INTRODUCTION

There has been a consensus among Costa Rican professionals and authorities in the sense that renewed economic growth in the 1980s will require a substantial expansion and diversification of exports, particularly to markets beyond Central America. There has been somewhat less agreement about the components of the policy package that would be required to promote an optimal rate of growth of exports. Most of the attention, however, has focused on the macroeconomic policy environment and on fiscal (tax-cum-subsidy) incentives. Substantial progress has been made with respect to exchange-rate policy, after the fiscal-financial crisis of the early 1980s made the fixed-exchange-rate system unsustainable. The frequent, small devaluations associated with the crawling-peg system adopted by the Central Bank have made it possible to maintain the competitiveness of Costa Rican exporters. Some progress has also been made in reducing the anti-export bias of the tariff structure. Export promotion and allocative efficiency, however, will require further reduction in the rate of effective protection of production for the domestic market, which has resulted from the import-substitution strategy within the Central American Common Market. The nature and desirability of export subsidies and other fiscal incentives associated with the "export contract" are still controversial and
their effectiveness needs to be demonstrated. Beyond these policy interventions, exporters still need to be convinced about the stability and permanency of the new rules of the game and must generate optimistic expectations about the future of the region. All of this will improve the incentives to devote resources to new exporting activities.

Creating an environment in which prices and incentives are correct is a necessary yet insufficient condition for export expansion. Once relative prices are right and incentives are attractive, resource reallocations and actual output expansion take effort and time. How rapidly and how vigorously will export supply expand in response to the new price signals? Very little is known about the determinants of the elasticity of supply of new, non-traditional exports in a small, developing economy like Costa Rica. The study by Academia de Centro América, "Costa Rica: Exports of Certain Non-Traditional Products," summarized here, is an exploration into this uncharted territory. Sponsored by the U.S. Agency for International Development, the study represents the basis for Alberto Franco's Master's Thesis at The Ohio State University and it contains seven chapters. The introduction lays out the objectives and limitations of the study. Chapter II describes the methodology (of case studies) employed to obtain the results. Chapter III surveys earlier investigations and relevant contributions to the literature. Chapter IV evaluates Costa Rican trade policies since the 1960s. Chapter V presents the performance of exports over three decades.
Chapter VI, the core of the investigation, presents the results of each of the case studies, while Chapter VII derives some conclusions from the comparison of such cases.

METHODOLOGY

The main objective of the study was to identify key determinants of the elasticity of supply of non-traditional agricultural exports. That is, to identify opportunities and obstacles for the expansion of exports beyond the Central American Common Market. The method employed was the investigation of case studies at the level of the firm. Each one of the case studies provides an analytical history of an exporting firm, a description of its operations, and an evaluation of the results. A comparison of the cases makes possible tentative predictions about the types of exporting firms that are likely to succeed in Costa Rica. The factors influencing the elasticity of supply are examined for each one of the major stages in the export chain: production, processing, packaging, storage, domestic and overseas transportation, marketing and financing. The firm's organization for exporting, the quality of information and of communications, and its managerial ability as well as the nature and role of government support are also examined.

Products to be studied were selected on the basis of recent rates of growth of exports, namely: fresh flowers (chrysanthemums), fresh strawberries, fresh pineapples, tropical fruit and vegetables, hybrid flower seeds, ornamental plants, and
shrimp. One firm was investigated for each product line: American Flowers, Coopefresia, Pindeco, Hortifruti, Linda Vista, Coopeindia, and Compañía Exportadora de Mariscos, respectively. In addition, exports of locally-assembled electronics components under an in-bond system (maquila) by Motorola de Centro América were investigated to compare opportunities and difficulties of agricultural and manufacturing exports. By 1990, this set of products are expected to represent about five percent of Costa Rica's total exports.

The specific firms studied were selected from a list of 90, which had applied for an export contract, after visits and further explorations confirmed their willingness to disclose the information desired. Linda Vista, Coopefresia, Coopeindia, Pindeco, and Hortifruti have been the major, if not the only, force in their business for extended periods. Compañía Exportadora de Mariscos produces and exports one-fifth of all frozen shrimp, while American Flowers, in the flower export business for over two decades, accounts for three-eights of the country's exports of fresh flowers. These firms are most diverse in their organizational structure, the origin of their production technology, the markets that they have penetrated, and their profitability. Numerous interviews with company officials (lasting for three hours on the average) and firm records provided the data for the analysis. Although, strictly speaking, the conclusions of the study are applicable only to the firms actually investigated, the commonality of results suggests topics
for future research and areas of special attention for the authorities. These conclusions are the result of inductive and creative reasoning, on the basis of the case studies, rather than of tests of casualty. They must be accepted with caution.

CONCLUSIONS

The case studies tell a story of small firms struggling to penetrate established, competitive world markets. A long list of mishaps and mistakes that have plagued most of these firms have resulted in substantial losses, but most of them have been able to use these experiences as feedback to improve their performance. Learning based on trial and error has been unavoidable, given insufficient information and incomplete organization for exporting, as well as limited resources to invest in research and in management skills.

Problems and opportunities were found at all the stages of the exporting process. Insufficient and inadequate information is one of the major constraints. The smaller firms suffer from a chronic information weakness, which has not been resolved yet. Difficulties are associated with obtaining reliable data on production techniques, packaging materials and procedures, transportation hazards and quality-control requirements. Moreover, all the firms had restricted access to current information on export opportunities, scope of potential markets, prices, and potential customers, distributors and agents. The exchange of information is inhibited by deficiencies in the
communications infrastructure, a particularly acute problem for smaller and newer firms.

The first steps towards establishing an export business are specially difficult, given lack of experience, and this insufficiency of information makes these initial efforts even harder. Because of their lack of familiarity with exporting, firms frequently overestimate the problems of selling abroad, and engage in time-consuming practices to meet unclear objectives. Few of the new entrants have had access to expert counseling and assistance, at a price that they could afford, not even from the government. The nationalized banks have few specialist knowledgeable about specific foreign markets and/or non-traditional commodities.

Many of the problems faced have their roots in organizational deficiencies and limited managerial abilities. About one-half of the firms studied do not have an institutional structure suitable for exporting. This is more frequently a problem for rural firms, which face a limited supply of local talent. Low salaries have compounded the problem. Coopefresa had five general managers in four years and the board has denied increases above the present $25,000 monthly salary. Several firms have had problems in filling medium-level technical administrative, supervisory, and managerial positions; while tightly-held family firms (Compañía Exportadora de Mariscos) have been reluctant to hire outside managers, who may eventually work for the competition. Unable to attract qualified managers, these
firms are run by their proprietors, some of whom have only a modest formal education. About one-half had not attended college; a few did not even have a high-school diploma. In the case of small firms, less than one-half had received vocational training and less than one-quarter spoke a foreign language. Almost none had even a verbal command of another language different from English. Skill formation has been largely concentrated on the apprenticeship of individual trades. Only a few have had prior experience in modern, large-scale enterprises. As a result, their firms lack clearly-defined export goals, policies, and procedures.

Organizational limitations are compounded, in the case of cooperatives and the smaller firms, by the lack of financial records. In one case no records were kept at all. Even when they are kept, these records are deficient and are not used as a management tool. Cooperatives were most lax in their accounting, and were frequently surprised to find out that they had incurred in losses. The failure to organize accounting and financial management procedures resulted in under capitalization and inadequate inventory management.

Technical problems in production were frequent, except for Pindeco, Linda Vista, Motorola, and possibly American Flowers, all of which had major foreign connections and/or ownership. At the other extreme, Coopeindia, with nearly 1,000 members scattered throughout the country, had problems in quality control. Insects have been the source of the major technical
difficulties. In the case of cooperatives, the advice given by technical assistance agencies to individual members has been often contradictory. In the case of Hortifruti, which purchased from independent growers who originally sold in the local market, these were unable to meet international standards.

Cultivation and harvesting have been two key areas where costly mistakes are often made. Cutting and shading have been done incorrectly and untimely harvesting has reflected inadequate training and lack of familiarity with production techniques and market demands. Many problems have reflected inaccurate and outdated information, on topics such as the emergence of pests, the application of agrochemicals, the status of the crops of competitors and, in the case of cooperatives, the status of member crops. Yields have been low in strawberries, caña India, shrimp, and tropical fruit and vegetables. Production programming is a major problem area where much improvement is needed. Many exporters lack a systems' view to coordinate the various stages of the exporting process. Excess production increased costs, while shortages wasted opportunities.

Among the most serious obstacles, emphasized by all exporters, have been the complexity of procedures and high transactions costs associated with imports of raw materials, intermediate inputs, parts, and capital goods. With the exception of Linda Vista, which uses local inputs, all firms reported problems in securing high-quality imports within a reasonable time frame. Several exporters complained that the
Ministry of Agriculture's requirement that they use only registered agrochemicals prevented them from using the newest products offered in the market. Long delivery periods, due to cumbersome import procedures and regulations, are particularly costly for maquila firms. One exporter claimed that the greatest obstacle to exports in Costa Rica was "la aduana" (customs). It still takes Motorola two working days to clear a shipment through customs, too long for an industry where the time cycle is critical. Protective tariffs make foreign inputs expensive, while highly-priced domestic substitutes are of low quality. Boxes and packing materials are still the relatively most expensive input into exporting operations, due to protectionism and the small size of purchases. Small firms suffered the most from unreliable, inadequate supplies of imported inputs, in view of the fixed costs of import licenses and the small scale of their transactions. Even when foreign-exchange allocations were available for small firms, their limited administrative resources jeopardized their ability to follow the bureaucratic procedures to get a license.

Fewer and less severe problems have been observed at the packing stage. However, due to packing materials which did not conform with international specifications, shipments of tropical fruit and vegetables, strawberries, and ornamental plants were rejected by the importer, with a total loss to the exporter. In view of the magnitude of the consequences of poor packing practices, firms have been quick to correct any deficiencies.
Several of Coopeindia's shipments of ornamental plants to Japan were rejected for lack of adequate fungicide treatment for the long journey. In other cases, produce still coated with pesticide has been spotted and impounded by inspectors of the importing country. Although pesticides used in Costa Rica are legal, they may exceed approved levels, if growers spray regularly, rather than during times of high insect infestation. Most of these problems, frequent in the early years, have been overcome with experience, and do not represent problems of importance for seasoned exporters.

Losses due to storage mishaps have been commonplace. Insufficiently precooled mangoes (Hortifruti) ripened beyond sellable conditions in Europe. The protection of inventories has been taken loosely by cooperatives and small exporters. Coopefresa kept its refrigeration facilities, with $10,000 worth of product, operating with no spare engine for three months, after it malfunctioned, although strawberries decompose within a few hours.

Air transportation has presented more obstacles than ocean shipping. Delays of flights caused severe losses to four of the six exporters which rely on air shipments. Failure to design appropriate crates, moisture, and to a much lesser degree, pilferage have caused losses during sea journeys. The infrastructure for air transportation has also weighed heavily against exporters, primarily of perishables. Loading of cargo in the rain has been frequent, mostly at the Santamaria airport,
while products left overnight unsheltered at the airport have been exposed to insect infestation. Cargos have been impounded abroad for carrying insects. Overseas air transportation was the most crippling problem for strawberry and electronics exports during the 1985-87 period, due to the decline in capacity and frequency of flights to Miami. This was a major cost of the limitations on landing rights to foreign carriers, the regulation of rates (floors), and other monopolistic practices resulting from aviation regulation. In addition, short routes and low traffic densities, which determine aircraft size, increase costs. Countries offering competitive products export at similar or lower transportation costs from more distant places. High local port tariffs and the protection of national fleets raise costs to levels equivalent to those paid by Ecuatorian exporters shipping to Miami. High costs of sea transport have been a key deterrent to exports to the West Coast of the United States, Canada and Japan. Service to Japan and Canada has been suspended, nearly closing all access to these markets. Port tariffs and low volume were the single most important factors. Lack of freight insurance for exporters of perishables has been an additional deterrent. In Hortifruti's early days (1979), transport handling and cargo hazards had to be fiercely contested, even in court, against forwarders who did not guarantee their shipments and would even insist in collecting freight when shipments arrived in poor conditions due to their neglect.
At least one-half of the firms lack a clear marketing strategy (export objectives, distribution tactics, and sales promotion). A major problem has been improper market selection. Many prefer to export to the United States, although market potential is greater elsewhere. Reluctance of Coopeindia and of Compañía Exportadora de Mariscos to sell more profitably in Europe reflected inability to deal in other languages and fear of dealing with distant customers. Transportation premiums, insufficient information, special trade regulations, and lack of counseling compounded the suboptimal market selection. Besides Linda Vista, American Flowers, and Pindeco, all other exporters operated with limited market information. The former had good market intelligence due to integration of the exporting-importing activities, an advanced communications system, and resources to spend management time in the foreign market place. Many of these deficiencies reflected more than two decades of operating in a relatively easy, protectionist business environment.

Selection of overseas distributors has been difficult. Prior knowledge about reputation has been scarce. Information about facilities and the distributor's management and sales methods has also been limited. Monitoring their performance has been almost impossible. Exporters have been forced to continue with a poor relationship during the duration of the contract. Exporters of perishables have had the greatest losses. The Coopefresa-Calzón fixed-price arrangement, while leaving most of the marketing risks up to the cooperative, reduced its profit
potential. Hortifruti experienced the riskiest arrangements, selling on a consignment basis. In contrast, American Flowers has always pre-sold its product and has so been insulated from price risks.

Consignment arrangements, used by most firms, lead to mistrust and exploitation, in the form of broken contracts without effective recourse, arbitrarily rejected shipments, high commissions and sometimes huge price markups, delayed payment and the absence of sufficiently clear and frequent communications between broker and exporter. It has been almost routine for brokers to fail to make timely payment of shipments. Total default hurt one-quarter of the firms. Hortifruti suffered heavy losses in the early 1980s, when the brokers did not pay for four containers of fresh fruit and vegetables. This has been usually the riskiest part of the business. Lack of export credit insurance has deterred exporters from making competitive offers to clients who request extended terms of payment. Unfortunately, most Costa Rican exporters cannot reach more advanced stages of the distribution chain (supermarkets and other retailers) due to relatively small and erratic volumes. Pindeco and Linda Vista have solved this problem through vertical integration. Costa Rican pineapples are now a regular feature in American supermarkets. Problems have been particularly acute when the distributor has been granted exclusive rights.

The cooperatives and small firms have accepted prices which did not guarantee a sufficient return. Most companies frequently
set their price as domestic cost plus "a percentage" to cover transportation and handling. Traveling expenses, legal fees, communications, provisions for bad debt, costs of market research, and other expenses typical of exporting activities have not been included in price computations. An additional complication have been the benchmark export prices (for fresh flowers, pineapples, and shrimp) set by the Central Bank to discourage under-invoicing. When these prices are set too high, sales abroad are discouraged, unless the exporter is willing to put forward additional hard currency. This has been the case with small-size, low-value varieties of shrimp, for which the benchmark has been above the export price. The absence of a local market to dispose of non-exportable surpluses also discourages exporters.

American Flowers, Motorola and Compañía Exportadora de Mariscos have found it cheaper to borrow abroad, while the cooperatives have had access to cheaper domestic sources of funds. Loans from special programs, at preferential rates, were few and highly contested, so all exporters in the sample saw no merit in pursuing them. No one ever attempted to borrow from FOPEX, FODEIN, and similar programs. Transactions costs have been too high. Lack of experience with new products limits the supply of credit from the nationalized banks. Most exporters rely heavily on their working capital and/or personal lines of credit, which are very limiting. Self-finance is predominant even for the larger firms. There were universal complaints about
delays in loan processing, about high collateral requirements, and the unwillingness to accept specialized assets as collateral (vessels and inventories), as well as lack of knowledge among lenders about non-traditional exports, who then overestimate the resulting risks. The credit squeeze was exacerbated by business practices which require that all firms extend credit to importers, but pay cash for purchased inputs and, in the case of cooperatives, make advances to producers.

Government export services have focused the least assistance on small- and medium-size firms. Export promotion policies have been inconsistent and have lacked continuity. Too many programs have been established and subsequently abandoned due to administrative and/or financial shortcomings. CENPRO, CINDE, MINEX and other agencies compete for attention, follow isolated and often inconsistent policies, and increase the exporter's transactions costs. They provide large piles of marginally interesting literature, add to red tape, and suffer from deficiencies similar to those of their potential beneficiaries.