TKNREPORT

Services Trade Liberalization and Food Security: Exploring the links in the Association of Southeast Asian Nations (ASEAN)

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Abstract

This paper addresses the potential role that services trade liberalization could play in promoting food security. Using the case study of regional cooperation pursued by the Association of Southeast Asian Nations (ASEAN), this paper argues that food security could serve as an important rationale for the Association to deepen its services sector reform process. This is particularly so given both the chronic food insecurity problem in many parts of Southeast Asia and the half-hearted willingness to deepen the process of services sector reform in the region.

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Abbreviations and Acronyms

AEC	ASEAN Economic Community
AFAS	ASEAN Framework Agreement on Services
APTERR	ASEAN+3 Emergency Rice Reserve
ASEAN	Association of Southeast Asian Nations
DSM	Dispute Settlement Mechanism
FAO	Food and Agricultural Organization
GATS	General Agreement on Trade in Services
IMF	International Monetary Fund
LPI	Logistic Performance Index
RILS	Roadmap for the Integration of Logistics Services
WTO	World Trade Organization

Summary

Food security remains a major policy concern for many governments the world over. Global climate change, rising demand for food as a result of population growth, international food price volatility, poverty, and conflicts are some of major contributors to food insecurity. In recent years, there has been an increased recognition that barriers to trade (particularly with respect to agricultural and food products), a lack of investment in agriculture and related infrastructure, and insufficient regional cooperation and coordination are also factors.

While a significant body of literature has assessed the linkages between international trade and food security, the bulk of that research has focused on trade in food and agricultural commodities. This paper attempts to address an aspect of trade agreements that has been relatively under-explored: the role played by trade in services in strengthening—or weakening—food security, with a focus on the members of the Association of Southeast Asian Nations (ASEAN). Although there are numerous services that may affect food security, the scope of this policy paper is limited to financial services and logistics services, which in our opinion are among the most relevant to the issue.

The financial services sector may be able to contribute to the promotion of food security in Southeast Asia, although liberalization alone does not seem enough to overcome the challenges that make financial institutions reluctant to establish themselves in poorer rural areas. Indeed, much of the existing literature on the subject generally emphasizes the difficulty for the banking sector to consider smallholder farmers to be bankable enough for their business operations. Further research on the subject should, therefore, examine relevant conditions that would facilitate the financial services sector's contribution to rural farming activities. Despite the liberalization of the financial sector since the Southeast Asian financial crisis of the late 1990s, the operation of foreign banks in the region remains limited in scope and coverage. Consequently, a more in-depth assessment is required to estimate the role of foreign banks in addressing rural financial requirements, and, subsequently, food security.

Logistics services and infrastructure also have the potential to promote and strengthen the food security status of Southeast Asian countries. As in many other developing country regions, the issue of logistics development is gaining importance in Southeast Asia. Aside from its potential to reduce costs and improve business efficiency, logistics services and infrastructure are also seen as key building blocks towards the promotion of enhanced political, economic, and sociocultural integration in the region. The key question that needs to be addressed in future research is how food security can feature more prominently in the current policy debates on logistics services and infrastructure.

1.0 Introduction

Food security remains a major policy concern for many developing countries. Global climate change, rising demand for food as a result of population growth, international food price volatility, poverty, and conflicts are some of major contributors to food insecurity. There has also been increased recognition that barriers to trade (particularly with respect to agricultural and food products), a lack of investment in agriculture and related infrastructure, and insufficient regional cooperation and coordination are also factors (Food and Agricultural Organization [FAO], 2003; Ghanem, 2009; Chandra & Lontoh, 2010).

A significant body of literature has assessed the linkages between international trade and food security. However, the bulk of that research has focused on trade in food and agricultural commodities. This paper addresses an aspect of trade agreements that has been relatively under-explored: the role played by trade in services in strengthening, or weakening, food security, with a focus on the members of the Association of Southeast Asian Nations (ASEAN).

The connections are well worth examining. For one, the production and distribution of food is often dependent on a range of services. These services, in turn, have an impact on the cost and availability of food. From a regional perspective, the issue is highly relevant in ASEAN, where member states have prioritized cooperation in the areas of both services liberalization and food security—but have yet to consider how the two are linked.

This paper discusses that the role that greater regional trade in services could play in promoting food security in ASEAN, together with the potential risks. While there are numerous services that may affect food security, the scope of this paper is limited to financial services and logistics services, which in our opinion are some of the most relevant to the issue. The paper begins with a conceptual framework on the nexus between services liberalization and food security. Section Two highlights the objectives and trends with respect to ASEAN's cooperation in the area of food security and services liberalization respectively. Section Three explores the potential linkages between services liberalization and food security in the context of ASEAN. Finally, Section Four offers some conclusions, and identifies specific areas where further research on the subject could be explored in the future.

2.0 Services and Food Security: What are the linkages?

The global agriculture and food economy has been massively transformed by the services sector (Reichert, 2005, p. 1), which includes telecommunication, banking, and insurance, and which can be produced in their own right or as a component of some product or another service (Goode, 1998: p. 249).[1] Farmers are increasingly integrated to global food supply chains that strongly influence their production and marketing decision. Small-holding farmers are also becoming more dependent on services—ranging from financial, logistics, information and communication technologies—that allow them to participate in food supply chains.

There is only a single reference to the agricultural sector in the services sectoral classification list of the World Trade Organization (WTO) (services incidental to agriculture, hunting, and forestry under the sub-classification of "other business services" as one of the types of "business services").[2] But in practice there are a range of other services sectors under the WTO's classification list that are relevant to the agricultural sector, including distribution, transport, finance, business, communication, and construction services, as well as movement of natural persons. As mentioned in the introduction, however, this policy paper focuses on financial and logistics services. Throughout this discussion, logistics services will also cover the distribution, construction, and transportation sectors.

2.1 Financial Services

Financial services[3] are integral to the development of the agricultural sector, and, therefore, have high relevance to the promotion of food security. These services include credit, deposit, payment, insurance, and other risk management services (Helms, 2006; Demirgüç-Kunt, Beck, & Honohan, 2008).

Despite the exponential growth of the financial industry globally, access to finance is not distributed equally; the rural poor often lack opportunities to take advantage of financial facilities. Poor smallholder farmers, whose income is often irregular and tied to the agricultural season, for example, would be better equipped to cope if provided with better access to financial services. To meet the demands of increasingly internationalized markets, farmers also are also confronted with the challenge of producing food commodities that meet international standards and quality, all of which require appropriate agricultural financial services, such as credit, to assist farmers to make the necessary adjustments in their production processes (Coffey, 1998, p. 23).

Although building a more inclusive financial system is increasingly recognized as a crucial element to spread the opportunity and tap the full potential of an economy (World Bank, 2008, p. 21), there is much debate over the types of financial sector reforms that are required. Advocates of greater liberalization argue that it can improve competition among financial providers, which, in turn, provides greater options and services for savers and borrowers, including those that have traditionally been neglected (Chigumira & Masiyandima, 2004; Arestis & Caner, 2004, p. 17).

However, others have expressed doubt whether liberalization will necessarily lead to greater services for marginalized populations, given the high transaction costs, risks, and general problems associated with high illiteracy rates that often discourage financial institutions from conducting business in poor rural areas (InfoResources Focus, 2008,

[1] The inclusion of these economic activities in the Uruguay Round of trade negotiations led to the General Agreement on Trade in Services (GATS), and, since January 2000, they have become the subject of multilateral trade negotations (WTO, n.d.a.). For further details concerning the negotiations under the GATS and its coverage, see, inter alia, WTO (n.d.a; n.d.b.).

[2] For further detail on the services sectoral classification list of the WTO see WTO (1991).

[3] The WTO (n.d.c.) considers the bundle of institutions that make up an economy's financial system as the "brain of the economy," with many functions, including the facilitation of transactions (exchange of goods and services) in the economy; the mobilization of savings; the allocation of capital funds; and the reduction of risk through aggregation and enabling risk to be carried by those more willing to bear it.

p. 5). The high transaction costs associated with rural financing result from poor infrastructure for transportation, information technology, and additional costs to secure and manage liquidity; high risks in the sector are linked to unpredictable seasonal agricultural and livestock production and weather conditions, as well as fluctuations in commodity prices. Households in rural areas also often lack collateral and legal title to their houses and land, so financial institutions have little means of securing their credits against default (ActionAid, Christian Aid, & Oxfam, 2008, p. 8). High rates of illiteracy are also considered a major constraint to the promotion of rural financing. Poorly educated people face the challenge of assessing credit risks and the potential profitability of a saving or loan scheme, and financial institutions often experience difficulties in hiring well-trained staff in rural areas

In addition, there is also very little evidence to suggest that the liberalization of the financial sector has indeed improved access to financial services to all layers of society. Two studies conducted by Detragiache, Gupta, and Tressel (2006) and Demirgüç-Kunt, Beck, and Honohan, (2008), commissioned by the International Monetary Fund (IMF) and the World Bank respectively, posit that an increased presence of foreign banks does not necessarily improve access to credit. Most foreign banks, as Demirgüç-Kunt et al. (p. 10) point out, are relatively large, and are more likely to concentrate on the banking needs of large firms and high net-worth individuals. In their study of lending behaviour in four Latin American countries, Clarke, Cull, Peria, and Sanchez (2005) also conclude that foreign banks lend less to small and medium-sized enterprises than domestic banks on average. This argument is likely to be consistent with regard to the access to credit for small and poor farmers in developing and least-developed countries.[4]

The negative assessment of the role of financial sector liberalization in the improvement of access to credit of the poor is also illustrated by a study carried out by Bandiera, Caprio, Honohan, and Schiantarelli (2000). Their study of eight countries (Chile, Ghana, Indonesia, South Korea, Malaysia, Mexico, Turkey, and Zimbabwe) found that financial services liberalization had little impact on the availability of credit to consumers through the formal financial sector. A representative of the European banking sector informally interviewed by the authors[5] noted that lending to the poor carries the problem of "asymmetric information": i.e., one party has more or better information than the other (Aboody & Lev, 2000).[6] The same also applies to insurance plans for the poor where asymmetric information often disrupts the normal signalling and screening function of the market.

2.2 Logistics

While considered "a major determining factor of the competitiveness of an economy in global trade and investment" (WTO, 2005, p. 1), the role of the logistics services in the promotion of food security has often been overlooked. Logistics services has been defined as "the process of planning, implementing, and controlling procedures for the efficient and effective transportation and storage of goods including services, and related information from the point of origin to the point of consumption for the purpose of conforming to customer requirements" (Council of Logistics

[4] It is also important to note that, in many developing countries, microcredit has been used as a tool to address the failure of financial liberalization to improve smallholder farmers' access to credit. Indeed, as Ramakumar argues (2013), the implementation of microcredit in most developing countries has been associated with the policy of financial liberalization. While financial liberalization has been aimed at the reduction of the roles of public banks in the financial system, the provision of microcredit has been promoted as a substitute for the provision of credit by the state in which credit is provided through non-governmental organizations.

[5] An informal interview was carried out with a representative of French-based bank on May 29, 2012. The name of the interviewee and the organization which this person represents will remain anonymous throughout this policy paper.

[6] The problem of information asymmetry is not necessarily new, and applies not only to the financial services sector, but also other sectors of an economy. In the mid-1970s, for instance, a study conducted by Hymer (1976) suggested that foreign firms are likely to confront competitive disadvantage vis-a-vis domestic firms since the latter tend to have better access to information of the host countries in terms of the country's economy, language, law, and politics. To a certain extent, this is mainly due to the location and culture disparities between the parent company and its local subsidiaries that tend to lead to less reliable accounting information from the borrowers.

Management, 2006, p. 88). In short, logistics encompasses a range of activities from transportation, storage, and handling of production inputs and finished products from producer to consumer (de Sousa & Findlay, 2006, p. 28).

The linkages between logistics services and food security are probably best understood through our assessment of the food supply chain, which, similar to the definition of the logistics, has been defined as "a set of three or more entities (organizations or individuals) directly involved in the upstream and downstream flows of fresh produce, industrial food products, services, and/or information from a source to a customer" (Hsiao, Kemp, Van Der Vorst, & S. Omta, 2006, p. 3). The food supply chain, therefore, includes food manufacturers and its suppliers, and, depending on the logistic flows, transporters, warehouses, retailers, service organizations, and consumers themselves.[7] All elements within a single food distribution chain influence one another in a system of cause and effect (FAO, 2001).

In an early study that recognized the linkages between food distribution and food security, Weber (1977, p. 2) maintains that the improvement of food supplies in rural areas and the lowering of marketing costs are important aspects of rural development. Another study focusing on the agri-food distribution services industry in the Caribbean Community also suggests that the liberalization of logistics stimulates the development of small and medium-sized food-related enterprises, strengthens food supply chains, and encourages the development of local food production (Best & Placide, 2006, p. 15).

A case analyzing the role of distribution services liberalization in East Africa is encouraging. Here, the increased internationalization of distribution services had a significant impact on the retail environment, bringing middle-class consumers in countries such as Kenya, Tanzania, and Uganda a greater variety of goods at cheaper prices than had been offered previously (Dihel, 2011). The modern procurement systems and buying centres established by supermarkets have also improved the lives of many participating farmers. In fact, studies on the procurement and marketing of fresh fruits and vegetables in these countries have also found a positive correlation between reforms in the distribution services (and the resultant reorganization of food supply chains) and the transformation of food systems for farmers, increased food security, and declines in rural poverty (Hooton & Omoro, 2007; Ngugi, Gitau, & Nyoro, 2007).

While not specifically linked to food security, these studies suggest opening up logistics services to international competition can have a positive outcome for farmers and consumers. In addition to improving the availability, quality, safety, convenience, pricing, and variety of choice of food products (Arkell & Johnson, 2010, p. 1), effective food logistics services can shorten food supply chains, and support new, healthy and sustainable consumption patterns and habits of consumers (e.g., the consumption of less-processed food and the changing of food production trends) (Mariani, 2007, p. 4). Importantly, effective logistics can also create links between food-deficient regions and food-surplus regions.

[7] More specifically, the logistics activities of food production and distribution are generally carried out by different operators, and could be grouped into seven categories: (1) order management (e.g., order receipt, elaboration, transmission, implementation, and invoicing); (2) management and stock control (e.g., defining the supply timing and quantity, inventory upload and download, products and packaging codification); (3) warehousing (e.g., conservation of goods, qualitative and quantitative controls before shipment); (4) shipment (e.g., activities related to product movement and shipment receipt); (5) packaging; (6) delivery (e.g., products delivery from the starting point to the destination); and, finally, (7) sales returns management and waste disposal (Mariani, 2007, p. 6).

3.0 Trends in ASEAN Food Security and Services Liberalization

3.1 Food Security in ASEAN

3.1.1 Food Insecurity in ASEAN

Although progress has been made to improve food security, nearly 80 million people of the ASEAN's 550 million inhabitants are still considered food insecure (International Food Policy Research Institute [IFPRI], 2011).[8] The region comprises five low-income countries (Cambodia, Indonesia, Lao PDR, Myanmar, and the Philippines), two lower-middle-income countries (Vietnam and Timor Leste),[9] two upper-middle income countries (Malaysia and Thailand), and two high-income countries (Brunei Darussalam and Singapore). In 2011, five countries in the region, Cambodia, Indonesia, Lao PDR, the Philippines, and Timor Leste, were considered Low-Income Food-Deficit countries.

With regard to the status of the region's food production and supply, which is calculated as food production plus food imports minus food exports, Brunei is substantially dependent on food imports,[10] whereas in Cambodia, Indonesia, Lao PDR, Myanmar, Thailand, and Vietnam, food production remains higher than each country's domestic food supplies. Meanwhile, food production is lower than domestic food supplies in Malaysia, the Philippines, and Timor Leste (see Table 1). Despite the divergence in the level of food production and supplies, nearly all countries in the region have experienced significant increases in food imports in recent years. For instance, Lao PDR nearly doubled the level of its food imports from 2000 to 2007, whereas the Philippines tripled its food imports from 2000 to 2007. In Cambodia, meanwhile, the level of food imports has fluctuated in recent years.

Southeast Asia is not immune to the emerging impacts of climate change, a fact which has implications for food security. The *2011 World Risk Report*, for example, shows that the region is at medium to very high risk from the impacts of climate change (Bündnis Entwicklung Hilft, 2011). The exception to this is Lao PDR, the only landlocked country in the region. Based on the same report, the Philippines, Timor Leste, and Brunei Darussalam are ranked 3rd, 7th, and 14th respectively among countries with the highest level of risk from climate change impacts. The Philippines is ranked particularly high in this regard due to its geographical exposure to natural hazards.

[8] In 2009, for example, the region's population reached 591.8 million, with an average growth of 1.4 per cent per annum (ASEAN Secretariat, 2011a).

[9] Timor Leste is not yet a member of ASEAN. It achieved independence from Indonesia on May 20, 2002, and submitted a formal request to become a full member of ASEAN in 2011. To date, there is no clarity as to when Timor Leste will formally join the Association.

[10] The other country that is likely to be heavily dependent on food import is Singapore. However, data from the FAO does not provide information concerning food production and supply of Singapore.

TABLE 1. FOOD PRODUCTION, IMPORTS, EXPORTS AND DOMESTIC SUPPLY (RICE MILLED EQUIVALENT IN KILOTONNES)[11]

COUNTRIES	2000				2007			
	P	I	E	DS	P	I	E	DS
Brunei	0.2	139.3	0.0	132.0	0.7	313.9	0.4	321.6
Cambodia	2,685.4	65.1	6.7	2,547.4	4,486.9	13.3	2.4	4,368.4
Indonesia	34,616.0	1,361.0	3.1	36,076.4	38,124.0	1,438.9	7.4	36,682.3
Lao PDR	1,468.5	15.2	23.5	1,194.7	1,807.6	26.7	33.9	1,389.6
Malaysia	1,427.9	637.0	289.1	2,072.5	1,584.1	814.5	412.5	2,156.2
Myanmar	14,223.0	11.6	0.4	13,065.8	20,977.2	3.6	0.5	18,900.8
Philippines	8,263.7	662.8	3.8	8,792.8	10,832.2	1,941.0	3.5	12,226.1
Thailand	17,237.9	2.3	0.0	10,347.0	21,410.3	21.4	0.0	10,863.8
Timor-Leste	34.0	32.2	3,513.9	62.9	40.3	57.7	4,606.3	98.0
Vietnam	21,697.2	0.0	3,513.9	16,647.2	23,973.8	2.1	4,606.3	18,106.3

Note: P = Production; I = Imports; E = Exports; DS = Domestic Supply.

Source: FAO, 2011.

3.1.2 ASEAN's Regional Cooperation on Agriculture and Food Security

Since its establishment in 1967, ASEAN has come a long way in its effort to pursue regional integration. The Association's cooperation in the area of agriculture and food security has also evolved significantly over time.[12] Although cooperation on issues related to food and agriculture is not new to the region, the 2008/09 global food crisis made this much more of a priority. Indeed, prior to the global food crisis, regional efforts to address food security were not high on ASEAN's agenda. Despite the existence of a regional food security mechanism that predated the crisis (the 1979 ASEAN Food Security Reserve [AFSR]), national economic interests tended to trump regional solidarity (Chandra & Lontoh, 2010, p. 12). It was only in 2008 that countries in the region began to look for regional alternatives to address the food security concerns by issuing a joint communiqué that emphasized the importance of "regional and international efforts to ensure the efficient functioning of market forces, as well as to come up with [a] longer term agricultural solution" (ASEAN Secretariat, 2008a).

Subsequently, at its 14th Summit in Cha-am, Thailand, in 2009, ASEAN adopted the ASEAN Integrated Food Security framework and the Strategic Plan of Action on Food Security as ways to address longer-term food security concerns and improve the livelihoods of farmers in the region. These initiatives were specifically designed to increase food production, reduce post-harvest losses, promote an effective market and trading system for agricultural commodities and inputs, ensure food stability, promote the availability and accessibility of agricultural inputs, and, finally, to put into operation the existing regional food emergency relief arrangement (ASEAN Secretariat, 2009a). ASEAN and its so-called "Plus Three" partners—China, Japan, and South Korea—have also agreed to launch the APT Emergency Rice Reserve (APTERR), holding 787,000 tonnes of rice supported with further US$4 billion endowment fund and US$330,000 operation fund (*The Jakarta Post*, 2011; ASEAN Secretariat, 2011b) (see Table 2).

[11] Domestic supply is the production plus (+) imports minus (-) exports plus (+) changes in stocks (decrease or increase), or supply for domestic utilization.

[12] According to the ASEAN Secretariat (n.d.a.), the grouping's cooperation in this sector has the objective of enhancing the international competitiveness of ASEAN's food, agriculture and forestry products as well as further strengthening food security arrangements in the region.

TABLE 2. ASEAN+3 EMERGENCY RICE RESERVE (APTERR)

COUNTRY	VOLUME (RICE IN TONS)	CONTRIBUTION OF ENDOWMENT FUND (IN US$)
Brunei Darussalam	3,000	107,500
Cambodia	3,000	83,000
Indonesia	12,000	107,500
Lao PDR	3,000	83,000
Malaysia	6,000	107,500
Myanmar	14,000	107,500
Philippine	12,000	107,500
Singapore	5,000	107,500
Thailand	15,000	107,500
Vietnam	14,000	107,500
China	300,000	1,000,000
Japan	250,000	1,000,000
The Republic of Korea	150,000	1,000,000
Total Reserve / endowment funds	**787,000**	**4,026,000**

Source: The Japan Times, 2011.

3.2 ASEAN and Services Liberalization

The services sector plays an increasingly significant role in the economies of Southeast Asian countries. In 2009, the sector accounted for 45.9 per cent of total ASEAN GDP, while services-related foreign direct investment (FDI) reached 50 per cent of the total ASEAN FDI. ASEAN's total exports and imports of services to the world market have also grown steadily in recent decades: US$9 Billion in 1980; US$29.3 billion in 1990; US$68.7 billion in 2000; and US$166.0 billion in 2009 (UNCTAD, 2010, p. 284). ASEAN's trade in services account for 4.9 per cent of global services trade (ASEAN Secretariat, 2010). Today, the services sector makes up at least 40–50 per cent of the GDP of many ASEAN member countries, and is considered one of the fastest growing sectors in the region's economy (ASEAN Secretariat, 2009b).

Services trade liberalization in Southeast Asia, pursued under the ASEAN Framework Agreement on Services (AFAS),[13] has been implemented in line with the WTO's General Agreement on Trade in Services (GATS). Under AFAS and GATS, ASEAN member countries have committed to implementing substantial services trade liberalization in terms of sectoral coverage and timelines for implementation (Wattakul, 2010, p. 6). The liberalization of financial services under AFAS is also to be carried out through the adoption of a positive-list approach that allows member countries to prepare an indicative list of financial services subsectors and modes for liberalization (ASEAN Secretariat, n.d.b.). By the end of 2010, the grouping had committed to fully liberalize up to 29 priority integration sectors. The liberalization of logistics is to be achieved by 2013, whereas the liberalization for other services sectors is to be achieved by 2015.

[13] Established in 1995, AFAS has the objectives of enhancing services sector cooperation among ASEAN member states, eliminating substantially all restrictions in services trade among member states, and to expand the depth and scope of liberalization in services that have been undertaken by the member states under the GATS (ASEAN Secretariat, 1995). Since then, ASEAN member countries have carried several rounds of negotiations to achieve the objective of this trade agreement. Each of these negotiation rounds resulted in packages of commitments for the liberalization of agreed services sectors and/or subsectors and modes of supplies. At present, the Association has concluded five rounds of negotiations (1996–1998; 1999–2001; 2002-2004; 2005–2007; and 2007–2009) and made seven packages of commitments under AFAS.

4.0 Exploring the Potential of Services Liberalization and Food Security Linkages in ASEAN

This section examines the potential roles the services sector can play in promoting food security in ASEAN. As mentioned at the beginning of this paper, services trade liberalization has not been viewed strategically as a means of strengthening food security. The analysis in the following subsection, therefore, is aimed at identifying areas where ASEAN's services-sector collaboration could complement the region's food security objective.

4.1 ASEAN's Financial Services and Food Security

The Asian financial crisis in the late 1990s encouraged ASEAN countries to pursue greater coordination and cooperation in the financial sector. To date, apart from financial and monetary surveillance processes and the Roadmap for Monetary and Financial Integration, ASEAN also pursues greater financial integration with the Plus Three countries of China, Japan, and South Korea under the current framework of the Chiang Mai Initiative Multilateralization, which is a US$120 billion multilateral currency swap facility designed to assist countries with short-term liquidity difficulties (ASEAN, n.d.c., p. 3). The ASEAN Economic Community (AEC) Blueprint, which guides the Association towards economic integration by 2015, also envisages a regionally integrated capital market where not only capital can move freely within the region, but issuers and investors would also be able to raise capital and invest anywhere in the region (ASEAN Secretariat, 2009c).

Despite the relatively extensive coverage of financial liberalization in the region, the 2008 Protocol to Implement the Fourth Package of Commitments on Financial Services under AFAS made note of two areas where progress was lacking. First, the level of commitments among member countries remained varied, not least due to the divergence of national policy objectives and the level of economic and financial sector development. Second, the content of services trade liberalization in most ASEAN countries was still weak (Mai, 2009, pp. 35–36).[14] Indeed, as highlighted further in the same document, while Singapore has reached the most advanced stage of financial liberalization,[15] the financial markets in Brunei Darussalam, Cambodia, and Myanmar remain somewhat restrictive.[16]

Notwithstanding such divergences, the presence of foreign financial institutions, particularly banks, is widespread throughout ASEAN, including those jointly owned by local and foreign banking institutions. Singapore, the most liberalized financial sector in the region, currently has 116 foreign commercial banks, 26 of which are full banks, 53 are wholesale banks, and 37 offshore banks (MAS, n.d.). Indonesia, which has undergone major reforms since the financial crisis of the late 1990s, currently hosts 10 foreign banks, and a total of 17 joint venture banks. Meanwhile, Malaysia and the Philippines have 8 and 14 foreign commercial banks respectively, while 15 foreign banks are currently operative in Thailand, with a total asset base of US$36 billion (Bank of Thailand, n.d.). In Brunei Darussalam, a total of six banks are listed as foreign, while in Vietnam and Cambodia, 41 and 3 foreign bank branches respectively are so listed (Mai, 2009, pp. 5 and 15).

While relatively more open than in the past, financial services provided by foreign financial institutions to the agricultural sector, particularly for small-holder farmers, remain limited. In fact, the percentage of residents with access to financial services in many developing and least-developed countries of Southeast Asia, such as Indonesia,

[14] For further detail on the 2008 Protocol to Implement the Fourth Package of Commitments of Financial Services under AFAS see ASEAN Secretariat (2008b).
[15] However, there remain restrictions for Mode 2 and Mode 3 for insurance intermediation comprising of brokering and agency services.
[16] For further analysis of the level of financial sector restrictiveness in these countries, see Mai (2009, pp. 36–38).

Vietnam, and the Philippines, to date remains less than 40 per cent (Nag, 2010). As mentioned earlier, many problems have deterred commercial banks from lending in rural areas: they include the scarcity of collateral, the absence of complementary institutions to reduce risks, information asymmetry, uncertainty and seasonality of agricultural activities, heterogeneity and dispersion of clientele, greater exposure to systemic risks, the small size of transaction, and the absence of standardized and documented information (Llanto, 2007, p. 30). Elsewhere, a study conducted by Meyer and Nagarajan (2000) also argues that rural financial markets in Asia are generally ill-prepared to meet the challenges of the 21st century. Both authors maintain that heavy government intervention in the rural financial markets through subsidized credit programs and the use of specialized government development finance institutions to finance the policy goals of the government, such as the green revolution, are factors that weakened rural financial systems in the region.

Another problem confronted by foreign financial service providers in Southeast Asia is the existence of entry and operation restrictions (Chan & Karim, 2011, p. 5617). Although recent efforts to liberalize the sector have allowed greater entry of foreign financial service providers in the region, the operations of such financial institutions are still restricted to commercial lending activities, normally with far fewer branches compared to local banks (Thangavelu & Findlay, 2010, p. 4). In Thailand, for example, no limitations are placed on representative offices of banks, though foreign bank branches are still subject to certain operational restrictions. While technically allowed to operate three branches, in practice, none of the foreign banks in Thailand have yet been granted approval to open more than one branch (Rajan & Sen, 2002, p. 19). In Malaysia, meanwhile, financial firms involved in insurance, fund management, and securities brokerage are allowed up to 51 per cent foreign equity and at least 30 per cent equity from the so-called *Bumiputras* (indigenous Malays), but those involved in finance/banking and venture capital are required to allow 70 per cent equity to be owned by the Bumiputras (Rajan & Sen, 2002, pp. 15–16).

Fewer entry and operational coverage restrictions apply to foreign banks in Indonesia, particularly since the Asian financial crisis. While geographical restrictions on lending activities used to be applied to foreign banks (Montgomery, 2003), the conclusion of the WTO's Financial Services Agreement in 1997 (also known as the Fifth Protocol to the GATS) and the country's supplementary commitment in the context of the IMF program in early 1998 paved the way for greater flexibility given to foreign banks' operations in Indonesia (Rajan & Sen, 2002, pp. 11–12). As of today, however, foreign banks have been cautious about expanding their operations in rural areas as a result of the problems identified earlier.[17] In most instances, foreign banks wishing to expand their operations beyond the capital, Jakarta, usually opt for acquiring joint ownership in local banks.

If, as seems to be the case, financial liberalization has so far failed to deliver its potential benefits to the development of rural agricultural communities, policy-makers then should introduce a range of requirements to ensure the availability of financial services to all segments of the society (Arestis & Caner, 2004, p. 21). Such requirements may include, *inter alia*, the establishment of macroeconomic stability, adequate regulation and supervision of financial institutions, specialized financial institutions, and credit information bureaus (Holden & Prokopenko, 2001, 19). In addition, policy-makers must be aware that excessive constraints on financial service providers, as Holden and Prokopenko further warn, may introduce biases against expanding financial services in poorer areas, thereby reducing the potential of the financial sector to promote its services to the poor (p. 22).

[17] In July 2012, the Central Bank of Indonesia issued a set of new ownership rules that applies to foreign banks wishing to acquire stakes in the country's banks, and these include, *inter alia*: (1) (foreign) banks and non-bank financial institutions can own up to a 40 per cent stake of a local bank, whereas non-financial institutions can own up to 30 per cent; (2) an individual can own up to 40 per cent stake in an Indonesian bank if they also: (a) have a minimum health level of 2 or equivalent and a minumum of 6 per cent Tier 1 capital; (b) have a recommendation from the bank's (home country) supervisory authority; (c) are publicly listed; (d) will support Indonesia's economy and buy the debt paper issued by the bank to be owned; and (e) will commit to owning the bank for a certain period of time to be fixed by BI (*The Jakarta Post*, 2012, p. 1).

Aside from these policy issues, there are also other opportunities for the financial sector to play a significant role in promoting food security in Southeast Asia. In the last quarter of a century, for instance, countries in the region have become more diversified in responding to conditions within and outside the region, including changes in corporate activities. In addition, countries in the region have also become the beneficiaries of foreign investment, which also helps the transfer of business management practices in the agricultural sector. The evolution and expansion of the region's agricultural sector, particularly agribusinesses, also means that the sector can provide more certainty for foreign financial institutions investing in the sector.

Moreover, although far from perfect, some countries in the region have also developed models for agriculture-related insurance. In 2008, for example, the National Insurance Association of Malaysia officially launched its Livestock Insurance, which provides coverage for livestock production (*Takaful Ikhlas*, n.d.). In Thailand, meanwhile, the government has recently initiated a Disaster Relief Program that is used to compensate farmers whose crops suffer from natural disasters and declared a total loss in the amount of THB606 (roughly US$20) per *rai* (1,600 square metres) (Jeerachaipaisarn, 2012, p. 2). While attached to the country's Disaster Relief Program, the main advantage of this initiative is its ability to keep the administrative claims cost at a minimum through the use of the government's existing loss assessment mechanism. While the risks of providing insurance to small-holder farmers remain, foreign insurance providers could explore such existing mechanisms, and identify areas in which they could contribute to the development of the region's agricultural sector and food security.

4.2 ASEAN's Logistics Sector Liberalization and Food Security

The development of logistics in ASEAN has been key to reducing costs and improving business efficiency, as well as enhancing political, economic, and sociocultural integration in the region. Following the 2003 ASEAN Competitiveness Study, which stressed that poorly integrated regional logistics were hampering the region's competitiveness,[18] ASEAN added logistics services as the 12th Priority Integration Sector, and signed the ASEAN Sectoral Integration Protocol for the Logistics Services Sector in August 2007.[19] Attached to this protocol was the Roadmap for the Integration of Logistics Services (RILS) which calls for the strengthening of ASEAN economic integration through liberalization and facilitation measures in the area of logistics services, as well as the enhancement of ASEAN's production competitiveness based on the creation of an integrated ASEAN logistics environment (ASEAN Secretariat, 2008c).[20] In November 2007, ASEAN leaders launched the ASEAN Economic Community (AEC) Blueprint which serves as a roadmap for the region to achieve the AEC by 2015. Regarding logistics services, the Blueprint calls for the removal of substantially all restrictions on trade in this sector by 2013, as well as allowing foreign (ASEAN) equity participation of 51 per cent by 2010, and 70 per cent by 2013.

[18] The ASEAN Competitiveness Study was commissioned by the ASEAN Economic Ministers (AEM) to be carried out by an international consultancy firm, McKinsey.

[19] For further detail on the ASEAN Sectoral Integration Protocol for the Logistic Service Sector see ASEAN Secretariat (2007).

[20] More specifically, the document lists a range of specific logistics services that are to be liberalized, including custom brokerage, storage and warehousing, packaging, freight forwarding, cargo handling, international freight transport, and express delivery. In addition, RILS also adds a number of measures to enhance greater trade in logistics services, including the completion of new agreements, such as the ASEAN Framework Agreement on the Facilitation of Inter-State Transport, and the implementation of the existing ones, such as the ASEAN Framework Agreement on Facilitation of Goods in Transit (ASEAN Secretariat, 2008c).

TABLE 3. ASEAN IN THE WORLD BANK'S 2012 LOGISTIC PERFORMANCE INDEX (LPI)

	GLOBAL RANKING	2012 LPI SCORES						
		AGGREGATE	CUSTOM	INFRASTRUCTURE	INTERNATIONAL SHIPMENT	LOGISTICS COMPETENCE	TRACKING & TRACING	TIMELINESS
Singapore	1	4.13	4.1	4.15	3.99	4.07	4.07	4.39
Malaysia	29	3.49	3.28	3.42	3.4	3.45	3.54	3.86
Thailand	38	3.18	2.96	3.08	3.21	2.98	3.18	3.63
Philippines	52	3.02	2.62	2.8	2.97	3.14	3.3	3.3
Vietnam	53	3	2.65	2.68	3.14	2.68	3.16	3.64
Indonesia	59	2.94	2.53	2.54	2.97	2.85	3.12	3.61
Cambodia	101	2.56	2.3	2.2	2.61	2.5	2.77	2.95
Lao PDR	109	2.5	2.38	2.4	2.4	2.49	2.49	2.82
Myanmar	129	2.37	2.24	2.1	2.47	2.42	2.34	2.59

Source: World Bank, 2012.

Notwithstanding such commitments, the quality of logistics services across ASEAN member countries varies considerably (Fry & Honnold, 2010, p. 26). While logistics services are world class in Singapore, they are relatively poor in the newer member countries, such as Cambodia, Lao PDR, and Myanmar. As of 2012, the World Bank's LPI ranked Singapore first, while the region's middle-income and developing countries, such as Malaysia, Thailand, the Philippines, Vietnam, and Indonesia, were ranked 29th, 38th, 52nd, 53rd, and 59th respectively. Meanwhile, the least developed countries of the region, including Cambodia, Lao PDR, and Myanmar, were ranked 101st, 109th, and 129th respectively in the index (see Table 3). Recent research also suggests that the poor perceptions of the logistics services quality in ASEAN are often linked to the restrictive logistics policies introduced in the Association's member countries. Accordingly, the full implementation of the RILS and AEC Blueprint are expected to improve the perceived quality of logistics in the region (Hollweg & Wong, 2009, p. 27).

TABLE 4. LOGISTICS SERVICES-RELATED BARRIERS IN ASEAN

BARRIERS	TYPES
Critically significant	
Time-consuming documentation requirements	Customs procedures and inspections
Burdensome inspection requirements	Customs procedures and inspections
Different classification of goods in different countries	Customs procedures and inspections
Very significant	
Limitation on equipment usage	Land transportation regulatory
Limitation on fleet size and hours of operation	Land transportation regulatory
Lack of border-crossing coordination	Customs procedures and inspections
Inefficient inbound clearance process	Customs procedures and inspections
Moderately significant	
Foreign ownership regulations	Foreign investment
Discriminatory licensing	Foreign investment

Cabotage regulations	Aviation-specific regulatory
Arbitrary independent rulings	Customs procedures and inspections
Volatility in border traffic	Customs procedures and inspections
Multiple uncoordinated offices	Customs procedures and inspections
Improper penalties	Customs procedures and inspections

Source: de Souza et al., 2007, p. 2.

As mentioned earlier, the AEC Blueprint has called for the easing of foreign ownership restrictions in the logistics services sector; however, the issue remains one of the major stumbling blocks for foreign logistics providers to offer high quality services in the region (Fry & Hold, 2010, p. 27). For instance, regulations that limit a foreign company's ability to operate as a minority partner in a joint venture could inhibit the ability of the foreign partner to control the service quality being delivered by such a venture (United States International Trade Commission, 2005, pp. 3–15). Unfortunately, as Fry and Hold further observe (p. 27), the scope for the enforcement of the commitments under the AEC remains unclear. For example, while the AEC Blueprint recommends that member countries use the grouping's Enhanced Dispute Settlement Mechanism (DSM) to enforce existing commitments, it does not specifically stipulate that the liberalization commitments of the member countries are subject to dispute resolution. In addition, member countries are likely to be hesitant to resort to the dispute mechanism. Indeed, since its establishment in 2004, none of the member countries have used ASEAN's Enhanced DSM, or the original mechanism that was established in 1994 (Greenwald, 2006).

TABLE 5. LOGISTICS FRIENDLINESS INDICATORS IN ASEAN

INDICATORS	BRUNEI	CAMBODIA	INDONESIA	LAO PDR	MALAYSIA	MYANMAR	PHILIPPINES	SINGAPORE	THAILAND	VIETNAM
Custom procedures and inspections	1.69	1.92	2.53	1.83	1.91	2.00	1.88	1.29	1.97	1.80
Mode-specific (regulatory) score	1.11	1.23	1.36	1.20	1.34	1.27	1.30	1.23	1.21	1.30
Maritime regulatory score	1.14	1.23	1.50	n.a.	1.32	1.24	1.46	1.35	1.23	1.43
Aviation regulatory score	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.02	1.00
Land transportation regulatory score	1.20	1.54	1.46	1.46	1.86	1.71	1.29	1.20	1.40	1.37
Regulatory score	*1.41*	*1.59*	*1.96*	*1.64*	*1.64*	*1.65*	*1.60*	*1.26*	*1.60*	*1.56*
Labour score	1.11	1.46	1.51	1.46	1.51	1.46	1.40	1.11	1.54	1.46
Cross-sectoral investment score	1.26	2.29	2.63	2.29	2.63	2.29	1.26	1.26	2.63	2.29
Licensing and transparency score	1.63	1.63	2.06	1.69	2.17	1.54	1.46	1.20	1.86	1.71
Foreign investment score	*1.36*	*1.65*	*1.91*	*1.67*	*1.96*	*1.61*	*1.40*	*1.17*	*1.83*	*1.69*
Maritime infrastructure score	2.29	2.00	2.51	n.a.	1.71	1.83	2.51	1.46	1.83	2.69
Aviation infrastructure score	1.63	2.01	1.82	1.94	1.79	2.08	1.65	1.50	1.45	1.91
Land transportation infrastructure score	2.63	3.06	3.06	3.06	3.49	3.06	3.06	1.34	3.06	3.06
Infrastructure score	*1.96*	*2.12*	*2.19*	*2.13*	*1.95*	*2.10*	*2.10*	*1.47*	*1.75*	*2.30*
Overall score	1.50	1.72	2.03	1.75	1.75	1.74	1.69	1.29	1.66	1.72
Logistics friendliness classification	B	C	D	C	C	C	C	A	B	C

Source: de Souza et al., 2007, 3.

Aside from foreign ownership restrictions, the list of government regulations or restrictions faced by foreign logistics services providers in the region are extensive. Restrictions to trade in logistics in the region, for instance, can arise from many sources, ranging from barriers that inhibit logistics service providers from entering or operating in the region, as well as poor quality infrastructure that frustrates efficient transport of goods (Hollweg & Wong, 2009, p. 2). An investigation carried out by the ASEAN Secretariat and the Logistics Institute of Asia-Pacific, for example, identifies a number of domestic policies, measures, and regulations that directly and indirectly influence the efficiency of door-to-door delivery of goods within ASEAN.[21] As illustrated in Table 4, many of the barriers confronted by foreign logistics services providers in most ASEAN countries are beyond foreign investment restrictions alone. Indeed, custom procedures and inspections, as well as transportation-related regulations appear across different levels of barriers in the region. The same investigation also grades the level of logistics friendliness across different ASEAN member countries (see Table 5). With the exception of Singapore, Brunei, and Thailand, the level of logistics friendliness in other ASEAN countries remains modest, if not poor, as in the case of Indonesia.

Countries with relatively poor or modest logistics infrastructure are also those that face the greatest food insecurity. As further illustrated in Table 6 above, countries that score relatively low ("D") or modest ("C") on the level of logistics friendliness, such as Indonesia, Cambodia, Lao PDR, the Philippines, and Vietnam, are countries with relatively major food deficit problem (refer to Table 1). Certainly logistics alone does not act as the main determinant in the food security status of the region's countries. For example, despite being a food-exporting country, as well as possessing relatively good logistics services and infrastructure, food insecurity is a significant problem in Thailand. Likewise, while scoring modestly on the logistics front, the level of undernourishment in Malaysia is in the 5th percentile. There are, of course, a host of other domestic policies and circumstances beyond logistics that affect the food-security status of the countries in the region.

Nonetheless, the availability of reliable logistics services and infrastructure affects the region's ability to attain better food security. Logistics infrastructure, such as roads, ports, railways, and multimodal transport facilities, in particular, are keys to ensuring the supply-chain efficiency, precision, and adaptability of many food commodities (Alavi, Htenas, Kopicki, Shepherd, & Clarete, 2012, p. 116). In many cases in ASEAN, the availability of good logistics infrastructure also determines the prices of food commodities. A report by the Asia Foundation (2008), for example, suggests that topography, poor maintenance of infrastructure, local government fees and illegal charges, and poor cargo security add up to the cost of moving goods across Indonesia. This, to a large extent, explains the wide price differentials among different provinces across the country, as well as between producing and consuming provinces.

Elsewhere, the World Bank (2010, p. 64) also argues that differences in food prices across Indonesia are not only determined by the level of market integration between various provinces, but also by the level of remoteness and infrastructure in each province in the country. Consumers residing in West Kalimantan and North Sulawesi, two of the most remote provinces of Indonesia, for instance, pay higher prices for food commodities than those in other provinces with better infrastructure. Being remote for consumers in North Sulawesi means paying about IDR24 (US$0.002)/kg more for rice than the average price paid in Indonesia; in West Kalimantan it means paying about IDR133 (US$0.014)/kg more (World Bank, 2010, p. 64).

[21] See, for example, de Souza et al. (2007).

TABLE 6. QUALITY OF LOGISTICS INFRASTRUCTURE FOR RICE AND MAIZE IN SELECTED ASEAN COUNTRIES

COUNTRIES	ROADS	PORTS	IWT*	AIRPORTS	RAILWAYS	ICT**
Indonesia	Fair/poor	Fair	Fair/poor	Fair	Fair/poor	Poor
Malaysia	Good	Fair/good	Fair	Good/fair	Good	Good
Philippines	Fair/poor	Fair/poor	Fair/poor	Fair	Poor	Poor
Thailand	Good/fair	Good	Fair	Good/fair	Fair/poor	Good
Vietnam	Fair	Fair/poor	Fair/good	Fair	Poor	Poor

*Note: *inland water transports; ** information and communication technology*

Source: Alavi et al., 2012, p. 119.

At the regional level, meanwhile, logistics costs associated with moving main food commodities, such as rice and maize, among ASEAN member countries varies between 20 to 25 per cent of the total price paid by consumers in the importing countries (Alavi et al. 2012: 9). To date, one of the major bottlenecks that inhibits regional food trade are ports, both in food exporting countries, particularly Vietnam, and importing countries, such as Indonesia and the Philippines. As Alavi et al. explain (p. 10), the waiting times in these ports, including loading, offloading, and clearance, represent about 45 per cent of the time needed to move grains from farmers in the exporting countries to consumers in the importing countries. Table 6 highlights the quality of logistics infrastructure for the main food commodities, such as rice and maize, in selected ASEAN countries.

Overall, although logistics infrastructure around economic centres in the region is relatively well-developed, the state of roads, rails, and ports in the rest of the region would benefit from increased liberalization in the sector.

5.0 Conclusions

The challenge of enhancing food security requires a comprehensive approach. To date, however, relatively little attention has been paid to the links between the liberalization of services and food security, despite the importance that services play in the agricultural sector. While this paper has featured a preliminary discussion of the links in ASEAN, with a focus on financial services and logistics, further research is required to enable policy-makers to develop relevant services trade-related policy capable of promoting food security in the Southeast Asian region. Future research could, for instance, be focused on approaches specific to the services sector.

The following are key findings of this paper regarding the role of specific services sectors in the promotion of food security:

Firstly, the ***financial services sector*** may be able to contribute to the promotion of food security in Southeast Asia. It is important to note, however, that liberalization of the sector alone does not seem enough to overcome the challenges that make financial institutions keen to establish themselves in poorer, rural areas. Indeed, existing literature on the subject generally emphasizes the difficulty facing the banking sector when considering smallholder farmers as clients for their business operations. Further research on the subject could, therefore, examine relevant conditions that would facilitate the contribution of financial services sector to rural farming activities. In the context of Southeast Asia, such a role has long been taken by local, normally state-owned, banks. Amid the liberalization in the financial sector since the financial crisis of the late 1990s, the operation of foreign banks remains limited in terms of scope and coverage. Consequently, a more in-depth assessment is required to estimate the role of foreign banks could play in addressing rural financial requirements, and, subsequently, food security.

Secondly, ***logistic services and infrastructure*** also has significant potential to promote and strengthen the food security status of Southeast Asian countries. While assessments of the links between logistics and food security exist, the existing studies on the subject are by no means comprehensive enough to estimate the actual role of the former in the promotion of the latter. As in many other developing regions in the world, the issue of logistics development is becoming more significant in Southeast Asia. Aside from its potential to reduce costs and improve business efficiency, logistics services and infrastructure are also seen as key building blocks towards the promotion of enhanced political, economic, and sociocultural integration in the region. The key question that needs to be addressed in future research is how food security can feature stronger in the current policy debates on logistics services and infrastructure.

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