ECONOMIC GROWTH AND DEVELOPMENT OF COUNTRIES IN THE ASIA PACIFIC REGION: SOME IMPLICATIONS FOR AUSTRALIAN FOOD EXPORTERS

Abstract

From the early 1970s until the Asian currency crisis in 1997, economic growth rates in the countries of the Asia Pacific region were above OECD averages. This was partly because priority in these countries has been achieving growth in manufacturing industries. The shift in emphasis from agriculture to manufacturing has resulted in these countries as a group becoming more reliant on agricultural exporters such as Australia and the United States for their food requirements. This paper provides an overview of the economic growth and development of the countries in the Asia Pacific region since the mid 1960s, in terms of changing trade and investment patterns; liberalisation and deregulation; and the role of the agricultural sector. Economic growth and development of the region has been accompanied by increasing disposable incomes and a range of changes to these economies, as well as changes in diet. However, there are differences in food consumption patterns amongst these countries. These differences reflect a variety of factors, including variations in economic performance, religious beliefs, cultural factors, government policies and agricultural resources.

1. INTRODUCTION

Economic growth may be defined in a number of ways. Through this study, it is defined as long-run increases in real per person income, where income is measured in terms of real GDP per capita. Per person income has been commonly used as an index of economic growth and development. There are, however, limitations associated with its use as a measure of economic growth. For example, per person income ignores the distribution of income within a country. It is not the objective of this paper to develop a measure of economic growth, nor does this paper set out to explain the reasons underlying growth in the Asia Pacific region. Nonetheless, to understand changes in food demand some background information on the policy measures followed in the countries in the region is needed. This study focuses on ten countries in the Asia Pacific region. These are Japan, Hong Kong, the Republic of China (Taiwan), the Republic of Korea (South Korea), Singapore, Thailand, Malaysia, Indonesia, the Philippines and the People's Republic of China (China). These countries are divergent in terms of economic development and have diverse colonial histories, cultures, lifestyles, government systems and agricultural land resources.

2. EXPORT-ORIENTED TRADE POLICIES

Immediately after the second World War, inward-looking policies intended to assist infant industries were a general feature of most economies in the Asia Pacific region. The protectionist and import-substitution policies had some short-run success in industrial growth of a number of these countries. The manufactured goods produced were mainly labour intensive and low value-added. Generally, the newly established manufacturing industries were not internationally competitive and were restricted from expansion by the limited size of their domestic markets (Ariff and Hill, 1985, p.3; Lim and Suh, 1988, p.25; World Bank, 1994, p.298).

The general failure of import-substitution policies to achieve desired levels of employment, economic growth and industrialisation, and the remarkable export performance of Japan in the 1950s and 1960s influenced Taiwan, South Korea and Singapore in the late 1960s and Malaysia, Thailand, Indonesia and China in the mid to late 1970s to reverse their policy approach and adopt outward-looking policies (Klein, 1992, p.17; Economist, 1993, p.6).[1] Export-oriented policies were first introduced in the Philippines in the 1960s and then this strategy was aborted and reintroduced in the mid 1980s. After the policy change came rapid industrialisation and increased productivity across a number of manufacturing industries.

Although the post world war two period was a time of economic growth and development, the type and rate of industrialisation and export-led growth varied markedly within the region. For example:

- Japan's phase of prosperity had its genesis in the Allied occupation years from 1945 to 1950. Japan's manufacturing industry base changed rapidly from labour intensive products such as toys and textiles in the 1950s to heavy industries such as, steel, chemicals, automobiles and shipbuilding in the 1960s and 1970s. In the 1980s, there was another transformation of Japan's export base towards a concentration on high value-added and technologically intensive industries such as industrial robots and electronics.

- The city states of Hong Kong and Singapore, with their limited land, adopted *laissez-faire* economies open to trade in the 1960s and developed into important entrepot centres of trade for northeast and southeast Asia respectively. Government policies favoured open trading systems with low trade barriers. Hong Kong and Singapore have also invested heavily in human and physical capital in order to expand their manufacturing, financial and service industries.

- In the early 1960s, Taiwan and South Korea were low-income rural based economies, heavily dependent on foreign aid, characterised by high unemployment and very small export to GDP ratios. Both countries had an abundant labour force. The initial stages of rapid economic growth was a period of specialisation in the production of relatively low skill and labour-intensive light manufactures, such as clothing and textiles. Sustained high growth rates led to the production of heavy manufactures, such as steel, shipbuilding and automobiles; as well as capital intensive manufactures such as semi-conductors and electronic products; and expanding service sectors.[2]

- Divergent resource endowments and levels of government intervention have resulted in different development paths amongst the ASEAN4 countries.[3] For example, Thailand has been a traditional exporter of bulk agricultural commodities. Decreasing commodity prices in the 1980s, coupled with investment by Japanese firms in particular, spurred Thailand to diversify into the production of labour-intensive manufactured goods such as clothing, textiles, footwear, canned seafood, fresh and frozen shrimp and other processed food (World Bank Group, 14 August 1997). In the early stages of development, Indonesia and Malaysia were heavily dependent on petroleum exports. In the 1970s, both countries began to

[1] The industrialisation and growth of these countries in succession is often referred to as the 'flying geese' pattern of Asia Pacific development.

[2] Although Taiwan and South Korea began their economic growth at around the same time, South Korea's economic growth path has been less stable due to political unrest (East-West Centre, 1989, p.8).

[3] Throughout the remainder of this paper the abbreviation ASEAN4 denotes Thailand, Malaysia, Indonesia and the Philippines.

diversify their export bases towards light manufactures, such as the processed food industry, electronics, rubber products and textile and footwear industries (EAAU, 1994, p.57). After the economic recession in the mid 1980s, which resulted from the collapse of commodity and oil prices, both the Malaysian and Indonesian governments responded with a renewed policy approach with emphasis on the development of export-orientated manufacturers and FDI.[4] After the aborted attempt to industrialise in the 1960s, the Philippine economy experienced a series of declines and was characterised by political unrest and high level of unemployment. In the mid 1980s, the newly elected Aquino government committed itself to the promotion of capital-intensive industries such as steel, chemicals and automobiles, rather than labour-intensive goods that require locally available materials (East-West Centre, 1989, p.28).

- After the 1949 revolution China officially developed a centrally planned economic system. Major policy reforms for liberalising trade, prices and foreign exchange were first announced in December 1978. Since these reforms, China's participation in world trade has increased sharply and the economy has grown at around 10 per cent per year, one of the fastest growing economies in the world (Chai and Haishun, 1993, p.10; World Bank, 1996, p.23).[5] Despite the sustained high economic growth rates, China is still a very poor country in terms of per person income, due to its massive population. Before the Asian currency crisis, the huge population provided a strong domestic market and an ample supply of cheap labour to the expanding steel and textile industries. Following the crisis there has been a sharp increase in unemployment as a number of manufacturing industries downsize. This has resulted from substantial decreases in Asian investment in China and from a slowdown in export growth because the Chinese currency has not been devalued compared to competing countries in southeast Asia.[6]

Per person income range is extremely wide in these countries, causing them to fall into several different income classifications. The World Bank (1996) classifies China as a low-income economy; Indonesia, the Philippines and Thailand are classed as lower middle-income economies; Malaysia and South Korea as upper middle-income economies; and Japan, Hong Kong and Singapore as high-income economies.[7] The variation among GNP per capita, real GDP growth and export growth over the last few decades, can be seen in Table 1. Some indication of the emphasis placed on export-led growth in these countries during different time periods in their development can also be seen in this table. The data presented in Table 1 suggest that the relationship between real GDP growth and export growth is somewhat ambiguous. In a number of instances, export growth outpaced income growth and *vice versa.*[8]

---

[4] Non-oil exports account for about 80 per cent of Indonesia's exports, up from 25 per cent a decade ago (World Bank Group, 11 August 1997)

[5] Between 1978 and 1994, China went from being the world's 32nd largest exporter to its tenth largest exporter (World Bank, 1996, p.132).

[6] For example, Japanese investment in China decreased by almost 70 per cent in 1997 (Business Week, 1998, p.18).

[7] The income-based economy grouping used by the World Bank (1996) are:
- Low-income economies are those with a GNP per capita of $750 or less in 1994.
- Middle-income economies are those with a GNP per capita of more than $750 but less than $9300.
- High-income economies are those with a GNP per capita of $9300 or more in 1994.

[8] The relationship between export growth and economic growth is unclear and is surrounded by controversy, though it has received extensive empirical analysis.

Table 1: GDP and Export Growth in the Asia Pacific Region

Countries	GNP Per Capita 1994 (US$)a.	Real GDP Growth 1970-80 (%)	Real GDP Growth 1980-93 (%)	Average Annual Export Growth 1970-80 (%)	Average Annual Export Growth 1980-93 (%)
Japan	34630	5.0	4.0	9.0	4.6
Singapore	22500	8.5	6.9	4.2	9.9
Hong Kong	21650	9.3	6.5	9.7	5.0
South Korea	8260	9.5	9.1	23.5	11.9
Taiwan	5713b.	9.7	7.7	28.5	16.0
Malaysia	3480	7.8	6.2	4.8	11.3
Thailand	2410	7.2	8.2	10.3	14.7
Philippines	950	6.3	1.4	6.0	3.7
Indonesia	880	7.6	5.8	7.2	5.6
China	530	5.8	9.6	8.7	11.9

Notes: a. GNP per capita comparison is based on conventional exchange rate;
b. 1993 figure.
Sources: Government Information Office (1993); Far Eastern Economic Review (1996); World Bank (1996).

Table 1 shows that with the exception of Thailand and China, economic growth rates in the region declined during the 1980s, when compared to the preceding decade. The region's dependence on trade and financial flows from the rest of the world, global recession and declining primary commodity prices combined with exchange rate volatility, are believed to have all contributed to the slowing down of the region during the first half of the 1980s (Tyabji, 1990, p.36). During the second half of the 1980s, economic performance improved when commodity prices increased and apart from the Philippines, was once again well above the OECD average.[9] At various times during the last few decades each of these economies have experienced business cycle fluctuations, budget and labour shortages, political unrest, wage increases and inflationary pressures. In addition, these economies have at times been highly susceptible to external shocks, such as the rapid increase in the price of oil at the end of 1973 and again in 1979, and the decline in commodity prices in the mid-1980s.[10] The most recent example of the susceptibility of the region, is its current economic stagnation caused by the Asian financial and currency crisis in 1997.

[9] The Philippines has not performed as well as to the other countries in the region. A combination of high debt, inflation and political unrest is believed to be responsible for the slow rates of growth over the last few decades (USDA, 1993).

[10] For example, there was a significant decrease in economic growth rates in the resource based economies of Indonesia and Malaysia in the mid 1980s, following the sharp decline in petroleum prices. Malaysia's real GDP growth rate fell from almost eight per cent in 1984 to -1 per cent in 1985 (United Nations, 1992, p.38).

3. LIBERALISATION AND DEREGULATION OF AGRICULTURE

Immediately after the second World War, the Asia Pacific region was characterised with poor rural economies with the majority of labour employed in the agricultural sector. During the early stages of industrialisation, these countries taxed their agricultural sectors to encourage manufacturing. With the accumulation of capital, some manufacturing industries eventually became internationally competitive, causing manufacturing exports as a share of GDP to increase. As this occurred the agricultural sector attracted high rates of protection.

The trade barriers used to protect agriculture vary greatly in nature and degree. Tariff and NTBs such as import licensing arrangements, import quotas, subsidies, tax incentives, state trading monopolies and health and safety regulations are examples of the instruments to have been used. With the exception of Taiwan and China, the countries in the Asia Pacific region are now full members of the World Trade Organisation (WTO), which replaced the General Agreement on Tariffs and Trade (GATT) at the conclusion of the Uruguay Round in December 1993. In addition, the ASEAN countries are members of the Cairns Group of Fair Agricultural Traders, a coalition of countries set up to provide a “third voice” to the United States and European Union in multilateral trade negotiations during the Uruguay Round.

With the conclusion of the GATT Uruguay Round in December 1993, a number of sensitive issues surrounding the access of agricultural and food products into these countries were resolved. For example:

- Japan replaced quantitative restrictions on beef and citrus and wound back protection on a range of dairy products.
- Japan and South Korea agreed to allow Minimum Market Access (MMA) of rice imports and both began to import rice in 1995.
- In 1996, the Philippine Government eliminated all NTBs for food imports. The only exception is rice, for which a quota remains in effect. The new regulations will allow the entry of previously banned food imports such as fresh onions and potatoes (Wade and Canono, 1997, p.18).

Although Taiwan and China are not members of the WTO, both have gradually reduced their protection and implemented a series of adjustment programs in order to bring their trade policies in conformity with WTO discipline.[11]

Accompanying these reductions in protection, a range of financial deregulation policies and privatisation measures have also been implemented. For example, in South Korea, government policies such as easy credit through direct lending played an important role in allowing the chaebols to increase their market share (IMF, 1998, p.9). Other examples include the privatisation of state enterprises in Malaysia and greater private sector participation that is now allowed in government expansion schemes in Thailand (Yam, Heng and Low, 1992, p.315).

Despite the liberalisation measures already taken, a wide variety of implicit trade barriers prevent agricultural and food imports from entering a number of these countries. These barriers include health and phytosanitary regulations, government procurement policies and subsidies.

[11] It should also be noted that Taiwan’s trade regime is more liberalised than China. A recent study found China has the highest average level of tariffs on food commodities in East Asia. Highly processed beef, wheat and dairy products attracted average tariffs of 70, 55 and 65 per cent respectively and NTBs are used extensively (ABARE, 1992, p.574).

For example:

- In Thailand, each new food import must be approved by the government. This process can take more than a year.
- In Indonesia, many imports require a health certificate that must be renewed every three months and delays are common (AgExporter, 1993, p.7).
- To assist its domestic beef industry, the Korean government introduced a cattle price stabilisation scheme in January 1997 and reduced imports of beef (AMLC, 1997, p.28).

4. FOREIGN DIRECT INVESTMENT

Over the last few decades, there has been a gradual reduction of regulation policies on FDI in the Asia Pacific region and investment has been encouraged through various schemes and programs, including financial deregulation, joint ventures and taxation policies intended to encourage investment. In addition, governments in these countries have also encouraged high domestic savings rates by maintaining high real interest rates and by putting in place incentives, mainly through the taxation system (Schlossstein, 1991). These high savings rates have enabled capital accumulation which is complementary to investment.[12]

The Asia Pacific region has a long history of attracting FDI. Historically, the United States and the United Kingdom were the two major investors in this region. Over the last twenty or so years, however, the share of both has been overtaken by Japan. Japan began investing heavily in foreign countries in the 1970s, after the liberalisation of its rules for outward FDI and the appreciation of the yen which began in the 1970s. Initially, Japan's investment into the Asia Pacific region was mainly in the services, banking and finance industries in Hong Kong and Singapore (Williamson, 1994, p.123). The second oil crisis and the uncertainty this created, slowed Japan's FDI spending until the second surge began in the mid to late 1980s after the appreciation of the Japanese yen following the Plaza Accord in 1986 (Riethmuller, 1992, p.25). In the late 1980s, Japanese companies began investing heavily in Taiwan, South Korea and the ASEAN4 member countries. Japanese investment in Taiwan and South Korea has mainly been focused on the manufacturing sector, while investment in the ASEAN4 countries has included food processing industries and in more recent years agriculture.[13] In a number of these countries, Japanese FDI as a percentage of total FDI inflow is quite high. For example in 1992, Japan's share of FDI inflow into Indonesia, South Korea and Thailand was 67, 49 and 44 per cent respectively (Graham and Anzai, 1994, p.9). In the mid 1990s, a substantial share of Japan's Asia Pacific investment portfolio shifted to China and Vietnam.

Since the early 1980s, the North East Asian Newly Maturing Economies (NEANMEs) have also been strong investors in the Asia Pacific region.[14] In 1988, the NEANMEs as a group surpassed Japan, the United States and the European Union and became the major investor in ASEAN countries (Borrmann and Jungnickel, 1992, p.285; Yam, Heng and Low, 1992, p.316). FDI into these countries grew strongly during the second half of the 1980s, particularly into the food

[12] In 1996, savings accounted for 33 per cent of Asia's GDP and investment accounted for 35 per cent (IMF, 1997, p.201).

[13] In the past, Japanese import barriers restricted agricultural imports into Japan and this would have limited the options available to Japanese firms investing in agriculture outside Japan (Riethmuller, 1992, p.24). However, in the last ten years or so, declining agricultural protection in Japan has stimulated Japanese investment in agricultural and food industries. These companies typically invest in plants which produce for export back to Japan as well as for exports to third markets (Heilbron and Larkin, 1995, p.55).

[14] NEANMEs denotes Hong Kong, Taiwan and South Korea.

processing industries in Malaysia and Thailand. The emergence of China in the late 1980s as a competitor for the kind of investment ASEAN seeks to attract, slowed the rate of FDI in these countries in the early 1990s (EAAU, 1994, p.68).

Despite the general decline in FDI regulation in industry sectors, openness to FDI varies markedly across the region. For example, domestic governments in Hong Kong and Singapore encourage FDI through a simplification of custom procedures and various financial incentives; while in South Korea, MNC investment is strongly regulated (Graham and Anzai, 1994, p.8). In addition, restrictions on FDI in the retailing and distribution sectors still apply in these markets. For example, retailing and distribution businesses in Indonesia must be 100 per cent domestically owned. In Thailand - a country which actively promotes foreign investment in its food manufacturing industry - foreigners are not permitted to have more than 49 per cent of the capital of firms engaged in retailing, wholesaling and distribution (Davies, 1993, p.347).[15] In addition, bureaucratic requirements are also said to limit the flow of investment in the region.

5. INTRA-REGIONAL TRADE AND REGIONAL TRADE AGREEMENTS

China and the ASEAN4 member countries are generally considered to be resource based economies and Japan and the Newly Industrialised Countries (NICs) are considered industrial economies.[16] Given the complementary resource endowments and their geographical proximity, it is not surprising that there have been large advances in intra-regional trade and investment between these two groups of countries. In 1992, intra-regional trade was around 40 per cent, the largest component of total trade in the Asia Pacific region. This was higher than shares going to the United States (28 per cent) and the European Union (16 per cent) and all indicators suggest that intra-regional trade will continue to increase (Borrmann and Jungnickel, 1992, p.282). As to be expected, due to the strong presence of Japanese MNCs in the region, the trade dependence of these countries with Japan is quite high. The ASEAN4 countries are also heavily dependent on the NICs for trade.

Using a gravity model, Yu and Zietlow (1995, p.298) found that bilateral trade among 14 Asian countries is attributable to a number of factors, including market size, political stability, physical distance, cultural similarity and membership in regional associations and organisations. If this is true, regional trade agreements such as the ASEAN Free Trade Agreement (AFTA) and the Asia Pacific Economic Cooperation (APEC) may alter these countries' liberalisation plans and effect their choice of trading partners.

- The economic objectives of ASEAN are based around promoting intra-ASEAN trade through Preferential Trading Arrangements (PTA) and greater access to intra-regional markets (Lim & Suh, 1988, p.19). Initially intra-ASEAN negotiations for tariff preferences were granted on a product-by-product basis. This approach was then complemented by the bilateral across-the-board approach for tariff reductions for an exclusion list of sensitive items among ASEAN countries. The formation of ASEAN in 1972 led to a substantial increase in intra-ASEAN trade in the 1970s. The share of intra-ASEAN trade in total ASEAN trade increased from 14 per cent to 21 per cent from 1973 to 1983 (Chiew, 1987, p.313). After the initial increase, intra-ASEAN trade remained relatively stable, increasing slightly in the 1980s to 23.7 per cent in 1994/95 (Horne, 1996). The PTA is believed to have had limited success at increasing trade due to two main obstacles. First, the general trend towards lower tariffs

---

[15] Until recently, the limit was 33 per cent (Heilbron and Larkin, 1995, p.33).

[16] NICs denotes Hong Kong, Taiwan, South Korea and Singapore.

within the region erodes the advantage of the PTA, and second, the PTA does not include sufficient control on NTBs (Chatterjee, 1990, p.66). Another reason for the limited growth of intra-ASEAN trade may be that these countries' resource endowments are competitive rather than complementary.[17] In order to stimulate regional growth and intra-ASEAN trade, AFTA was established in January 1992 at the fourth ASEAN Summit. In January 1994, these countries began a 15 year program to stimulate intra-ASEAN trade by implementing a Common Effective Preferential Tariff (CEPT) scheme. Under AFTA, intra-regional tariffs will be phased down to zero to five per cent and NTBs for a wide variety of manufactured products will be eliminated by the end of 2002.

- APEC was initiated in 1989 with the aim of facilitating regional trade liberalisation. Membership includes Australia, Brunei, Canada, Chile, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, the Philippines, Singapore, Taiwan, Thailand and the United States. The main objective of APEC is to promote non-discriminatory multilateral trading systems and regional cooperation in a manner consistent with GATT principles (Bureau of Industry Economics, 1994, p.20). APEC requires that all member countries go beyond their GATT/WTO commitments and obtain open trade and investment in the region by 2010 for developed countries, and 2020 for developing countries. Another aim is to remove all impediments to international economic transactions such as differences in domestic policies, regulatory systems and product standards (Elek, 1996, p.4). Therefore, APEC has implications for cooperation in areas that go far beyond trade issues.

6. THE CHANGING ROLE OF AGRICULTURE

Rapid rates of industrialisation and urbanisation have changed the role of agriculture in the Asia Pacific region. Table 2 shows that in the more affluent countries in the region - Japan, Hong Kong, Singapore, Taiwan and South Korea - the share of GDP derived from agriculture and the percentage of the labour force employed in agriculture more than halved between 1970 and 1993. However, the agricultural sector in China and the ASEAN4 countries, remains important in terms of its contribution to GDP and employment. A possible reason for the maintenance of agriculture in these countries is because they began industrialising latter than Japan and the NICs and are at lower stages of economic development. In addition, China and the ASEAN4 countries are relatively more well endowed with agricultural resources. Empirical evidence and the theory of dynamic comparative advantage suggest that agriculture's share of the economy typically declines as an economy develops (World Bank, 1994, p.32). However, the richer the country's endowment of natural resources the longer the delay. Japan and the NICs are generally classified as resource poor countries, while China and the ASEAN4 countries are classified as resource rich. Thus, it is not altogether surprising that the resource poor, rapidly industrialising countries in the Asia Pacific region failed to develop a comparative advantage in agricultural production, while the resource rich economies strengthened their comparative advantage in the early stages of their development (Anderson, 1983, p.328). Due to different resource endowments, the agricultural and food supply capacity of these economies varies markedly. Japan and the NICs are net importers of agricultural and food products and China and the ASEAN4 countries are net exporters.

[17] For example, the ASEAN4 countries produce a similar range of food items. However, different climatic conditions and seasonal variation among member countries suggests that there is considerable scope for future intra-ASEAN trade in fresh and processed food products.

Table 2: Agriculture in the Asia Pacific Region, Employment, Share of GDP and Growth (%)

Countries	Agriculture Share of the Labour Force 1970	Agriculture Share of the Labour Force 1993	Agriculture Share of GDP 1970	Agriculture Share of GDP 1993	Agriculture Share of GDP Growth 1980-93	Industry Share of GDP Growth 1980-93
Japan	19.6	5.5	6	2	0.6	5.0
Hong Kong	4.4	1.0	2	0	na	na
Taiwan	36.0	11.0	14	4	1.6	6.5
South Korea	49.1	21.7	26	7	2.0	12.2
Singapore	3.4	1.0	2	0	6.4	6.2
Thailand	79.8	62.3	26	10	3.8	11.0
Malaysia	53.8	29.5	29	18	3.5	8.2
Indonesia	63.3	45.8	45	19	3.2	6.3
Philippines	54.8	45.4	30	22	1.2	-0.1
China	78.3	65.2	34	19	5.3	4.5

Notes: na denotes not available.
Sources: Council for Agriculture, Executive Yuan (1994); United Nations (1995); Far Eastern Economic Review (1996); World Bank (1996).

Immediately after the second world war, agricultural yields per unit of land were low and some countries in the Asia Pacific region experienced a shortage in the supply of agricultural and food products. In the 1960s, green revolution technology spread throughout the region. This resulted in the introduction of higher yielding, more disease resistant crops and improvements to irrigation and drainage systems. Although green revolution technology was adopted at varying rates and to varying degrees, most of these countries made significant advances in achieving long-standing goals of self-sufficiency or near self-sufficiency in staple foods. The improvements in production in the region are especially prominent for rice. Despite the achievements made in obtaining self-sufficiency in food staples, food security issues remain a high priority of domestic policies.[18]

In the last decade or so the agricultural sector in these economies have undergone yet another transformation. The latest transformation involves a change in the production focus of agricultural industries. Agricultural resources have been redirected away from grain production and towards the expansion of the livestock and horticultural industries. However, continued expansion of livestock sectors in the region are constrained by a number of factors. These include the quantity of land, shortage of skilled labour in animal husbandry, lack of breeding stocks, absence of support industries and limited availability of capital and infrastructure (Piggot, Parton, Treadgold and Hutabarat, 1993).[19] The expansion of horticultural industries that

[18] In order to gradually increase the production level of important food items, many plans and policies to increase agricultural output have been implemented over the last few decades. Some examples are the Five Year Agricultural Plan in Indonesia and in South Korea; the New National Agricultural Policy (1992-2010) in Malaysia; and the Medium Term Livestock Development Plan in Indonesia which aimed to increase the livestock population of beef to a self sufficiency level.

[19] The Japanese beef industry is an exception, the domestic government has provided numerous financial incentives and subsidies to encourage beef production and there is a highly developed infrastructure system

enjoy natural protection due to perishability, such as fresh fruit and vegetables, have been more successful. Despite efforts made by these countries to expand and diversify agricultural production, land availability and increasing population have resulted in growth of a wide range of agricultural and food imports over the last few decades.

7. CHANGING FOOD CONSUMPTION PATTERNS

So far this paper has suggested that while the countries in the Asia Pacific region have been undergoing development, they are not at the same stage of economic and social development. This implies that the food consumption patterns in these countries have changed, but probably in different ways. Changing food consumption patterns typically accompany economic development. In the early stages of development, demand for food staples increase. As development progresses and per person disposable income increases, there is a shift in diet from traditional staples to foods high in protein. This transition is often referred to as Bennett's Law. In Asia, this transition involves a shift away from a diet based largely on rice, starchy roots and vegetables to a diet based on high value-added foods such as beef and dairy products. Per person consumption data for a number of food items shown in Table 3 suggest that food consumption patterns in the Asia Pacific region have changed over the last few decades. In a number of these countries, changing dietary patterns appear to have followed Bennett's Law. For example, between 1965 and 1993, per person demand for fish, beef and milk increased at the expense of the traditional staple rice in the high-income countries. However, in the less affluent countries of Indonesia and China, per person consumption of these animal products remain low, while rice consumption continued to increase, though at a decreasing rate. These patterns suggest that a relationship exists between income and food consumption in the region.

Inspection of the data in Table 3 also indicates that the percentage change in demand of these foods over the last few decades has varied widely amongst these countries. For example, the change in per person milk consumption in South Korea, Hong Kong, Taiwan and Singapore are very large in comparison to Japan, Indonesia and China. An explanation for the large differences in the percentage change in consumption of some of these foods can be explained by the differences in consumption levels in the base year.

7.1 Food Retailing in the Asia Pacific Region

The food retailing sector in the Asia Pacific region is characterised by small family owned stores and traditional wet markets. As these countries modernise, however, alternative methods of retailing, marketing and distribution are emerging. While modern retailing establishments number and total share of food sales is growing in these countries, family stores and wet markets still account for the majority share of total food sales in most countries in the region, even in urban areas. In Japan and Hong Kong supermarkets, hypermarkets and convenience stores account for over 50 per cent of total retail sales; in Singapore and Taiwan modern retail outlets account for between 20 and 40 per cent; and in South Korea, Thailand, Indonesia and the Philippines less than 20 per cent (Heilbron and Larkin, 1995; Young, Twyford-Jones, Logie and Franks, 1995). While modern retailing

---

supporting the industry (Longworth, 1983). However, industry expansion is constrained by other factors, including the recent removal of import quotas on beef which has lowered the domestic price of beef and the profit of domestic producers. Kai (1992) describes the effects of the April 1991 beef import liberalisation on Japan's domestic livestock production sector.

Table 3: Per Person Consumption of Selected Foods in 1965, 1980 and 1993

Countries	Fish	Beef	Milk	Rice	Wheat	Vegetables
	---- Kilograms ----					
Japan						
1965	29.0	1.4	17.2	113.4	27.6	105.7
1980	34.8	3.5	33.9	78.9	31.8	112.0
1993	36.7	7.4	39.9	69.2	32.2	102.6
	---- Percentage Change ----					
1965 - 1980	*20.0*	*60.0*	*49.3*	*-30.4*	*15.2*	*6.0*
1980 - 1993	*5.5*	*111.4*	*17.7*	*-14.0*	*1.3*	*8.4*
	---- Kilograms ----					
Hong Kong						
1965	17.6	6.1	1.9	94.2	19.8	98.9
1980	21.3	9.7	4.4	63.0	23.2	96.5
1993	21.4	10.6	12.0	57.4	24.3	74.0
	---- Percentage Change ----					
1965 - 1980	*21.0*	*59.0*	*131.6*	*-33.1*	*17.1*	*-2.4*
1980 - 1993	*0.5*	*9.3*	*172.7*	*-8.9*	*4.7*	*-26.4*
	---- Kilograms ----					
Taiwan						
1965	27.8	0.1	1.1	134.1	31.7	74.3
1980	39.0	0.7	2.8	101.2	38.7	177.9
1993	44.0	2.7	12.5	73.5	42.3	133.5
	---- Percentage Change ----					
1965 - 1980	*40.3*	*600.0*	*154.5*	*-24.5*	*22.1*	*139.4*
1980 - 1993	*12.8*	*285.7*	*346.4*	*-27.4*	*9.3*	*-24.9*
	---- Kilograms ----					
South Korea						
1965	20.6	1.0	0.5	121.8	23.5	45.5
1980	46.0	2.6	11.9	132.4	30.1	120.3
1993	34.4	5.4	45.0	110.5	29.9	132.9
	---- Percentage Change ----					
1965 - 1980	*123.3*	*160.0*	*2280.0*	*8.7*	*28.1*	*164.4*
1980 - 1993	*-25.2*	*107.7*	*278.2*	*-16.5*	*-0.6*	*10.5*
	---- Kilograms ----					
Singapore						
1965	25.3	2.0	1.3	75.6	86.4	22.2
1980	19.0	5.1	5.1	60.6	74.5	35.2
1993	7.8	7.4	14.5	73.9	66.7	33.0
	---- Percentage Change ----					
1965 - 1980	*-24.9*	*155.0*	*292.3*	*-19.8*	*-13.7*	*58.5*
1980 - 1993	*-58.9*	*45.1*	*178.4*	*21.9*	*-10.5*	*-6.2*

Countries	Fish	Beef	Milk	Rice	Wheat	Vegetables
			Kilograms			
Thailand						
1965	13.7	2.5	0.2	140.3	0.4	49.3
1980	27.2	3.0	0.5	130.1	4.3	58.9
1993	39.4	4.1	4.9	116.7	9.7	44.7
			Percentage Change			
1965 - 1980	*98.5*	*20.2*	*150.0*	*-7.3*	*975.0*	*19.5*
1980 - 1993	*44.9*	*36.7*	*880.0*	*-10.3*	*109.3*	*-24.1*
			Kilograms			
Malaysia						
1965	16.2	0.9	3.7	135.3	18.4	15.2
1980	37.2	0.9	2.7	148.6	32.9	22.7
1993	29.5	0.7	2.3	99.2	48.7	19.1
			Percentage Change			
1965 - 1980	*129.6*	*0.0*	*-27.0*	*9.8*	*78.8*	*49.3*
1980 - 1993	*-20.7*	*-22.2*	*14.8*	*-33.2*	*48.0*	*-15.9*
			Kilograms			
Indonesia						
1965	6.2	1.2	1.9	112.6	1.6	18.3
1980	8.0	1.1	2.3	131.9	8.2	16.3
1993	12.1	1.0	3.3	132.8	11.7	26.3
			Percentage Change			
1965 - 1980	*29.0*	*-8.3*	*21.1*	*17.1*	*412.5*	*-10.9*
1980 - 1993	*51.3*	*-9.1*	*43.5*	*0.7*	*42.7*	*61.3*
			Kilograms			
The Philippines						
1965	31.2	2.0	0.8	118.6	13.7	26.5
1980	29.2	2.0	0.6	128.1	16.3	39.5
1993	36.7	1.3	0.4	116.6	26.5	43.0
			Percentage Change			
1965 - 1980	*-6.4*	*0.0*	*-25.0*	*8.0*	*10.0*	*49.1*
1980 - 1993	*25.7*	*-35.0*	*-33.3*	*-9.0*	*62.6*	*8.9*
			Kilograms			
China						
1965	3.3	0.1	2.6	70.6	42.5	141.1
1980	4.1	0.2	3.0	85.1	67.5	141.7
1993	7.5	1.4	5.3	91.2	87.4	136.3
			Percentage Change			
1965 - 1980	*24.2*	*100.0*	*15.4*	*11.0*	*58.8*	*-0.4*
1980 - 1993	*82.9*	*600.0*	*76.7*	*7.2*	*29.5*	*-3.8*

Source*:* International Economic Data Bank.

establishments may provide a wider range of foods, some Asian consumers do not regard supermarkets as being able to provide food as fresh as street vendors and wet markets (J. Kim, 21 November 1996). Supermarkets in the region typically have small or non-existent fresh food sections and find it difficult to compete with the freshness and rapid response of local produce suppliers (Rogers, 1997, p.31). In addition, there are many infrastructural bottlenecks which prevent the rapid expansion of modern retail outlets. These include high energy costs, inadequate road and rail systems to transport perishable foods and few cold storage facilities and delivery trucks. Therefore, increasing numbers of modern retail outlets does not mean that the traditional retailing system will be abandoned or that complex marketing and distribution systems will change rapidly.

8. IMPLICATIONS FOR THE AUSTRALIAN FOOD INDUSTRY

Since Australia became a member of GATT in 1948, it has become a strong advocate for removing impediments to international trade. According to ABARE estimates, the completion of the Uruguay Round and the commitments made to liberalise trade in the Asia Pacific region are believed to benefit all Australian farm sectors, apart from dairy and citrus fruit producers. Australian processed food exporters are also expected to gain from increased prices and significant reductions in levels of protection in a wide range of food markets. However, removal of quantitative restrictions does not necessarily mean that Australia's food exports will increase. For example, despite the decline in trade barriers, the Australian processed food industry has experienced a gradual deterioration in the Japanese beef market. In the early 1970s, Australia supplied close to 90 per cent (by weight) of all Japanese beef and veal imports while the United States supplied less than five per cent (Coyle and Dyck, 1989, p.31). Since this time the United States' share of the Japanese beef import market has risen at the expense of Australia. In the fiscal year ending 1997, Australia's share of Japanese beef imports were 46 per cent compared to 48 per cent for the United States (AMLC, 1997). The decline in Australia's share of the Japanese beef market is the result of a number of factors with perhaps the most important being the introduction of the high quality beef import quota in 1978, which gave the United States significant advantage over traditional suppliers (Longworth, 1983; Coyle and Dyck, 1989). Drysdale and Lu (1996, p.19) suggest that Australia's beef exports to South Korea and Taiwan have also been affected by changes in protection regimes which favour beef imports from the United States.

Regional trade agreements such as AFTA and APEC are also expected to influence Australia's agricultural and processed food industry in the future. For example;

- At present, unprocessed agricultural goods are excluded from AFTA. Therefore, Australian exporters of bulk primary commodities are unlikely to be significantly affected by AFTA. However, exporters of processed primary products are expected to suffer small adverse effects (Melanie, Barry and Phillips, 1994, p.67). Of course, to the extent that such agreements result in higher incomes in participating countries, Australia's exports could benefit in the long-run.

- Future developments with APEC are expected to greatly affect Australia because over 70 per cent of Australia's trade is with APEC member countries (ABS, Catalogue No.5422.0).[20] Until 1996, agriculture and processed food products were virtually left out of APEC. The recent establishment of the Task Force on Food (TFF), however, aims to add to the progress

[20] Nine out of ten of Australia's largest export markets are APEC member countries.

> made in GATT in NTBs with respect to processed food standards and regulations. Government analysts believe this will have a positive impact on Australia's major agricultural export industries, including beef, dairy, wheat and sugar (Podbury, Ladlow, Mai, Atisuthaphot and Rose, 1996, p.36).

It is often said that the emergence of the Asia Pacific region as a large net importer of agricultural and food products is of special importance to Australia, due to the proximity of the region and the strong complementary in resource endowments between Australia and a number of these countries. However, these countries seem to prefer to trade and invest with neighbouring Asian countries which have similar business practices and regulation policies (Heilbron and Larkin, 1995, p.5).[21] Advances in horizontal and vertical integration of trade and investment between these countries can restrict entry opportunities into a market for new entrants. The recent surge of investment in food production and processing plants in the ASEAN4 countries by Asian agribusiness conglomerates, has implications for Australian food exporting firms, because in some food products Australia competes directly with these countries. For example, Australia and the Philippines both compete in Malaysia's sugar import market; and Australia and Thailand compete in the rice market in Singapore and Indonesia.

9. CONCLUDING COMMENTS

During the last quarter of this century, there has been a major relocation of economic activity towards the Asia Pacific region as these countries have increased their openness to trade and investment. While the countries in the region share geographical proximity, they are at various stages of economic and social development and are very diverse in terms of economic performance and agricultural resources. Efforts to sustain economic growth and development over the last few decades have also varied among these countries. Generally speaking, however, domestic governments have attempted to promote growth through export-oriented polices.

The gradual liberalisation and deregulation of the Asia Pacific region has encouraged trade expansion and FDI into the region. The rapid inflow of FDI, especially by Japanese MNCs, has been partially responsible for the diversification of production in these countries and the general economic growth of the region. Although these countries' growth paths have varied, there is evidence to suggest that they are closely interrelated and have been effected to varying degrees by Japan's rapid growth and industrialisation. For example, the appreciation of the Japanese yen in the 1980s was partially responsible for a substantial transfer of manufacturing industries from Japan into Taiwan and South Korea. The subsequent rapid economic growth of these economies and the appreciation of the Korean won and the New Taiwan dollar caused a further shift of Japanese labour intensive manufactures out of these countries and into China and the ASEAN4 countries, where the real wage levels are relatively low.

In recent years, MNCs have been investing heavily in food processing industries in the ASEAN4 countries. However, expansion of these industries continues to face constraints. For example, physical infrastructure such as communication systems, roads, railways and water and electricity supplies have lagged behind growth of trade and investment in countries such as China, Thailand, Indonesia and the Philippines, causing chronic shortage of transport services and urban congestion. Thus, even after the removal of explicit trade barriers, there remains a

---

[21] While this is may be true, health and safety standards also play a role in the choice of trading partners in some of these countries in the region. For example, Japan imports meat products form Australia, but not from southeast Asian countries because these countries do not meet Japan's health and safety standards (S. Kai, 22 November 1996).

wide range of implicit barriers which impede the flow of trade and investment. These problems are well known to governments and aid agencies and attempts are being made to overcome them.

Consumption of food products especially for meat, milk and dairy products, has far outstripped production, causing most of the countries in the region to increase imports of these products. In a number of these countries, the domestic government has concentrated on developing or at the least sustaining declining domestic agricultural sectors, via various methods of intervention. Government policies have distorted agricultural production in the region. Assistance to the production of commodities such as beef and dairy, has resulted in high cost industries that may be costly to maintain.

The Asia Pacific region is a large market with over 1.8 billion people. However, many people are very poor and live in rural areas isolated from modern transportation, retailing and distribution facilities. The people living in these countries quite often have very different lifestyles and traditions. These differences are reflected in differing food consumption patterns. However, diets remain relatively high in grains, vegetables and seafood products and low in animal products such as beef and milk. As these countries have allowed greater access to food imports the structure of the food retailing sector has also undergone change and has resulted in a wider range of foods being available for consumption. Such changes do not necessarily mean that Australia's share in this market will increase.

REFERENCE

ABARE (1992) "Impediments to Australian Processed Agricultural Exports to East Asia", in *Agricultural and Resources Quarterly*, Vol. 4, No. 4, pp. 570-583.

ABS (1997) *International Merchandise Trade.* Catalogue No.5422.0, Canberra.

AgExporter (1993) "Diet Revolution in Pacific Rim Cereals: New Customers for U.S. Foods", in *AgExporter,* Vol. 5, No. 6, pp. 4-7.

AMLC (1997) *Annual Report 1996/1997,* Sydney: AMLC.

Anderson, K. (1983) "Growth of Agricultural Protection in East Asia", in *Food Policy,* Vol. 18, No. 4, pp. 327-336.

Ariff, M. and Hill, H. (1985) *Export-Oriented Industrialisation: The ASEAN Experience,* Sydney: Allen & Unwin.

Borrmann, A. and Jungnickel, R. (1992) "Foreign Investment as a Factor in Asian Pacific Integration", *Intereconomics,* Vol. 27, No. 6, pp. 282-288.

Bureau of Industry Economics (1994) *Australian Industry Trends April 1994*, Issue No. 20, Canberra: AGPS.

Business Week (1998) "Can China Avert Crisis?", in *Business Week: Asian Addition,* March 16, pp. 16-21.

Chai, J. and Haishun, S. (1993) *Liberalizing Foreign Trade: Experience of China,* St Lucia: Department of Economics Discussion Paper, The University of Queensland.

Chatterjee, S. (1990) "ASEAN Economic Co-operation in the 1980s and 1990s", in A. Broinowski (ed.) *ASEAN Into the 1990s,* London: The Macmillan Press Ltd., pp. 58-82.

Chiew, E. (1987) "ASEAN Co-operation in Food and Agriculture: Looking Back and Looking Forward", in S. Noordin, L. Chew and S. Lim (eds.) *ASEAN At The Crossroads,* Malaysia: Institute of Strategic and International Studies, pp. 303-328.

Council of Agriculture, Executive Yuan (1994) *Basic Agricultural Statistics,* Republic of China: Council of Agriculture, Executive Yuan (Including Previous Years).

Coyle, W. and Dyck, J. (1989) "A Choices Debate on Japanese Beef Trade Liberalisation: It will Benefit American Agriculture", in *Choices,* Fourth Quarter, pp. 26-31.

Davies, K (1993) "Trade Barriers in East and Southeast Asia: the Implications for Retailers", in *The International Review of Retail,Distribution and Consumer Research,* Vol. 3, No. 4, pp. 345-365.

Drysdale, P. and Lu, W. (1996) "Australia's Export Performance in East Asia", in *Pacific Economic Papers,* No.259, September 1996.

EAAU (1994) *ASEAN Free Trade Area,* Canberra: AGPS.

East-West Centre (1989) *Asia Pacific Report, Focus: China in the Reform Era,* Honolulu: East-West Centre.

Economist (1993) "Asia: Survey", in *Economist,* Vol. 329, No. 7835, pp. 5-21.

Elek, A. (1996) "From Osaka to Subic: APEC's challenges for 1996", in *Pacific Economic Papers*. No. 255, May 1996.

Far Eastern Economic Review (1996) *Asia 1996 Yearbook*, Hong Kong: Review Publishing Co. Ltd.

Government Information Office (1993) *The Statistical Yearbook of the Republic of China*. Taiwan: Council for Economic Planning.

Graham, E. and Anzai, N. (1994) "The Myth of De Facto Asian Economic Bloc: Japan's FDI in East Asia", in *The Columbia Journal of World Business,* Vol. 29, No. 3, pp. 7-19.

Heilbron, S. and Larkin, T. (1995) *Corporate Strategies and Structures: Penetrating Asian Markets,* Research Paper No. 7, Canberra: RIRDC.

Horne, J. (1996) "East Asia and Eastern Europe Trade Linkages and Issues", in *Pacific Economic Papers,* No.261, November 1996.

IMF (1997) *World Economic Outlook, October 1997,* Washington: IMF.

IMF (1998) *World Economic Outlook, May 1998*, Washington: IMF.

Kai, S. (1992) "The Effects of Beef Import Liberalisation on its Consumption, Distribution and Production in Japan", in *Journal of the Faculty of Agriculture, Kyushu University*. Vol. 36, No. 3-4, pp. 201-208.

Klein, L. (1992) "Pacific Basin Economic Prospects, 1990-1994", in W. Coyle, D. Hayes, and H. Yamauchi (eds.) *Agriculture and Trade in the Pacific: Toward the Twenty-First Century,* London: Belhaven Press, pp. 15-28.

Lim, C. and Suh, J. (eds.) (1988) *ASEAN Industrial Co-operation: Future Perspectives and an Alternative Scheme,* Malaysia: Asian and Pacific Development Centre.

Longworth, J. (1983) *Beef in Japan: Politics, Production, Marketing and Trade,* St Lucia: The University of Queensland Press.

Melanie, J., Barry, G. and Phillips, B. (1994) "ASEAN: Effect of Economic Growth and AFTA on Australian Primary Industries", in *Australian Commodities,* Vol. 1, No. 1, pp. 67-83.

Piggot, R., Parton, K., Treadgold, E. and Hutabarat, B. (1993) *Food Price Policy in Indonesia,* Canberra: Australian Centre for International Agricultural Research.

Podbury, T., Ladlow, S., Mai, H., Atisuthaphot, A. and Rose, R. (1996) "Implications of APEC for Australian Agriculture", in *Outlook 96,* Proceedings and Resources Outlook Conference, Vol. 2, pp. 29-38.

Riethmuller, P. (1992) "Japanese Direct Foreign Investment in Agricultural Industries: A Review of Some Recent Developments", in *Agribusiness,* Vol. 8, No. 1, pp. 23-33.

Rogers, M. (1997) "Food Markets - Capturing Emerging Opportunities", in *Agriculture Outlook 97,* Proceedings of the National Agricultural and Resources Outlook Conference, pp. 27-37.

Schlossstein, S. (1991) *Asia's New Little Dragons - The Dynamic Emergence of Indonesia, Thailand and Malaysia,* Chicago: Contemporary Books Inc.

Tyabji, A. (1990) "The Six ASEAN Economies: 1980-88", in A. Broinowski (Ed) *ASEAN Into The 1990s,* London: The Macmillan Press LTD, pp. 32-57.

United Nations (1992) *Asian Data Handbook,* New York: The United Nations.

United Nations (1995) *Statistical Yearbook of Asian and the Pacific,* New York: Department for Economic and Social Information and Policy Analysis.

USDA (1993) *International Agricultural and Trade Reports: Asia and the Pacific Rim,* Washington: Economic Research Service RS-93-6.

Wade, J. and Canono, J. (1997) "Philippines Familiar Market for U.S. Agricultural Products", in *AgExporter,* Vol. 9, No. 5, pp. 18-19.

Williamson, H. (1994) *Coping with the Miracle: Japan's Unions Explore New International Relations,* London: Pluto Press.

World Bank (1994) *The East Asian Miracle: Economic Growth and Public Policy,* New York: Oxford University Press.

World Bank (1996) *World Development Report,* New York: Oxford University Press (Including Previous Years).

World Bank Group (1997) http://www.worldbank.org. 14 August 1997.

Yam, T., Heng, T. and Low, L. (1992) "ASEAN and Pacific Economic Co-operation", in *ASEAN Economic Bulletin,* Vol. 8, No. 3, pp. 309-332.

Young, C., Twyford-Jones, P., Logie, K. and Franks, R. (1995) *The East Asian Agribusiness Market: Export Potential for North Queensland,* Brisbane: Queensland, DPI.