand, the firms that do are unaware of the potential benefits of export to level seasonal demand, or that these firms are unable to take advantage of these opportunities. It is recommended that an export-marketing plan make firms aware of the potential opportunities involved in exporting when seasonality is a consideration within a market.
- You create markets for new products related to domestic products. (Products with small domestic demand but that fit your production facilities well). Forty-one percent of firms replied that this was a motivating factor behind their exports. This means that a significant fraction of Hillsborough County businesses seek export markets as markets in which to develop new products. These firms utilize the byproducts of their current production processes in a profitable manner via exporting.

It is apparently the objective of the area's firms to develop export activities with a long-term growth perspective rather than a one time opportunistic mindset. We conclude that a number of County exporters are involved in investment, innovation, and upgrading that lead to competitive advantage. It is recommended that this investment be encouraged in

the export marketing plan. Subsidizing the capital investment of exporting firms, thereby lowering their costs of remaining competitive could do this.

V. Conclusions.

We observe in the sample that a large number of businesses involved in exporting are in industries engaged in fabricating both ferrous and nonferrous metal products. This includes fabricated structural metal products and miscellaneous fabricated metal products. Another major segment manufactures machinery and equipment such as construction, mining, and materials handling machinery and equipment. All companies are organized as corporations. They employ an average of 80 people and earn an average of \$15,000,000 per year—an average of \$187,500 sales per worker. The businesses surveyed have experienced growth in both their domestic markets and their international markets. These firms are engaged in capital intensive production with high values of output per worker. Successful assistance of these firms will yield a relatively high value added to the community in the form of added output per worker. Encouraging these firms demands constant vigilance to their needs and to the surrounding competitive economic environment.

The companies that responded to the survey use direct sales calls on foreign customers to obtain sales, do not use government programs to assist them, and attend trade shows to make foreign contacts. These firms also look closely at the foreign price of their products; however, many do not require a high foreign price to make exporting

profitable. It should be noted here that more than one firm surveyed had ceased foreign sales operations as a result of the maintained strength of the dollar relative to foreign currencies. This situation cannot persist indefinitely, and there will come a time when more Hillsborough County businesses may find it lucrative to export. Nevertheless, a higher foreign price for a company's output is always preferred, and there still seem to be foreign market opportunities for firms in the region. Companies reporting delays in product delivery and payment and strong price competition may wish to recruit and train foreign sales staff in order to sell products in foreign markets where these workers are more knowledgeable about the customs and language.

Companies surveyed utilize letters of credit and banker's acceptances in international financial relations, generally denying the extension of trade credit. Typically they do not insure goods in transport to their foreign customers. Hillsborough County firms also appear to view their export programs as long term relationships to be developed. Such companies invest to increase their production capacity to meet growing product demand. It may be worthwhile to develop relationships with local bank representatives to explore financial opportunities. Local competition among banks decreases the costs to exporters in using their preferred method of financing. A study of the local banking market for letters of credit and banker's acceptances might help make this determination. Furthermore, it may be useful to lend assistance to retail exporters that buy from local manufacturers.

Hillsborough County's current and potential future competitive advantage would seem to arise from four sources. First, local exporting firms engage in the long term planning and investment necessary to maintain competitive advantage when it exists. Second, local factors of production are highly specialized in their access to and familiarity with the market characteristics of their trading partners. This fact is attested to by the fact that the largest number of the firms make direct foreign sales calls on their customers. Third, local demand would appear to be of a nature that drives firms to innovate and develop in order to satisfy local demand. Fourth, competition is thriving in local metal-products industries. This competition is driving them to seek out new markets for their products and to develop existing plant and equipment to meet this demand.

VI. Marketing Plan Recommendations.

The marketing plan adopted by the Greater Tampa Chamber of Commerce should include the following ten items:

- 1) Targeting of industries in which the region has the potential of competitive advantage.
- 2) Key-in on growth in these industries in order to increase the number of relatively high-wage jobs in the region.
- 3) Provide information to local firms regarding customs and duties in various regions.
- 4) Explore export-financing opportunities and programs for Tampa and Hillsborough County firms in order to develop exports, increase production capacity, sell goods overseas, and invest in future technologies.

- 5) Help firms establish overseas relationships with trade reps and sales staffs that can work with local businesses.
- 6) Continue to participate in trade shows for targeted industries to make foreign contacts. Encourage Tampa firms to participate in trade shows.
- 7) Collaborate with banks in Hillsborough County to extend their international orientation and competitiveness.
- 8) Encourage upgrading and expansion of production facilities for targeted firms.
- 9) Provide a forum for targeted industries to exchange knowledge and develop complementary products.
- 10) Act as a liaison between industry and government in assisting industry to develop export potential.

Specific actions recommended are:

- 1) Examine local firms manufacturing goods in SIC codes 34 and 35. It may be appropriate to recruit these firms to develop export programs. Establish a forum for representatives of these firms to discuss their experiences in overseas markets. Publish the proceedings in a local newsletter format to disseminate to other local firms as a recruitment tool. Recruit a cadre of industry experts to oversee the program in an advisory capacity.
- 2) Identify the specific factor input requirements of export-prone firms and work with local academic institutions to supply these firms with any technical workers they require.
- 3) Utilize trade shows to contact qualified sales personnel.

- 4) Include representatives of local banks in the industry meetings and advisory boards.
Develop a cadre of experts to keep lenders current on recent developments. Have these experts perform an advisory role.
- 5) Act as an agent to secure funding to develop these industries and upgrade their technical expertise.
- 6) Actively promote all federal, state, and local government funding programs to targeted companies.

VII. Recommendations for Further Study.

Future studies will be critical to the development of the marketing plan. The more accurate our information, the more successful will be our results. Future studies should center around six topics:

- 1) Update and augment the existing international trade database for all Hillsborough County firms, including relevant service industries.
- 2) The specific characteristics of factor inputs required by targeted industries.
Specifically, the skills and knowledge required of employees of firms in these industries.
- 3) The optimal financial structure of exporting companies. This is important to GTCC-C100's ability to assist firms in the development of adequate physical capital and technology to compete effectively in exporting.

- 4) The required skills of the overseas sales force to effectively market the County's products in foreign markets, the level of such skills at present, and the most effective methods for training this sales force.
- 5) The status of communication networks linking Hillsborough County and the County's primary foreign markets. This study should include current technology, available technology, firms providing communications services, and the communications abilities required by our local firms.
- 6) The characteristics of foreign companies that buy our local products and the markets in which foreign companies operate. It is imperative that GTCC-C100 understands why local businesses enjoy an advantage in certain foreign countries. This knowledge will facilitate the Chamber in targeting new opportunities with foreign firms and markets.
- 7) The nature of the production processes of the targeted industries. It is critical to Tampa's competitive success that firms know their most efficient scale of operation in order to produce at the lowest cost. Furthermore, it is important for GTCC-C100 to understand competing technologies and how they affect the production processes and costs, in order to make valid recommendations to our local firms.

References.

- Center for Economic Development Research, “International Trade in Hillsborough County”.
- Davis, Donald, “Intra-industry Trade: A Heckscher-Ohlin-Ricardo Approach”.
- Dornbusch, Rudiger, Stanley Fischer, and Paul Samuelson, “Comparative Advantage, Trade and Payments in a Ricardian Model with a continuum of goods.” *American Economic Review* 67 (December 1977), pp. 823-839.
- Dosi, Giovanni, Keith Pavitt, and Luc Soete, *The Economics of Technical Change and International Trade*. Brighton: Wheatsheaf, 1988.
- Florida Chamber of Commerce Foundation, Inc., “International Cornerstone Florida: Building a Crossroads Economy”.
- Leamer, Edward E., *Sources of International Comparative Advantage: Theory and Evidence*. Cambridge, Mass.: MIT Press, 1984.
- Lodge, George C., and Ezra F. Vogel, Eds. *Ideology and National Competitiveness: An Analysis of Nine Countries*. Boston: Harvard Business School Press, 1987.
- MacDougall, G.D.A., “British and American Exports: A Study Suggested by the Theory of Comparative Costs.” *Economic Journal* 61 (December 1951), pp. 697-724; 62 (September 1952), pp. 487-521.
- Mill, John Stuart, *Principles of Political Economy*. London: Longmans, Green, 1917.
- Porter, Michael E., *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York: The Free Press, 1980.
- _____. *The Competitive Advantage of Nations*. New York: The Free Press, 1990.

Ricardo, David, *The Principles of Political Economy and Taxation*. Homewood, IL:
Irwin, 1963.

Smith, Adam, *An Inquiry into the Nature and Causes of the Wealth of Nations*. 1776.
New York: The Modern Library, 1937.

Stigler, George J., "The Division of Labor Is Limited by the Extent of the Market,"
Journal of Political Economy, Volume 59, Number 3, June 1951, 185-193.