

CHAPTER 2

REVIEW OF RELATED LITERATURE

2.1 Definitions

The important components of a cross-border economy are cross-border trade and formal or informal cross-border trade migration. This study will emphasize on cross-border trade activities.

2.1.1 Types of border trade

Formal Border Trade: Trade between neighboring countries with permission from respective governments or from the country of study by paying dues (e.g., custom duties, commercial tax, etc.) at border posts.

Informal Border Trade: Trade where no border posts exist where both sides avoid border posts or when sanctioned by local authorities but not recorded in official statistics.

Illegal Border Trade: Trade without the knowledge of local authorities or trade in goods that are banned by the governments on both sides of the border.

Transit Trade: Importation of goods across one border and export through another, importation of goods across one border and export overseas, and importation of goods from overseas and export across a border.

Although no study directly focusing on the cross-border trade activities on any port is available, some scopes of study provide information on the cross-border trade of Yunnan with GMS members.

2.1.2 Cross-border trade

Cross-border trade is defined as the flow of goods and services across international land borders within a reach of up to 30 kilometers. Cross-border trade plays an important role in supporting the livelihood of border communities and pushing prosperity in the GMS. Cross-border trade also can strengthen commercial ties and promote cultural understanding and relations between neighbors.

2.1.3 Benefits of Cross-border trade

Cross-border trade benefits traders' lives and incomes, strengthens local production, and fosters service provision (such as storage facilities and transportation and agency services in local bazaars). Cross-border trade is also a significant driver of employment, such that incomes increase in households that would otherwise live in poverty. In remote regions where employment and salaries are low, cross-border trade can bring more profits to households than most other economic activities.

Cross-border trade lowers the import prices of goods available to consumers in bordering areas and enables exporters to benefit from higher added-value. As well, cross-border trade has a gender dimension: women are more actively involved in border trading activities, such as selling goods in bazaars, as well as moving goods through border crossing points, than men. In fact, many heads of traders associations involved in cross-border activities are women.

2.2 Literature review

The relationship between border trade and economic growth can be traced back to the 15th century: “The Balance of Trade Theory” in Mercantilism. Mun and Stafford considered that export trade and trade surplus can increase economic growth while import trade and trade deficit can reduce it. In the 1930s, Keynes published the foreign trade multiplier theory in “International Trade Theory,” pointing out that one country that exports products to another country makes investments in that country, thus increasing the employment rate and national income. But imports will role the negative effects to decrease the employment rate and national income. Helpman and Krugman (1985) pointed out that exports have a direct, one-way relationship with economic growth. “Vent for surplus” is a theory originally formulated by Smith (1723–1790) and later revised by Hla Myint in his thesis on South East Asia. Smith believed that division of labor improves the long-term productivity of a country; this division of labor is limited by the size of the market. International trade can help markets grow significantly. In Smith’s argument, trade provides “the new effective demand of the output of surplus resources, which would have remained unused in the absence of trade.” According to observations of increased international trade, division of labor is developed, productivity increases, and the economic growth rate hastens. Smith further implied that trade has a positive effect on economic growth. “Comparative advantage” was first described by Ricardo in 1817. Ricardo issued the theory of comparative cost, which agreed with Smith’s beliefs. Ricardo believed that international trade and division of labor can be optimized by a difference in product costs. Imported food and raw materials lower marginal and opportunity costs from other countries, which can slow the decrease in land revenues and allow the economy

to continue growing. Heckscher-Ohlin Theorem, in the 1960s and 1970s, opined that each country is best able to produce goods that require large proportions of the resources relatively abundant there. Thus, goods that require large proportions of resources existing within its borders must be imported in small quantities or not at all, allowing the country to allocate resources more efficiently and promote economic growth. In the 1930s, Roberson promoted the idea that international trade is the “engine for growth.” In the 1950s, Nurkse pointed out that international trade can pass on economic growth from a central country to other countries. In other words, the economic growth of a central country can bring about higher demands for raw materials to developing countries, thereby increasing their economic growth. These observations helped confirm that international trade is indeed the “engine for growth.” In the 1980s, the new growth theory was proposed by Romer, Lucas, and Rebelo, who put forth the idea that economic growth is primarily the result of endogenous and not external forces. In endogenous growth theory, investment in human capital, innovation, and knowledge are significant contributors to economic growth. New growth theory proposed that technological changes can improve productivity. Many papers have shown that economic growth is influenced by high productivity. Using technology changes as the endogenous variable, we can study the relationships between international trade, technology, and economic growth. Technological innovations can improve productivity, allowing people to obtain surplus products with which to do international trade. International trade can increase the size of a market and help transfer information more quickly. International trade can push technologies to innovate. Overall, international trade and technological innovations can push economic growth. Grossman and Helpman (1985, 1991) postulated that international

trade promotes economic growth in two ways: (1) International trade brings the economies of scale and (2) international trade can optimize the allocation of resources within a country. After the allocation of resources is optimized, the economy can continue to grow. Shan and Sun (1998) used the Granger causal test in a VAR model with six variables to analyze the relationship between the input of real industries and export in China from 1978(May) to 1996(May). Their results showed that the relationship between real industrial outputs and export in China presents a bi-directional Granger causality. Pack (1992), Helleiner(1996), and Bleaney(1997) opined that since no causal relationship exists between exports and economic growth, the former should not have any effect on the latter.

Tong Jiadong (1995) was the first scholar to study the relationship between international trade and economic growth in China, using the OLS model to test the relationship between import volume and national income from 1953 to 1990. His results showed that import growth has positive effects on economic growth. Shen Chengxiang(2000) used the Granger causal test and co-integration model to determine the relationship between China's export and industrial output, showing that the two have a bi-directional Granger causality. Liu Xiaopeng(2001) used the co-integration model to show that the growth rate of import scan significantly promote economic growth rather than the growth rate of exports in China. Lin Yifu and Li Yongjun(2001) used the macroeconomic model to prove that the growth of exports has positive effects but the growth of imports has negative effects on economic growth. Shi Chuanyu, Wang Yafei, and Wang Ke(2001) used the co-integration model and ECM to examine the relationships among exports, imports, and the GDP from 1952 to 2000, with results showing that in the short-term, exports can push

economic growth while import do not have obvious effects on economic growth. In the long-term, however, both exports and imports have positive effects on economic growth. Li Jin (2005) used the co-integration model and Granger causal test to examine exports, imports, and the GDP from 1978 to 2003. Long-term stable relationships among exports, imports, and the GDP were found. Export and import growth have significantly positive effects on the national economic growth. Du Jiang (2007) used the ECM and Granger causal test to illustrate the relationship between import growth rates and economic growth. Results showed that import growth rates and economic growth have a long-term stable relationship. Specifically, the relationship described has bi-directional Granger causality.

Lai Mingyong(2006) used the panel unit root test and co-integration model to explore long-term equilibrium relationships among border exports, border imports, and regional economic growth in the China-Russia region from 1992 to 2004, with results showing that there exist unit roots for the level values and long-term equilibriums among these variables. Co-integration results showed that border trade can produce significantly positive effects on regional growth but that border import trade may negatively affect regional economic growth to a certain degree. The panel Granger test showed that there exist long- and short-term bi-directional Granger causalities between border exports and economic growth. However, in the long-term, border import trade showed Granger-causality with regional economic growth but this relationship was not sustained in the reverse direction from 1992 to 2004. Zhang Zhenqiang (2009) used co-integration analysis, the ECM, and the Granger causal test to examine the relationship between border trade in Pingxiang and Vietnam's economic growth based on data from 1990 to 2008. In the long-term, a balanced and

stable relationship among the imports and exports of Pingxiang's border trade and Vietnam's total import-export trading volume and economic growth were found, and exports were determined to be the Granger cause for economic growth. The total import-export trading volume and import are not the Granger cause of economic growth but economic growth is the Granger cause for the growth of imports, exports, and the import-export trading volume. In the short-term, as the tripartite relationship among Pingxiang's GDP and the border import and export to Vietnam, their period from short-term undulation to long-term equilibrium last about 3 years and 6 months. The adjustment from short-term non-equilibrium to long-term equilibrium occurs relatively rapidly. The impacts of the short-term undulation of border export trade on the short-term variation in Pingxiang's economic growth are quite obvious; border import trade also influences Pingxiang's economic growth. Quantitative analysis shows the Pingxiang's border trade and its economic growth greatly promote each other.

2.3 Theories

Several classical theories in international trade may explain trade behaviors between countries. Porter's national competitive advantage theory is the main theory that can explain the cross-border trade between Yunnan and other GMS members.

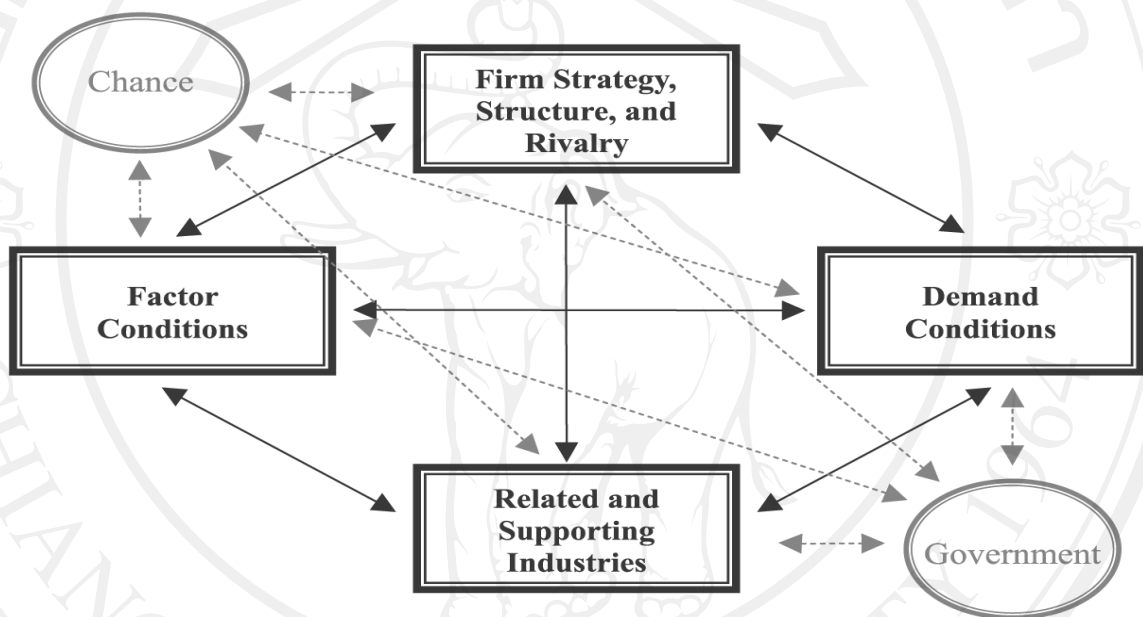
2.3.1 National competitive advantage theory

In the national competitive advantage theory, Porter set up two principles.

First, to analyze national competitiveness, firms must use the national environment to develop their identity, resources, capabilities, and managerial styles. Second, for a

country that needs to maintain its competitive advantage in a particular industrial sector, it must innovate and improve.

Porter explains four main factors in the national competitive advantage theory, calling the “diamond of national advantage:” factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry.



Source: Porter (1990)

Figure 2.1 The 4 main diamonds of national advantage

Factor conditions show how far the factor of production of a country can be used successfully in a particular industry. According to economic theory, factors of production include land, labor, capital, natural resources, and infrastructure, all of which determine the flow of trade. This concept goes beyond the factor proportion theory and explains that the contribution to the creation and upgrade of products is more important than the availability of the factors of production per unit for competitive advantage. If Japan possesses competitive advantage in the production of

automobiles, it is not because Japan has easy access to iron but because the country has a skilled labor force for making this industry competitive.

In this work, we focus only on factor conditions and compare the different competitive advantages of the GMS members. As Myanmar, Vietnam, Thailand, Laos, Cambodia, and Yunnan are developing GMS members, they have competitive advantage in labor-intensive industries, such as in fabric, clothing, and agricultural production. In capital-intensive industries, such as automobile, equipment, and machine manufacturing, however, these countries lose their competitive advantage.

Demand conditions dictate that the demand of products must be present in the domestic market from the very beginning of production. Porter pointed out that the size of the market is not very important; the intensity and sophistication of demand is significant for competitive advantage. If consumers are sophisticated, they will make demands for sophisticated products and will help industries produce such goods. In this manner, the country can achieve competitive advantage in such production.

Communication and feedback between final consumers and producers have been poor in all of the GMS members. The lengthy procedure of importing required inputs has hindered firms from receiving, interpreting, and responding to their customer needs.

Related and supporting industries require that a firm operate a long with its competitors, as well as its complementary firms, to obtain benefits through a close working relationship in the form of competition or backward and forward linkages. If competition is fierce, firms are more likely to produce better-quality items at a lower

cost to survive in the market. Home-based related and supporting industries provide innovation and upgrading advantages in close working relationships. Suppliers and end-users that have close relationships will achieve advantages in terms of short lines of communication, quick and constant flow of information, and ongoing exchange of ideas and innovations.

While the GMS members have been trying to develop their own industries, they continue to face many problems. Yunnan, for example, is restricted in terms of its exports/imports and lengthy licensing procedures. Thailand, Laos, and Vietnam, on the other hand, are restricted by their shortage in electricity.

Firm strategy, structure, and rivalry help increase exports. There is no fixed rule as regards choosing a particular strategy. More often than not, the strategy to be adopted depends upon a number of factors present in the home country or the importing country. National advantage results from a good match between these choices and the sources of competitive advantage in a particular industry. Domestic rivalry creates demand on companies to innovate, develop, and upgrade. Local rivals pressure each other to lower costs, improve quality and service, and create new processes and products. Local companies encourage each other to look outward to foreign markets to obtain more efficiency and profitability.

For Yunnan, domestic rivalries are fierce because of population pressure and the lack of resources. This rivalry plays an important role in improving the process of innovation and forwarding it to international trade. For other GMS members, however, firm strategy and firm structure are poor.

Besides the four factors of national competitive advantage, Porter provides two other factors to explain the influence of the first four factors:

First, **government policies** can change taxes and tax rates to control the demands of consumers. They can also encourage or discourage industries. For example, when a government support removes pressures on firms, these firms are able to improve and upgrade their own products.

Second, **chance events**, such as war, or some unforeseen events, such as inventions and innovations, play a role in fostering national competitive advantage. Wars can cause discontinuities in supplies while innovations can change demands and supplies.

Cross-border trade between Yunnan and other GMS members may be explained by other classical trade theories, such as absolute advantage theory, comparative advantage theory, and Heckscher-Ohlin theory.

2.3.2 Absolute advantage theory

Absolute advantage theory refers to the ability of a party (an individual, or firm, or country) to produce more goods or services than competitors using the same amount of resources. The main idea of absolute advantage comes from Smith (1776).

Smith hypothesized that when two parties trade with each other, both must gain from the exchange. Trade is not zero-sum game, such as mercantilism, which theorizes that a country must discourage imports and encourage exports to increase its wealth. Smith believed that both countries can obtain benefits from trade.

Yunnan and other GMS members are labor-intensive economies that continue to engage in the agricultural business and uphold tax-free agreements on agricultural products. Because each country features different climates, different fruits and vegetables may be expected from them. Yunnan exports temperate fruits to GMS countries, including apple, peach, and plum. In return, Thailand, Vietnam, Laos, and Myanmar export tropical fruits, such as longan, durian, and jackfruit, to Yunnan.

2.3.3 Comparative advantage theory

In 1817, Ricardo explained the idea of trade based on comparative advantage. The theory of comparative advantage states that two countries (or other types of parties, such as individuals or firms) can obtain benefits from trade on both sides. Each country incurs different relative costs to produce the same goods. Even if one country is more efficient in the production of all goods than the other, in other words, this country has absolute advantage over the other, both countries will still benefit from trading with each other until they have the same relative efficiencies. Thus, comparative advantage refers to the ability of a country to produce goods at a lower cost than another country.

Ricardo's theory assumes that the world has only two countries and two commodities. One of the assumptions of the theory is that firms live in the perfect competitive situation. This theory points out the links between different markets. Yunnan and other GMS members are labor-intensive economies and produce articles for daily use. GMS countries exchange living goods with each other because of differences in price.

2.3.4 Heckscher-Ohlin theory

In the early of 20th century, two Swedish economists, Heckscher and Ohlin, explained the causes of comparative advantage using the factor proportions theory (or Heckscher-Ohlin theory). The factor proportions theory explains that the comparative advantage of countries is determined from their resource endowments. Different countries have different factor endowments and different factor endowments lead to different costs. If a factor is abundant, its cost will be low. This theory assumes a constant return to scale.

The Heckscher-Ohlin theory suggests that each country can best produce goods for export when the resources for these goods are abundant there. It's best to produce the goods for import which require large proportions of factors within its borders in small quantities or not at all. However, while the Heckscher-Ohlin theory reflects current situations in international trade, it is not perfect. Specifically, it does not explain the phenomenon where goods are imported for re-export.

The factor proportion theory does not explain two types of international trade. Products from natural resources, such as diamonds, copper, coffee, oil, and natural gas, cannot be explained by this theory. As well, countries importing and exporting similar goods in international trade are not covered by the theory. For example, the US exports and imports automobiles at the same time.