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COMPETITIVENESS THROUGH AGRICULTURAL EXPORT PERFORMANCE Experience from Indonesia and Thailand

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ABSTRACT

Competitiveness can be measured into four main conditions that incorporate both internal and external factors need to be present to allow country compete successfully. These include (i) factor conditions, such as the availability of skilled labor and infrastructure; (ii) demand conditions for the products of the industry; (iii) related and supporting industries including competitive suppliers; and (iv) firm strategy, structure, and rivalry. Together these four factors create the context in which country in an industry are born and compete. Competitiveness of a nation in less developed countries, especially like Indonesia and Thailand can much be easier calculated from the performance of the industry, which is likely, an agricultural supply and demand performance.

In the 1960s, the agricultural export performance was similar between two Southeast Asia countries (Indonesia and Thailand), both in nominal and real value term. Those two countries were selected despite other ASEAN countries because of the performance in the past four decades where both nation were able to diversified and adjust their agricultural product not only for local consumption, but also include the export performance. One important factor resulting in the differences is the ability of diversification and adjustment of agricultural exports when the market conditions changed. The differences in export performance between the two countries are characterized clearly in contribution of each factor to explain the export growth rate. Among the factors contributing to the export growth rate for principal agricultural products, commodity diversification plays a

significant role in Indonesia compared with Thailand. Agricultural exports are often considered less promising because of the inelastic demand for agricultural products to both price and income. However, at the level of trade flows by commodity and by market, there are a lot of opportunities to gain from exports. Whether agricultural exports can remain to contribute to economic growth and rural welfare improvement depends on the ability to adjust to agricultural structure to the changes in relative resource scarcity and comparative advantage in the course of economic development.

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INTRODUCTION

Introduction

The concept of international competitiveness, although controversial, continues to attract plenty of attention from policymakers worldwide. This is perhaps the result lack of a better indicator for countries to benchmark their performance. Most measures of competitiveness so far have been at the national level and generally refer to the ability of a country to produce goods and services that meet the test of international markets, while simultaneously maintaining and expanding the real income of its citizens. Because competitiveness ultimately depends upon the industry in the country competing successfully in domestic and international markets, attention has recently shifted toward competitiveness at the industry level. At the industry level, competitiveness is generally understood to refer to the ability of the industry to retain and, better still, expand its global market share, increase its profit and expand. According to the traditional economic theory, an industry can gain competitive advantage through comparative cost of production by, for example, reducing labor cost.

However, recent research from the management field suggests that nonprice factors are equally important determinants of competitiveness. The range of nonprice factors is diverse and include human resource endowment, such as skills; technical factors such as research and development capabilities and the ability to innovate; and managerial and organizational factors, both internal to the industry and externally organized through relationships with other bodies, customers, suppliers, public and private research

institutes, and other industries or sectors. Together, these factors determine the ability of the industry to compete successfully in international markets in the face of changing technological, economic and social environments. Export profitability and the ability of the industry to maintain its market share remain the ultimate indicators of international competitiveness.

The purpose of this paper is to assess the competitiveness of agricultural export performances of two Asean countries, Indonesia and Thailand since the 1960s until 1997 and to examine the differences among the two in the light of changes in both external and internal factors especially in competitiveness over the four decades. Both countries are selected because in terms of agricultural exports, they had a similar situation and facing exactly the similar situation where both countries have to survive and increase their agricultural products for exports in order to sustain their agricultural industries as their main activities and income provider of the nation.

Agricultural exports are very important for many developing countries especially for Indonesia and Thailand, as a main source of earning foreign exchange and as generator of overall economic growth. Expansion of agricultural exports is considered one of the most promising means of increasing incomes and augmenting foreign exchange earnings, particularly, in a country stepping up its development efforts (Johnson and Mellor, 1961). It is generally accepted that the supply of foreign exchange is one of the standard contributions of the agricultural sector to the promotion of economic development (Myint, 1975).

In addition to earning foreign exchange, a potential advantage of agricultural exports is that export outlets in developed countries may provide capital and technical advice on production and product improvement. The benefit of such advice may spread from export sector to the production of food for domestic market as well spread from export sector to the production of food for domestic market as well (Ghatak and Ingersent, 1984). Even for the countries that have shifted the weight of economy from agriculture to manufacturing and other sectors, agricultural exports continues to play an important role creating incomes in rural areas and related sectors.

But in the 1950s and 60s it was widely believed that rapid growth in developing economies would not be achieved through increases in agricultural (primary commodity) exports because of inevitable deterioration in the terms of trade against primary commodities due to the forces limiting demand for primary products. This underlay the foundation of import substitution strategy. Even in the 1980s the view of primary export pessimism that export prospects for agricultural products are determined predominantly by world demand was argued.

Such pessimism may apply to agricultural exports as a whole since both price and income elasticities of demand for agricultural products are low in general. However, it is not necessarily true that demand is serious constraint of export for individual commodities in each country. For a small country the price elasticity of demand for exports of a homogeneous commodity is large and there is a huge potential to gain if it is successful to

reduce the export price by more efficient production. There are also many agricultural commodities whose demand elasticities are relatively large in terms of both price and income like horticultural products and processed foods. To take advantage of such opportunities for gains from agricultural exports, it is necessary that exporting countries have an ability to adjust to dynamic changes in international markets and to develop markets for commodities with large price and income elasticities of demand. Therefore, agricultural export performances for individual countries are results of sustainable competitiveness not only the external factors (demand forces) but also the internal factors (change in supply side abilities).

In the following sections, first brief overviews competitiveness of agricultural export performances between the two countries are provided. Then an econometric model is applied to identify the sources of the differences in performance of agricultural exports. The model tries to explain the growth and pattern of agricultural exports by external market conditions (world demand) and internal factors (competitiveness and export diversification), applying not only to aggregated agricultural exports but also to individual commodity exports as well. Next, further investigation is conducted to explore the structure of demand for exports by commodity in selected markets using a formal demand system model. Correspondingly, transmissibility of export prices to import markets is statistically examined. Based on the results of the statistical analyses, this paper concludes with the sources of different performance in agricultural exports and draws the meanings for economic growth and rural welfare in the both countries.

Types of Competitiveness

Before one can discuss policies to address competitiveness concerns, it is important to clarify what is meant by the term competitiveness. At least three general types of competitiveness have been identified or implied in various contexts:

a. Economy-wide competitiveness

   The ability of firm's across the economy to compete, via price or other product attributes with business located in other countries (this is sometimes referred to as the competitiveness of a country);

b. International competitiveness of firms

   The ability of specific firms or industries to compete for market share with business located in other countries, which effects the location of production across countries;

c. Domestic competitiveness of firms

   The ability of specific firms or industries to compete for market share with other firms or industries in the same country.

A. Economy-wide competitiveness

"Economy-wide competitiveness" is actually more a product of a government's macroeconomic policies than of specific sectoral or environmental policies. Indeed, some economist have argued that it makes little sense to talk about the competitiveness of an entire country or economy, and that doing so can lead to badly misguided policies (Krugman 1994). Countries do not compete the way business do, and a country is much more likely to be helped than harmed by the strength of its trading partners' economies. If "competitiveness" has any meaning at all for an entire economy, Krugman says, it is as a synonym for "productivity".

This is not to deny that specific policies on taxation, climate change or other matters that affects the domestic business climate do not matter, for indeed they do. But the concept of "competitiveness" is not a useful tool to examine the economy-wide implications of such policies. Rather, these issues should be considered in terms of the implications of such policies for gross domestic product (GDP) and gross national product (GNP), along side such issues as education levels, labor relations law, and other issues that affect productivity.

B. International Competitiveness of Firms

The international competitiveness of firms is the ability of specific firms or industries to compete for market share with business located in other countries, which affects the location of production across countries. Put differently, it is the ability of a firm to

supply product of similar quality at a similar price to other suppliers and thereby gain or hold a share of the market while maintaining profitability.

In the context of environmental policy, discussion of the international competitiveness of firms has centered on the costs of environmental measures in the producing country, and this aspect of competitiveness is the focus of this report. A loss of competitiveness due to the costs of environmental measures can be of concern for two reasons. First, reduced international competitiveness can cause job losses and flow-on social and economic impacts in affected communities.

In the medium longer term, workers and other resources will be employed in other sectors of the economy, if necessary through a process of currency devaluation that makes other sectors more competitive internationally. However, this entails short-terms adjustment costs on firm, workers and communities. Shareholders could see the value of their investment fall, workers might need counseling and retraining, and communities might suffer social problems associated with higher levels of unemployment and poverty.

C. Domestic competitiveness

A third type of competitiveness is the ability of specific firms or industries to compete for market share with business in the same country while maintaining competitiveness. While international competitiveness is likely to be based on competition for sales of closely similar products, "domestic competitiveness" may involve competition and potential substitution by consumers among broader classes of substitutes, especially in

the medium to the longer term. Examples include substitution between gas or wind power and coal; between different development patterns and modes of transportation in a city or region; or between waste disposal systems such as gas collection and composting of organic waste.

Significantly, a loss of domestic competitiveness by one firm is the result of an increase in competitiveness of another domestic firm, i.e. the firm to which consumers have switched. There would be inefficiencies, however, if some domestic firms or sectors were treated differently and paid a lower cost or no cost for their emissions and as result were able to capture market share (broadly defined) from firms that were paying full cost.

Second, the domestic adjustment process should be less painful than adjustment to losses of international competitiveness because domestic firms that have gained business would be increasing output right away and thus demanding more labour and other resources (possibly before the firms losing competitiveness lay off workers).

Problem Statement

According to Porter (1990), four conditions that incorporate both internal and external factors need to be present to allow country compete successfully. These include (i) factor conditions, such as the availability of skilled labor and infrastructure; (ii) demand conditions for the products of the industry; (iii) related and supporting industries

including competitive suppliers; and (iv) firm strategy, structure, and rivalry. Together these four factors create the context in which country in an industry are born and compete (Porter 1990).

In addition, recent research also emphasizes path dependency, which relates to history and the development of features specific to a particular nation, as also being an essential determinant of competitiveness. There is well-developed literature that ascribes a strong role to national capabilities, characteristics, and policies in conferring technological and competitive advantage to industry, particularly in developing countries. A central aspect of this view involves networks and interactions among firms in the industry, universities, research centers and government organizations comprising a national system of innovation or NSI (Bartholomew 1997) that enhance their ability to grow (Kaounides 1999). Within this framework, government policies aimed at strengthening a country's NSI generally contribute to the competitive advantage of industry in that country (Aoki 1997).

Furthermore, the resource-based perspective of the industry (Barney 1991) emphasizes the ability to create entry barriers in order to discourage competitors from imitating and duplicating their successes. Accordingly, an industry can gain and sustain its competitiveness in international markets by its ability to leverage on organizational resources and skills that are valuable and rare (Coyne 1985); non-imitable (Lippman and Rumelt 1982, Barney 1986); and non-substitutable (Barney 1991). Thus, while micro factors are important determinants of competitiveness, the natures of the external

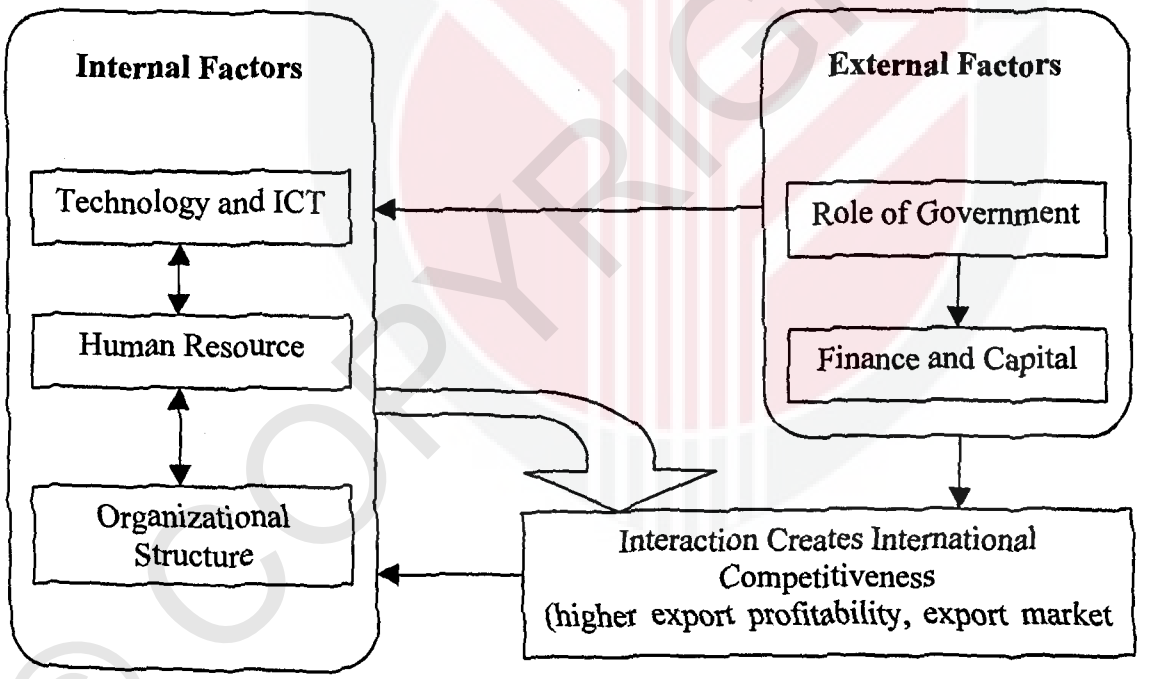
environment in which industries operate and the relationship industries develop with outside organizations are increasingly being recognized as integral elements of competitiveness at the industry level.

The different theoretical explanations of competitiveness above explain the competitiveness of mostly large corporate firms in advanced developing countries and therefore are not entirely appropriate for firms in Asian developing countries. For example, the resource-based view approach (Barney 1991) suggests that firms derive their competitiveness by producing unique products and by creating entry barriers to prevent others from imitating their activities. This is not entirely relevant for firms from underdeveloped countries in Asia, which is characterized as being generally small, technologically underdeveloped with unskilled workers, and operates within an underdeveloped financial sector. To explain how these firms can enhance their competitiveness, we borrow elements of the different theoretical perspectives above developing a conceptual model reflective of the experience of Asian firms. In particular, our model postulates that firms can enhance their competitiveness by (i) being flexible and working cooperatively with outside organizations, (ii) being innovative, and (iii) being human resource-oriented. To the extent that the external factors facing industries are also important, we further argue that ultimately the competitiveness of industries also depends on the role the government plays in supporting business and industrial development. A major constraint facing Asian firms in the post crisis period has been access to adequate financial resources. We incorporate this element in our model and

argue that access to capital in a well developed and stable financial sector is crucial for industries to grow.

The model in Figure 1 shows the linkages between the internal and external factors discussed above. The internal factors include technology, human resource, and organizational structure. The second component of the model includes external factors consisting mainly of the role of government and the nature of the financial sector. Although finance constitutes an internal resource to any enterprise, the present paper considers macro financial issues and as such includes it as an external factor.

Figure 1 : An Integrated Model of International Competitiveness of Enterprises in Asia



Objective of the Study

The objective of this study is to see how competitive is our two closest neighbors, which are Indonesia and Thailand, in managing their agricultural exports. This will include what

is their strategy in maintaining the exports volume and value of agricultural exports despite having some economies difficulties and financial constraints. We also can learn how Indonesia and Thailand expanding their market share through product differentiation and focus commodity. This could be interesting because both nations are facing some difficulties in managing their agricultural but can survive and maintaining their performance throughout the four decades. We also want to know how both nations sustain their competitiveness of the industry consistently through a medium and long term planning even though they are facing a very tough challenge from other industry like manufacturing.

Specific objectives of this study are to see how internal factors and external factors influence the agricultural exports of Indonesia and Thailand. Is demand plays a significant role in determining the production of the product or not. We will also see if there is enough room in domestic market to fulfill the consignment for export. We also want to know whether price competition is major factor in exporting the agricultural product and how to maintain the price to be competitive enough in the world market.

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