



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Strategies for U.S. Apple Exporting Firms

by

Vicki McCracken
Associate Professor
Department of Agricultural Economics
Washington State University

Patriya Tansuhaj
Assistant Professor
Department of Marketing
Washington State University

A. Desmond O'Rourke
Professor
Department of Agricultural Economics
Washington State University

Karol Walter
Graduate Research Assistant
Department of Agricultural Economics
Washington State University

Introduction

World trade in agricultural products has grown rapidly in recent years. In 1985 over 15 percent of the world's food supply moved across international boundaries. The United States is the world's largest exporter of agricultural products, with nearly 15 percent of the value of the world's agricultural exports originating in the United States. Hence it is becoming increasingly important to understand and address marketing issues in a global setting. The basic nature of marketing does not change between the domestic and international arenas, but marketing outside of national boundaries does pose special problems.

Basic marketing decisions can be divided into four areas: product, price, distribution, and promotion (Jain). These decisions take on an added level of difficulty when the targeted market is unfamiliar to the marketer. Jain uses seven categories to describe the environments in which international marketing decisions are made. The first four are the economic, cultural, political, and legal environments. The others include international economics institutions and agreements, a general category including competition and technological changes, and a final category which encompasses the internal condition of the firm. International marketing requires a firm to make product, price, distribution, and promotion decisions simultaneously in several countries (or regions) which may be characterized by very

different environments. The main focus of this paper is on the distribution decisions made by U.S. fresh apple marketers in the international marketplace. The following section provides some background information about the apple industry.

Background Information and Objectives

The U.S. apple industry experienced large supply increases during the 1980s (Figure 1). Domestic production grew from an annual average of 196.2 million 42-pound boxes in 1979-81 to 235.2 million boxes in 1987-89, almost a 20 percent increase. Further increases are projected in the 1990s as many new plantings come into full bearing. Imports of fresh apples to the United States from Southern Hemisphere suppliers, while relatively small in absolute terms, increased from an annual average of 3.7 million boxes in 1979-81 to 6.5 million boxes in 1987-89, about a 75 percent increase. In addition apple juice concentrate imports rose dramatically during the 1980s, reaching a record high of 183,657 metric tons (the equivalent of 70 million boxes) for the marketing year 1988-89. Fresh and processed apple imports combined increased dramatically from an annual average of 23.6 million boxes (fresh weight equivalent) in 1979-81 to 67.3 million boxes in 1987-89 (Figure 1).

The increasing total supply of apples and relatively stable domestic demand for apples has put a downward pressure on prices, with average real prices falling during the 1980s. The average real price of Washington fresh apples in the three seasons 1987-1989 was about forty percent below the 1979-81 average. Consequently, the international marketplace has become increasingly important for the U.S. fresh apple industry.

During the 1960s and 1970s, the volume of world trade in agricultural products grew rapidly. Total world fresh apple trade more than doubled in the years from 1962 to 1986 (Figure 2). This growth was not evenly distributed, with major changes in the world trade flow of apples. In terms of imports, the large growth areas were East Asia and the Middle East. In terms of exports, Europe, the United States, and Southern Hemisphere countries were major gainers.

The U.S. apple industry was relatively successful in its export efforts in the mid-to-late 1970s and came to depend on continued access to world markets (Figure 3). In the 1980s, however, export expansion proved to be more difficult. Tariff barriers were reduced but non-tariff barriers were increasingly used to impede the free flow of trade. The Uruguay Round of GATT negotiations was launched to attempt to deal with these trade protectionist strategies, potentially increasing the access to foreign markets. Other institutional changes, such as the FAS Cooperator Program, have also played important roles in U.S. fresh apple exporting.

In light of the increasingly uncertain and competitive international marketplace, this study was undertaken to address several critical issues that may influence the competitive position of U.S. fresh apples in the international market. In particular, this study:

1. examines the structure of the U.S. export marketing system for apple products and the role of cooperatives in that system;
2. assesses the provision of different marketing support services by U.S. exporters; and
3. identifies the implications of the research for future international marketing strategies.

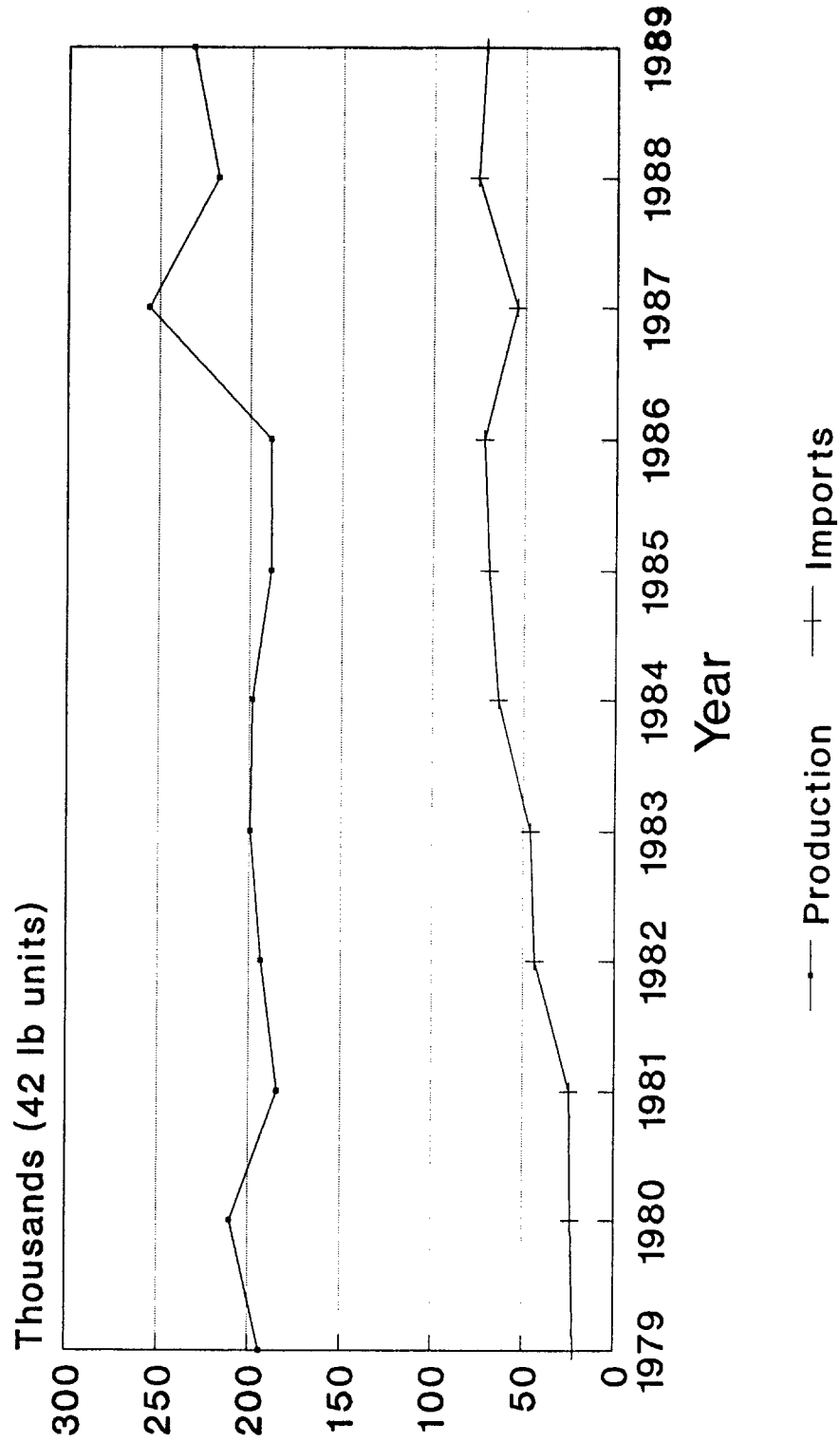
To achieve these objectives, apple exporting firms and organizations were examined in two separate but related segments of the overall research project. In the first segment, the structure of (mainly cooperative) exporters of fresh apples was examined. In the second segment, the quality of marketing services for U.S. apples exported to Southeast Asia was assessed. The methods and results of these research segments are discussed in the following sections.

Methods and Results

Apple Cooperative Surveys and Results

Exporting is a complex task involving a number of interrelated marketing functions, ranging from procuring the product through dealing with and affecting regulations. Export marketing

Figure 1
U.S. Total Production and Total Imports
1979-1989



1989 data is preliminary

Figure 2
World Fresh Apple Trade
1962-1986

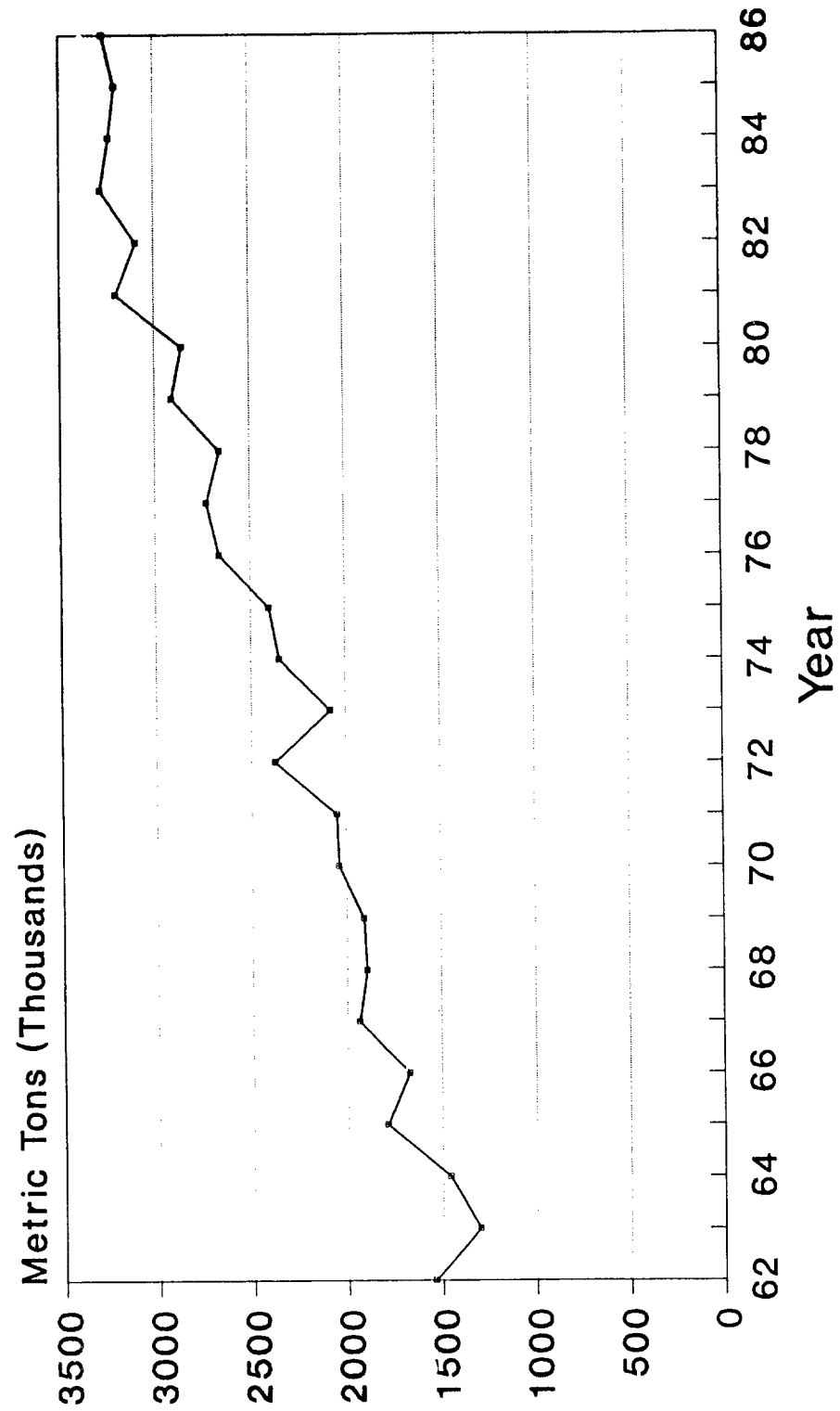
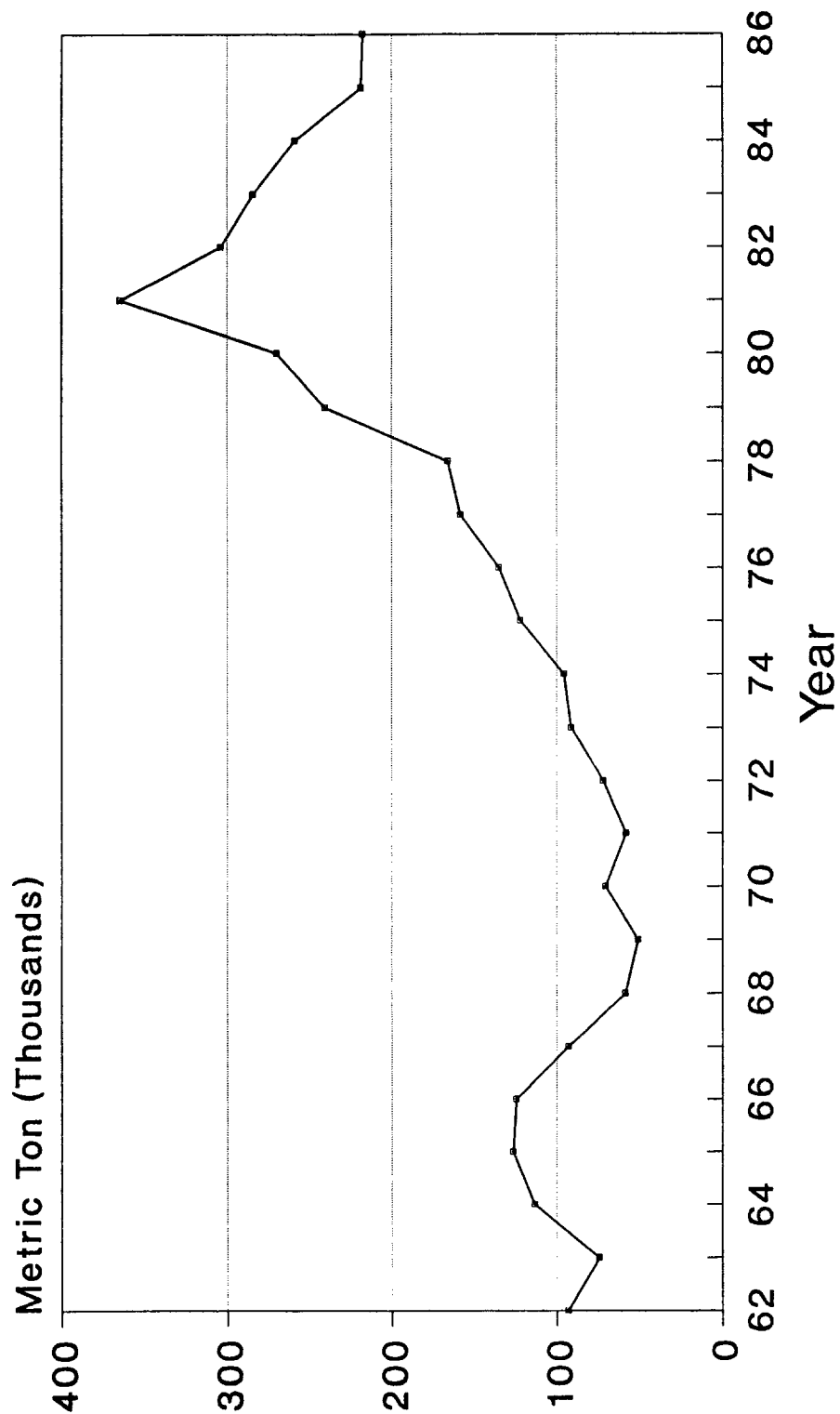


Figure 3
U.S. Fresh Apple Exports
1962-1986



should not be looked at simply as an extension of domestic marketing (Jain). New strategies are essential in order to comply with different and changing conditions in each market area. There are a number of barriers to entry in the international market including volume requirements, financial risks, range of products, and the large fixed costs that a firm faces when entering the market as a single unit. Both cooperative and noncooperative U.S. firms have dealt with these constraints with varying levels of success, due to their characteristics and degree of commitment to exporting. The objective of this segment of the research was to examine the current structure of (mainly cooperative) apple exporting organizations in the United States and to evaluate the performance of current arrangements.

A detailed questionnaire was developed for use in a personal interview setting. The five broad areas of information collected in the survey were: 1) company background information; 2) logistics of exporting; 3) market information - sources and usefulness; 4) sales/marketing activities; and 5) evaluation of export efforts. Interviews were conducted using the questionnaire as a guidance for discussion with the major apple cooperatives in Washington State and in the states of Michigan and New Jersey. An individual(s) familiar with or responsible for export marketing decisions was (were) interviewed. The results of these interviews are summarized in the following paragraphs.

The U.S. cooperatives interviewed were well established firms, most having been in operation for more than twenty-five years. They differed considerably in terms of the number of growers/suppliers with which they dealt, ranging from 12-20 members to approximately 2700 members with a median of 200 members. Similarly, the number of full-time employees ranged from three to over 30. The large size difference between these cooperatives is also indicated by their reported annual sales volume, which ranged from approximately \$6 million to over \$250 million.

These cooperatives differed in their dependence on the export market: at one extreme, a small cooperative exported on average only 0.40

percent of its apple products while several larger cooperatives exported almost 50 percent of their sales volume in the 1988 crop year. When questioned about their current and future objectives in exporting (using a scale that ranged from "12-month *aggressive* exporter" at one extreme and "export only *at request* of foreign buyer" at the other extreme), most of the cooperatives considered themselves to be aggressive exporters.

In general, firms avoid exporting because of the complexities involved with dealing in the international market (relative to the domestic market). The cooperatives were asked to provide some detail concerning how they carried out their export activities. The mechanics of exporting were found to vary by cooperative, and appeared to depend upon factors such as size of cooperative (total volume and export volume). The typical grower cooperative had a single person in charge of exporting. This person tended to have considerable exporting experience (10 to 20 years), to have some college education, and tended to travel extensively. The general ability to communicate with individuals of different cultures was considered to be more important than specific foreign language skills in being a successful exporter.

Channels of distribution in international marketing are often classified as either direct or indirect. Direct distribution involves transferring title with a foreign firm (in the foreign country) while indirect distribution involves dealing through another U.S. firm (or foreign firm located in the United States) as an intermediary. Most export sales (aside from those to Canada) by these cooperatives were made indirectly, mainly because of the seasonality of these exports, financial risk (especially related to exchange rates), payment responsibilities, time and personnel requirements, and lack of expertise in the international market.

Personal visits to foreign markets were believed to be a critical component of an export marketing program. Many cooperative managers visited both potential and established markets on a fairly regular basis. Trips to potential markets were perceived to be necessary in order to evaluate the markets and to make contacts in the case that exporting did occur. Trips to established markets were necessary in order to maintain con-

tacts with exporters and other members of the apple distribution channel and to continuously monitor the situation in the foreign country.

Most of these cooperatives made limited direct use of government services and publications in their export decisions. It is not clear that these cooperatives made an obvious decision not to use the services and publications since many indicated that they were not aware of their existence. Very little formal market research and few promotional campaigns were carried out by these cooperatives. The most critical decision that they made appeared to be selecting their export agent or broker. The known reputation of these individuals was seen as a critical piece of information. These individuals were trusted to provide the cooperative with relevant and timely information about quantity, prices, competition, product specification, credit, and exchange rates in foreign markets.

It is assumed that the cooperatives used this information to develop their marketing and pricing strategies. The most common strategy mentioned was essentially that they marketed and priced their product according to what the market (domestic and export combined) would bear, yet would still allow them to move the crop in a timely manner.

Many factors can influence a firm's export activities. One element of success in the export market is consistent provision of quality apples. Being a cooperative was perceived to be both a help and a hindrance in providing apples of desirable quality. On the positive side, cooperatives felt that because they were cooperatives they were more likely to have funds to modernize equipment and expand when necessary. On the negative side, it was felt that cooperative management often could not make major decisions quickly because of board control. It was not clear whether current pooling arrangements helped or hindered their ability to provide quality apples. Transportation costs, trade barriers, foreign competition, and lack of foreign demand were other factors that these cooperatives indicated negatively affected their export efforts.

Southeast Asia Channel Survey and U.S. Exporter Results

The previous section (interviews of exporting firms) emphasizes that international marketing involves more functions than simply selling or buying products. A recent study by Tansuhaj, Hong, and Tan (1987) found that although U.S. (Washington) fresh apples were perceived as having high quality, the willingness of some wholesalers and retailers in Southeast Asian markets to handle apples from the United States was not very strong. This reluctance stemmed at least partially from the perception that U.S. exporters provided inadequate service and were not as reliable as competitors from other countries. Grading, shipping, financing, and customer relations are examples of important functions which might not be emphasized enough by exporters and other channel members. This represents a potentially serious problem since these supporting services serve as the principal link between producers and foreign buyers. The total product concept suggests focusing not only on the "core" product but also on the "auxiliary" product (e.g., brands, packages, facilitating services). Improving the marketing support services provided is believed to be an important step for U.S. apples producers and exporters in gaining a competitive advantage in international markets.

Accordingly, this segment of the study focused on identifying areas of needed improvement for the auxiliary components involved with marketing U.S. apples in a specific region of the world, Southeast Asia. In particular, the marketing services provided by U.S. producers and exporters were evaluated through surveys of U.S. exporters and channel members in three Southeast Asian markets (Singapore, Malaysia, and Thailand).

Southeast Asia Channel Survey

A questionnaire was developed (originally in English, and translated into Chinese as necessary) which included a number of questions concerning the quality of various marketing services provided by U.S. exporters. Importers, wholesalers, and retailers in each country rated these services, using a scale of excellent, good, average,

below average, or poor. In some instances, the respondents claimed that the particular service was not performed by U.S. exporters.

The ratings for the services differed by country, reflecting either differences in the value placed on these services in different countries, or differences in the quality of services provided in different countries, or both. The results are presented for each question by country in Table 1. In order to condense the individual responses for simplicity in discussion, the original scale of excellent to poor was converted to a nominal scale with values ranging from five to one (i.e., 5 = excellent, 4 = good, 3 = average, 2 = below average, and 1 = poor). The average score for each question by country was calculated, and the results are summarized in Figure 4. Note that these averages should only be interpreted as tendencies in the data (e.g., in Singapore, the results indicate that shipping services were rated more favorably (4.00) than were documentation services (3.78)). The specific numbers (e.g., Singapore, shipping = 4.00) do not have a clear meaning.

Based on interviewer experience, the ratings of good and excellent are considered above the desirable threshold level. The rating of average tended to be used, however, even when the respondent was dissatisfied with a service. There also appeared to be differences across countries in how the respondents used the rating scale (that might be unrelated to differences in satisfaction with services). These warnings should be kept in mind when interpreting the responses in this section.

Singapore respondents generally rated shipping services, documentation, marketing research, meeting schedules, and foreign customer relations by U.S. firms as good or excellent. The respondents felt that financing, grading, packing, branding, and quality control services were only average. These marginal ratings on grading services could be related to problems of inaccurate weight, insufficient number of apples per carton, a mixture of sizes or qualities of apples in a carton, and

damage to the apples that occurred in transit to the foreign market.

Almost one-third of these wholesalers/retailers in Singapore rated advertising services as below average. Some of the respondents felt that the effectiveness of mass advertising (the method mainly used by the Washington State Apple Commission) was reduced because of lack of proper coordination with the indentors, wholesalers, and retailers in these export markets.

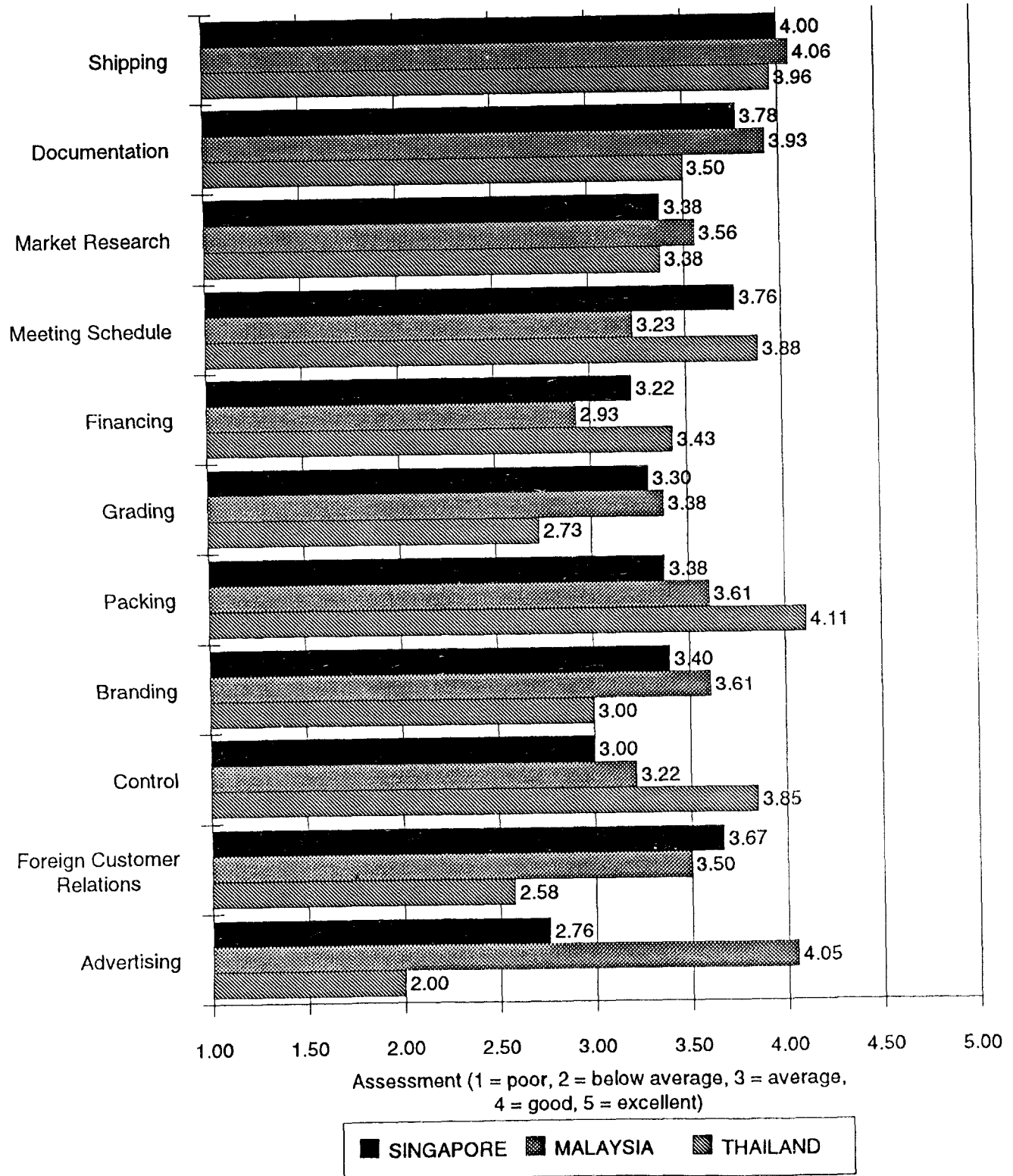
In Malaysia, it was found that financing, meeting schedules, packing, quality control, and foreign customer relations were the service areas needing improvement. Complaints with respect to packing referred to mixed sizes within the box of apples and allegations of intentional packing of smaller apples at the bottom of the box. As far as quality is concerned, there were complaints about apples arriving very badly bruised and damaged, and white due to incorrect use of wax. There were also concerns about excessive use of chemicals on apples which are for export to overseas markets like Malaysia. Apple distribution channel members in Malaysia suggested that a central body be established to keep a tighter control on the U.S. apples being exported overseas. There was some dissatisfaction expressed concerning the quality and frequency of customer relations between the U.S. advertising agents and the Malaysian apple wholesalers/retailers. The other services provided by U.S. exporters were rated as average, good, or excellent by a larger proportion of Malaysian respondents.

The market channel members in Thailand gave low ratings to several services provided by U.S. exporters. In particular, grading, advertising, and foreign customer relations services were felt to be performed at a level considerably below average. A number of retailers and wholesalers indicated that they were not aware that these services were being performed by U.S. exporters. Despite the relatively low ratings the Thai importers gave to the grading of U.S. apples, they felt that any problems they saw were not a fault of the exporter himself/herself, but were a fault of brand

TABLE 1
Assessment of Services Performed by American Exporters

	% of Respondents Rating				
	Excellent	Good	Average	Below Average	Poor
I. SINGAPORE					
Shipping	11	78	11	--	--
Documentation	6	88	6	--	--
Market Reserch	10	57	10	10	14
Meeting Schedule	10	62	24	5	--
Financing	--	33	61	--	6
Grading	5	30	55	10	--
Packing	5	43	43	5	5
Branding	--	45	50	5	--
Quality Control	5	19	57	10	10
Foreign Customer Relations	10	57	29	--	5
Advertising	5	9	52	2	10
II. MALAYSIA					
Shipping	20	67	13	--	--
Documentation	20	53	27	--	--
Market Research	13	31	56	--	--
Meeting Schedule	12	24	41	24	--
Financing	7	31	31	31	--
Grading	6	39	50	--	5
Packing	11	50	28	11	--
Branding	6	50	44	--	--
Quality Control	11	39	22	17	11
Foreign Customer Relations	6	44	44	6	--
Advertising	27	50	23	--	--
III. THAILAND					
Shipping	25	46	29	--	--
Documentation	18	41	18	18	5
Market Research	20	20	55	5	--
Meeting Schedule	20	54	21	--	5
Financing	4	52	31	9	4
Grading	27	27	38	8	--
Packing	35	46	15	4	--
Branding	--	44	50	6	--
Quality Control	31	35	27	4	4
Foreign Customer Relations	12	52	32	4	--
Advertising	--	--	44	12	44

Figure 4
Assessment of Services
Performed by U.S. Exporters in Southeast Asia



owners or growers. Many importers felt that the services provided by the (former) advertising agency (promoting U.S. apples) did not provide adequate promotional support and did not help them deal with the Alar situation. These concerns were also the main reason for their low ratings for foreign customer relations.

The majority of the Thai respondents felt that branding of apples is very important. However, these direct importers believed that most final customers do not know the difference between U.S. (Washington) apples and those from other countries. Therefore, branding has little meaning in the retail market although brand names are very important to wholesalers in order to evaluate the quality of apples. The Thai importers rated the branding performance of U.S. exporters as marginal. The Thai respondents did indicate that shipping, documentation, scheduling, packing, and quality control functions were satisfactorily performed.

United States Exporter Survey

In addition to questioning importers about the services provided by U.S. exporters, U.S. exporters were asked about the marketing services that they provide in the export market. A sample of 43 members of the distribution channel for apples in Washington State was interviewed, mainly through personal interviews. Most of these firms or individuals were involved in more than one activity: 63 percent were growers, 72 percent packers, 74 percent shippers, 28 percent brokers, 47 percent marketers, and 14 percent agents. Seventy-eight percent of the firms were cooperatives. Most of these firms used both indirect and direct methods of exporting apples, with 88 percent exporting apples indirectly through a middleman, and 54 percent exporting directly to a foreign distributor.

As an alternative to directly asking the exporters to assess their own services, they were asked to rate factors which make them particularly strong or weak in competing in export markets. A scale ranging from one to five was used, with one indicating weak and five indicating strong.

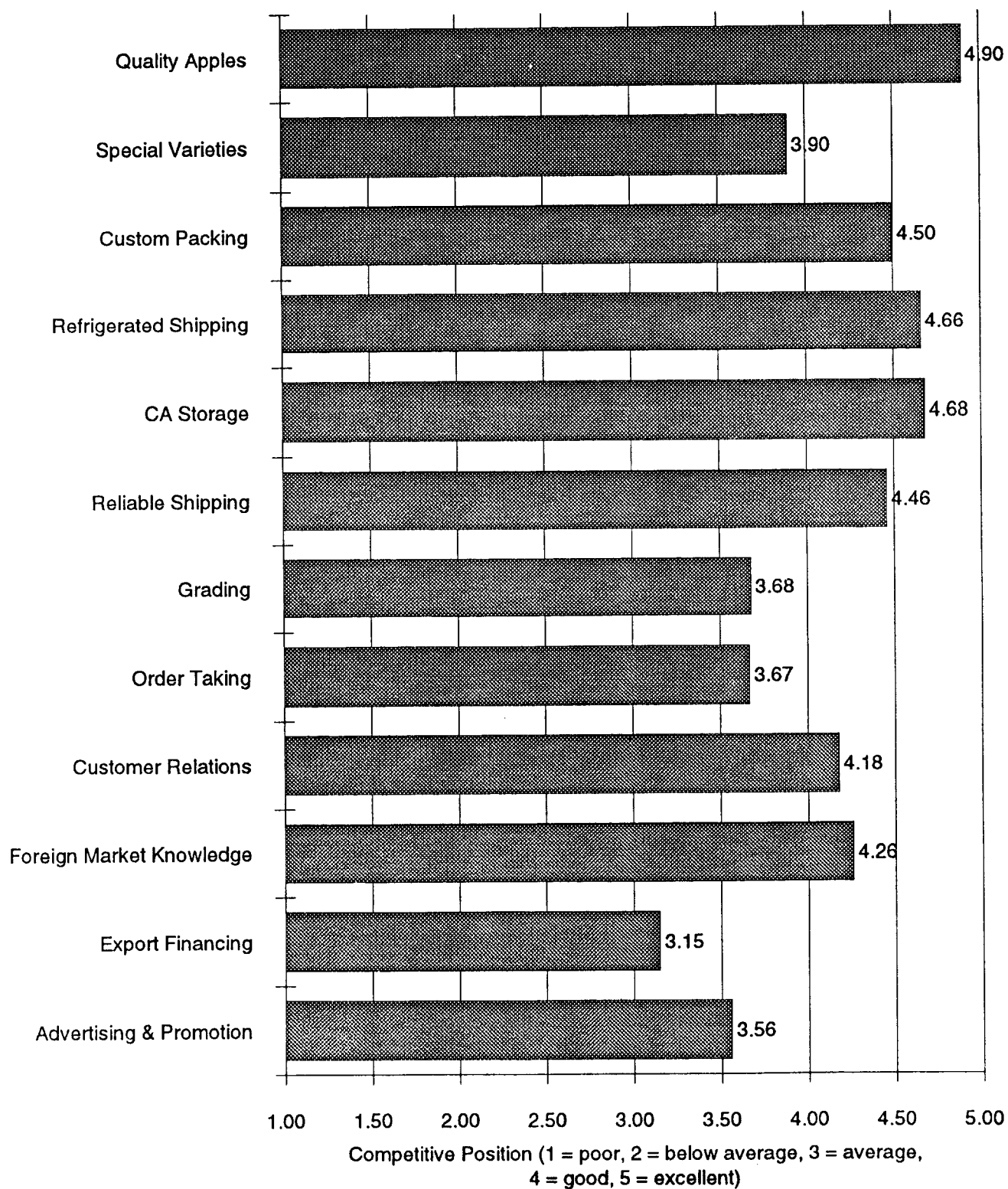
The results are summarized in Figure 5. Growing quality apples received the highest average score. Other important factors were CA (controlled atmosphere) storage, custom packing, and shipping services. Factors such as growing special varieties, grading, order taking, export financing, and advertising/promotion were given weaker ratings.

These ratings by U.S. exporters indicate that they are generally aware of problem areas hindering export growth in foreign markets. There does appear to be a difference between how U.S. exporters see themselves and how foreign buyers see the U.S. exporters. The issue appears to be whether, and if so how, changes will be made so as to improve marketing service quality. Currently, almost three-fourths of the companies surveyed indicated that they provide services for foreign buyers that are not performed for domestic buyers. Examples of such services are heavy packing, custom packing, longer credit terms, and personal assistance.

The U.S. exporters were also asked to evaluate the usefulness of organizations or individuals that support apple export activities. There was strong agreement that brokers, buyers, and marketing/sales agents provided valuable assistance to them in apple exporting. These organizations or individuals are those which have direct involvement with the companies in export activities. In contrast, U.S. Department of Commerce (ITA), State Extension Service, and the Washington State Apple Commission were not considered to be as helpful. The lower ratings of helpfulness for these organizations may be related to the lack of direct involvement in export activities by these latter organizations, or the apple industry's low awareness or recall of the available services.

In order to increase apple exports, a number of U.S. respondents felt that tariffs must be reduced and that the quality of apples needed to be improved. Other important factors cited (in order of importance) for increasing exports were determining customer needs and wants, seeking new markets, and promotion. The majority of

Figure 5
U.S. Exporters' Perception of Service Areas
Strengthening or Weakening Competitiveness



respondents believed that government should be more involved in the aforementioned areas.

Summary and Implications

The descriptive analysis of the structural characteristics of U.S. cooperative apple exporters indicates the potential that exists for reducing barriers that these cooperatives face in the international market through combining the efforts of the individual cooperatives. The cooperatives did not appear to differ in terms of their general outlook on exporting, but most were hindered by their size and overwhelmed by the immense task of exporting.

The strategy followed by cooperatives to price and market their commodity according to what the market would bear is really a tactic, not a strategy, and indicates the limited control that many of these cooperatives felt that they had over their product in the export market. Many critical decisions are influenced by information provided to cooperatives by individuals who may not be dealing mainly in apples and are made with limited explicit planning. These aspects of the behavior or conduct of apple exporters suggest the need for these cooperatives to have more control over their destiny in the export market.

It appears that cooperative organizations play an important role in providing quality apples to the export market, but that cooperatives need to consider changes that will allow them to respond more quickly to market conditions. Also considering the factors that were identified as hindering export efforts, some could be reduced (via economies in moving larger quantities) by more efficient organization of cooperatives in exporting (relative to each using their own export agent or brokers). Dealing in larger volumes and with a more diversified product line has the potential of opening up markets to cooperatives that were not possible in the past (due to these markets wanting large volumes or a mix of products).

Recent studies have found that U.S. exporters do not provide adequate services and are not

as reliable as competitors from other countries. This research also indicated that there were problems with the quality of services provided by U.S. exporters in Southeast Asian markets. U.S. export firms were found to be weakest in financing, packing, and advertising. The specific ratings for services varied by country. U.S. exporters typically rated themselves as being weak in these same service areas. They also rated themselves low in order-taking and in growing special varieties that are desired in the international market. And consistent with the opinions of the cooperatives, the U.S. export firms gave low ratings to the assistance efforts of public agencies (in terms of their usefulness) relative to that of individuals who have direct involvement in their export activities.

These findings suggest the need for apple firms to take a more active role in exporting their apples. Currently export agents or brokers are relied on to market apple products in the international market. Successful marketing involves more than producing and providing a quality product. The total market concept focuses not just on the core product but also on the auxiliary services (e.g., brands, packages, facilitating services). Given the problems identified by channel members in Southeast Asia, U.S. exporters are currently not doing a satisfactory job in providing some of these auxiliary services. The apple industry needs to develop a more effective marketing strategy for both domestic and export markets.

References

- Jain, S.C. 1987. *International Marketing Management*. Boston: Kent Publishing Co.
- Tansuhaj, P., K. S. Hong, and M. Tan. 1987. "Marketing Activities for Apples in Selected Southeast-Asian Countries: Thailand, Malaysia, and Singapore." *IMPACT Information Series No. 20*, Washington State University.

