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The Chinese Economic
Area: Economic Integration
without a Free Trade
Agreement

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## THE CHINESE ECONOMIC AREA: ECONOMIC INTEGRATION WITHOUT A FREE TRADE AGREEMENT

by Randall Jones, Robert King and Michael Klein



ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Paris 1992

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## THE CHINESE ECONOMIC AREA: ECONOMIC INTEGRATION WITHOUT A FREE TRADE ARRANGEMENT

This paper describes the *de facto* economic integration taking place between China, Hong Kong and Taiwan -- the "Chinese Economic Area" -- and analyses basic factors underlying the process. Even in the face of weak economic performance in OECD countries the integration has helped underpin rapid growth in all three economies, particularly in China's south-eastern provinces. If Chinese policies are further liberalised within a reasonably stable macro-environment, the Chinese Economic Area could become a major player in world markets within one generation and require massive adjustment in the rest of the world.

Ce document décrit l'intégration économique qui a lieu de facto entre la Chine, Hong Kong et Taiwan -- la "Zone Économique Chinoise" -- et analyse les facteurs à la base de ce processus. Malgré la faible performance économique des pays de l'OCDE, cette intégration a permis une croissance soutenue de ces trois économies, particulièrement dans les provinces du sud-est de la Chine. Si la Chine poursuit une politique de libéralisation dans un environnement macro-économique raisonnablement stable, la Zone Economique Chinoise pourrait tenir un rôle majeur sur les marchés mondiaux en l'espace d'une génération, ce qui pourrait entraîner des ajustements importants dans le reste du monde.

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#### THE CHINESE ECONOMIC AREA:

#### ECONOMIC INTEGRATION WITHOUT A FREE TRADE ARRANGEMENT

#### I. INTRODUCTION

In 1991/92 the economies of Taiwan, Hong Kong and China experienced continued strong GDP growth in spite of recession in the United States and a slowdown of activity in other East-Asian economies. The boom is driven by activity in mainland China resulting from an opening of the economy and de facto economic integration with the economies of Hong Kong and Taiwan -- what one may call the Chinese Economic Area (CEA). An understanding of developments in the CEA is of interest for several reasons. First, continued economic expansion of the CEA will require major adjustment of other economies including those of OECD. Second, the economic policies pursued by China -- affecting particularly the South-East -- and their success stand in marked contrast to the more recent efforts to reform the economies of Eastern Europe. Third, economic integration between China, Taiwan and Hong Kong has proceeded without an agreement for free trade and to some extent against Taiwanese policy efforts. Rather, forces appear to be at work, which may resemble those driving re-unification of countries.

The CEA is now a major player in world trade. Only the United States, Germany, Japan, France and the United Kingdom account for a larger share of world trade than the CEA (see Figure 1). Netting out intra-trade, the share of the CEA in world trade grew from about 1.8 per cent in 1980 to about 4.2 per cent by 1989 (see Figure 2a-c). Intra-trade in the CEA, which grew from about 10 per cent of total trade in 1978 to over 35 per cent by 1990 (see Figure 3) exceeds that of all free trade arrangements outside the OECD area (1). About sixty free trade arrangements have been established outside the OECD area since World War II. None has attained major economic importance or led to integration among member countries in the sense that intra-trade increased significantly as a share of total trade of the members of the arrangement (2). Even in the dynamic countries of the association of South East Asian Nations (ASEAN), the share of intra-trade has risen little, while their trade with the rest of the world grew rapidly. Instead, it is a non-arrangement which is becoming a major player in world trade and is developing strong intra-trade flows.

Much of the economic integration is centered around the southern provinces of the Chinese mainland, which are geographically and ethnically close to Hong Kong and Taiwan and whose GDP has been growing in excess of 10 per cent per year for over a decade. Reforms in mainland China have provided the opportunity for economic integration, yet much of the subsequent developments appear to have occurred in spite of economic policies and the policy efforts of Taiwan. Hong Kong and Taiwan, which have provided three-fourths of foreign investment in the mainland, have played a crucial role in China's economic take-off. In particular, Hong Kong, as the financier, investor, supplier, and provider of technology for Southern China, has helped smooth the transition from central planning, in contrast to the difficulties faced in Eastern European countries and the former Soviet Union.

In Guangdong province, where state-owned enterprises account for only about a third of industrial output, the changes have been most dramatic. the end of 1990, about 14 000 foreign-funded firms, almost half of China's total, were operating. Exports to Hong Kong, which is the source of 80 per cent of foreign investment in the province, accounted for two-thirds of Guangdong's industrial output. Industrial output has risen at a 25 per cent annual rate since 1986, double the national average. Guangdong has also begun to establish direct contacts with other countries to avoid using Hong Kong as a middleman. Shenzhen, a town of 30 000 in 1977, now has a population of 2 million (3). The benefits of rapid growth have spread to other areas of the province as well. The per capita income of Guangdong's rural population was 60 per cent above the national average in 1990 (see Figure 4 a and b). Inland provinces are now also winning privileges previously reserved for coastal Two counties in Hunan, which borders Guangdong, have been declared areas. open economic zones. Rising labour costs in the Pearl River delta region are helping to push foreign investors inland.

This paper first briefly introduces the players in this story of successful economic integration -- Hong Kong, Taiwan and the People's Republic of China (see Table 1). It then surveys the linkages that have developed among these economies before sketching some basic factors underlying the integration process. The paper concludes that economic policies allowed integration to take place, and freedom to contract led to fairly efficient economic outcomes in spite of continuing policy distortions. Better economic policies, particularly in the PRC, would however strengthen the chances that the "spontaneous" integration and accompanying growth can be sustained.

#### II. PROFILES OF THE ECONOMIES

#### A. Hong Kong

A British colony since 1842, Hong Kong has emerged as an important center of trade and finance in South China. In addition to its role as an entrepôt for trade between China and the West, Hong Kong's laissez-faire atmosphere of minimal government intervention and hard-working labour force made it perhaps the world's most dynamic centre of light industry in the 1960s and 1970s. Economic growth has averaged about 8 per cent a year during the past 25 years, boosting per capita income in 1988 to more than US\$14 000 (in purchasing power parity terms), a level second in Asia behind Japan (4). Hong Kong is densely populated with almost 6 million people (98 per cent of whom are Chinese) crowded into 1 000 square kilometers of mountainous land on Hong Kong Island and the New Territories on the Chinese mainland. The territory is predominantly urban with only 7 per cent of its land and 2 per cent of its labour force engaged in agriculture.

Hong Kong, which has the only developed deep water port on the coast of China, prospered throughout much of its history as the gateway to China. The Communist victory in 1949, however, led to China's isolation from the world economy and forced Hong Kong to develop industry to survive. Given the shortage of land, industrial development was concentrated in light industries that could operate in high-rise buildings. The manufacturing sector, which is still dominated by small, family-owned firms, averages only 15 workers per

establishment. Hong Kong firms have been successful in adapting quickly to changes in market conditions and in their extensive use of subcontracting arrangements with foreign enterprises. Textiles and apparel have been the leading industries, accounting for 43 per cent of the manufacturing work force in 1990. Electronics, which employs 14 per cent of manufacturing workers, has benefited from foreign investment from Japan and the United States (5).

Hong Kong's economy has flourished in an environment of low taxation and a minimum of government regulation. The government's policy of "positive non-intervention" has limited its role primarily to the provision of infrastructure, public housing and medical services. Public sector expenditures remain relatively small at less than one-fifth of GDP. In addition, Hong Kong does not impose controls on international trade or capital movements and maintains no anti-dumping system. The laissez-faire atmosphere has helped make Hong Kong an important center of international finance, with 44 of the world's 50 largest banks operating in the territory. The financial services sector, which accounts for about 17 per cent of GDP, has become nearly as important as manufacturing. Hong Kong's stock exchange is the fourth-largest in Asia.

As rising costs and the emergence of regional competitors eroded Hong Kong's international competitiveness in manufacturing in the 1980s, the colony's service industry flourished. Production activities of many firms were shifted into neighbouring regions of China, reducing manufacturing employment in Hong Kong by 27 per cent between 1986 and 1991. Hong Kong firms now employ an estimated 2-3 million workers in Guangdong Province. The integration of Hong Kong with the mainland is reflected in the rapid growth of re-exports, which consist largely of Chinese goods shipped to Hong Kong for finishing before shipment to third countries. Re-exports increased from one-fourth of Hong Kong's total exports in 1979 to almost two-thirds in 1990. The rapid growth of re-exports made Hong Kong the world's 11th-largest exporter with exports equivalent to 117 per cent of GDP. In addition, Hong Kong remains the second-largest container port in the world after Singapore.

The major challenge facing Hong Kong is uncertainty about its future under Chinese rule. With the end of Britain's 98-year lease of the New Territories approaching, China and Britain agreed in 1984 that all of Hong Kong would be returned to China on 1st July 1997. At the same time, China promised to preserve Hong Kong's capitalist system for 50 years. The Tiananmen Square incident in June 1989 and China's growing involvement in Hong Kong's affairs has weakened confidence about the territory's future under Chinese rule that is reflected in an increasing levels of emigration. About 50 000 persons have left Hong Kong each year since 1989, exacerbating the shortage of labour.

#### B. Taiwan

The island of 36 000 square kilometers located near the coast of China, is smaller than China's 29 mainland provinces. The Nationalist Party government, which fled to Taiwan following its defeat by the Communists in 1949, still claims sovereignty over all of China and has pledged to reunify Taiwan and the mainland. China, which also claims jurisdiction over Taiwan, has never ruled out the use of force to reunify the country and the two sides remain technically at war. During the past few decades, Taiwan has become

increasingly isolated internationally. It lost membership in the IMF and the World Bank in the early 1970s and only 27 nations maintain diplomatic relations with the Republic of China as it is officially known. An increasing number of nations, however, have established trade offices on the island in recognition of its growing economic power. Taiwan is likely to be accepted as a member of GATT in 1993 along with China.

Taiwan has been one of the fastest-growing economies in the world, averaging almost 9 per cent a year since 1953. Its per capita income is about US\$8 000 at current exchange rates, roughly twenty times higher than on the mainland (6). Life expectancy increased from 59 years in 1952 to 74 years in 1990. Rapid economic growth has been accompanied by an improvement in income equality. In 1952, the income of the wealthiest one-fifth of the population was 15 times that of the poorest one-fifth. By 1980, the ratio had been reduced to 4.2. The narrowing of the income gap is a result of land reform, the development of labour-intensive industries, full employment throughout much of the period, and easy access to education. Another positive aspect of Taiwan's performance was low rates of inflation of less than 5 per cent in the 1960s and 1980s.

At least 80 per cent of the island's 20 million inhabitants are "native" Taiwanese whose ancestors emigrated from Fujian province on the mainland (only 100 miles across the straits of Taiwan) beginning in the 14th century. Although the official language is Mandarin Chinese, most people speak Fukienese, the dialect of Fujian province. With 566 persons per square mile, Taiwan is one of the most densely populated areas of the world. Only one-fourth of the island is arable, forcing it to rely on imports for much of its food. In addition, more than 90 per cent of its energy requirements are met by imports.

Two important characteristics of Taiwan's economy have been the declining role of the government in economic affairs and the importance of small enterprises. The government initially adopted an interventionist stance towards industry to promote a strong defence and a high degree of self-sufficiency. In 1952, state-owned enterprises accounted for over half of industrial production. By 1990, their share had been reduced to about 10 per cent, concentrated in strategic sectors such as steel, electricity and shipbuilding. Small- and medium-sized firms have played the major role in Taiwan in contrast to the Korean economy, which is dominated by large conglomerates. In 1990, manufacturing firms averaged less than 17 workers. While their small size is sometimes thought to be an obstacle to moving into high technology fields, Taiwanese firms have shown great flexibility in the face of changing market conditions.

During the 1950s, the government adopted inward-looking policies to build on the industrial base developed during the Japanese occupation of the island from 1895-1945. Foreign aid from the United States financed 30 to 50 per cent of domestic investment during the period 1951 to 1965. The adoption of policy reforms in 1960, which included investment incentives, the devaluation of the New Taiwan dollar, and the lowering of import barriers, preceded the rapid growth of industry and exports. The manufacturing sector's share of GDP doubled from one-fifth in 1960 to two-fifths in 1986, while agriculture declined from 29 per cent to 6 per cent over the same period.

Exports, meanwhile, increased from only 12 per cent of GDP in 1960 to 58 per cent in 1986. In 1990, Taiwan was the 12th-largest exporter in the world.

Industrial development in the 1960s was led by light industries, such as food processing, textiles and apparel. In the 1970s, a surge in investment, which exceeded 30 per cent of GNP during the decade, shifted the economy toward more capital— and skill—intensive industries such as petrochemicals, metals, shipbuilding and machinery. Taiwan's industrial structure has continued to shift toward higher-value-added goods during the 1980s as the appreciation of the New Taiwan dollar and rising wages made it uncompetitive in some product lines. Taiwan's exports of electronics increased from US\$13 billion in 1988 to US\$25 billion in 1990, while the labour-intensive footwear industry shifted most of its production to China's southern provinces. Taiwan's computer industry is the world's fifth-largest.

In the 1980s, Taiwan experienced huge current account surpluses exceeding 11 per cent of GNP. The large surpluses, which reflect a decline in investment to 22 per cent of GNP and a continued high saving rate, have boosted Taiwan's foreign exchange reserves to about US\$85 billion, the largest in the world. In addition, they have increased foreign pressure on Taiwan to lower its trade barriers. Taiwan plans to reduce its average tariff rate, which exceeded 30 per cent in 1980, to 3.5 per cent in 1992. In addition, Taiwan has made progress in liberalising its financial system.

#### C. People's Republic of China

China is the third-largest country in the world. Its area of 9.6 million square kilometers is about one-fourteenth of the land area of the world and its population, estimated at 1.14 billion at the end of 1990, accounts for about one-fifth of the world's population. More than 90 per cent of the people are Han Chinese, with 53 minority groups accounting for the remainder. The Han Chinese, though, are not a homogeneous group; they speak a variety of mutually unintelligible dialects and are marked by regional differences. China's 29 provinces compare in size and population to European nations. Guangdong province, which is nearly as large as the United Kingdom, has 64 million people, while Fujian, which is the size of Greece, has 30 million inhabitants.

The People's Republic of China was founded in 1949 following the Communist victory over the Kuomingtang, which fled to Taiwan. After three decades of war and political instability, the economy and infrastructure was in disarray. The new government adopted a centrally-planned economy, carried out a land reform and later established agricultural communes. During the subsequent 25 years, price stability and external balance were maintained while output growth averaged 4 per cent a year, despite only 2 per cent annual growth in agriculture. The average figure, though, masks dramatic swings in output growth in some years. The mistakes of the "Great Leap Forward" programme in 1958 was compounded by bad weather, leading to three years of widespread starvation. The social unrest unleashed by the Cultural Revolution, which began in 1966, also had negative economic consequences.

In addition to the problems created by sudden policy shifts, China faced the difficulties encountered by other centrally-planned economies; an irrational pricing system, an emphasis on quantity rather than quality, isolation from foreign competition, and a lack of incentives. Under the "iron rice bowl" approach, state enterprises provided lifetime employment, housing, and medical care, with no effective link between individual output and salary. Until 1978, growth was primarily a result of increased inputs of labour and capital, with little growth in total factor productivity.

In 1978, China began a series of gradual economic reforms (7) to increase the role of market forces that have resulted in dramatic economic and social changes. By 1991, less than 50 per cent of GDP was marketed at prices fixed by the State (8), private production dominated in agriculture and less than 50 per cent of industrial production was produced by government-owned Reforms began in agriculture, which supplies 27 per cent of enterprises. China's GDP and employs more than two-thirds of its labour Collectively-owned land is leased to farm families and land-use rights were made legally transferable. Mandatory sales of output to state procurement agencies have been replaced by a system of largely voluntary contracts for key crops at state-fixed prices. Production beyond the contracted quantity may be sold at free market prices (two-tier pricing system). All other agricultural products may be sold at unregulated prices. Restrictions on non-agricultural activities in rural areas were relaxed, allowing the development of township and village enterprises mostly owned by local government units below the county-level (9) (see Table 2). They accounted for almost one-fourth of industrial output in 1987 and employed 88 million workers or about 17 per cent of the labour force.

Reforms were extended to the industrial and service sectors in 1984. have been encouraged, reducing state-owned Non-state enterprises (10) enterprises' share of industrial output from four-fifths in 1978 to 46.5 per cent in 1991 (11). The number of items allocated through the government's output plan declined from 250 products in the early 1980s to about 20 in 1988 (e.g. steel, coal, petroleum and electricity). The two-tier pricing system was extended to industry. A corporate income tax system -- with marginal tax rates de facto varying by enterprise -- replaced the full remittance of profits of state-owned enterprises. Management contracts, usually three to four year in length, provided more autonomy over investment and labour decisions to state enterprises. The state-owned enterprise sector, though, remains a serious drag on the economy. At least one-third of the firms are losing money (12), requiring subsidies that steadily increased central government deficits in the second half of the 1980s. Concern about the possible effect on employment has made the government reluctant to close loss-making enterprises. Administrative decentralisation has given provincial and local authorities more discretion in taxation and resource allocation. The management of 75 per cent of small firms in the service sector have been contracted or leased to collectives or private individuals, and now account for more than half of all retail sales.

Reforms of the financial system are still in their infancy. The old mono-bank system is slowly being replaced by a system of multiple commercial and specialized banks as well as increasingly important non-bank financial institutions and a fledgeling securities market. The government uses a variety of instruments to intervene in the financial markets, including credit targets, interest rate controls and other administrative interventions. Provinces have

gained greater control over financial institutions, including branches of the central bank. Although labour market reform has progressed more slowly, allowing more profit-related pay and some fixed-term contracts, it has increased flexibility in employment decisions. Yet mobility restricting regulations remain important and strong job security undermines incentives to work.

A series of measures were taken to open the economy. Before 1978 foreign trade was the monopoly of 12 foreign trade corporations (FTCs) organized along product lines. To expand relations with the rest of the world, the government decentralised control over trade. At present, there are over  $5\,\,000$  FTCs managed by provincial or local authorities that trade either as agent or principal. In addition, a number of manufacturing enterprises have been allowed to trade directly. The scope of trade subject to the central plan has been reduced significantly and an import licensing system as well as import and export duties (13) now provide the government with instruments to influence trade flows. The foreign exchange market has been deregulated to some extent. The government now operates a dual exchange rate system comprised of a controlled official market and a less regulated market in foreign exchange retention quotas, which is operated country-wide through about 100 swap centers and fed by foreign exchange retained by exporters. The permitted retention rate gradually increased from 25 per cent -- up to 100 per cent for firms operating in export-processing zones. The official exchange rate has in recent times been allowed to move closer to the rate established in swap centers. Local and provincial governments share with the central government in foreign exchange surrendered by exporters.

China also decided to utilise foreign capital by allowing direct investment and borrowing from abroad. Joint ventures with foreigners were promoted under a 1979 law. Five Special Economic Zones (14) featuring tax incentives and improved infrastructure provision were established in 1980 as the principal areas for direct investment (see Figure 5). In 1984, 14 coastal cities and Hainan Island were also permitted to offer tax incentives to attract foreign investment — as was Shanghai in 1990. While international trade has been partially deregulated, trade barriers continue to exist between provinces due to attempts by provincial governments to prevent arbitrage resulting from differing provincial pricing arrangements or to protect "domestic" producers.

The reforms have boosted economic growth to an annual average of almost 10 per cent in real terms during the 1980s, a rate sufficient to meet its target of quadrupling output between 1980 and the end of the century (see Table 3). Agricultural output expanded at a 6 per cent annual rate, enabling China to export a significant amount of grain in 1985, and higher food prices have doubled the average incomes of the 800 million people living in rural areas. Industrial output, aided by a surge of foreign investment, increased at a 13 per cent annual rate. Gross direct investment inflows increased from an average of less than US\$2 billion a year between 1979 and 1984 to over US\$7 billion in 1990 (15). The rise in foreign investment was accompanied by an expansion of trade at a 12 per cent annual rate during the 1980s. As a result, China's share of world exports doubled to 2 per cent between 1975 and 1991.

Since 1978, however, China has experienced three cycles of macroeconomic The reforms in agriculture in 1978, in industry in 1984, and in the enterprise management system in 1987-88 coincided with sharp increases in domestic demand and excessive credit expansion. Inflation peaked at a higher level in each successive episode of overheating; 6 per cent in 1980, 8.8 per cent in 1985 and 18.6 per cent in 1988. Each cycle was accompanied by a deterioration in the external balance that led China to increase its foreign borrowing. The authorities responded to overheating by tightening financial policies. The implementation of austerity policies in 1988 succeeded in cutting inflation to 2 per cent in 1990, and enabled China to record an US\$11 billion trade surplus following a US\$4 billion deficit the previous year. Economic growth, though, was reduced from 10 per cent to less than 5 per cent in 1990 and unemployment increased. Currently another inflationary boom may be building up at a time when prospects for further economic reform have been strengthened by recent political developments.

#### III. THE EMERGENCE OF A CHINESE ECONOMIC AREA

#### A. Trade and investment policies

In the 20th century traditional economic links between China, Taiwan and Hong Kong have been disrupted by a variety of events. As a colony of Japan from 1895 to 1945, Taiwan had relatively few ties to the mainland. Although it was briefly reunited with the mainland after the Second World War, the arrival of the Nationalist government in 1949 led to a near complete severance of ties with the mainland. In addition, Taiwan and Hong Kong have had no official ties since 1955. Hong Kong's role as the entrepôt center for China was disrupted by the communist victory in 1949 and the mainland's subsequent isolation. China's diminished trade with the world was handled directly by state trading corporations, by-passing Hong Kong middlemen. Hong Kong's bilateral relationship with the mainland was one-sided. While Hong Kong remained open to China's exports and investments, China was closed to Hong Kong.

The opening of China in 1978 expanded its economic links with Hong Kong and Taiwan. Three of China's five Special Economic Zones were established in Guangdong; Shenzhen (adjacent to Hong Kong), Zhuhai (adjacent to Macau) and Shantou. Another SEZ is located in Xiamen, just a few miles from two coastal islands owned by Taiwan. The 1989 Tiananmen incident accelerated the development of its economic links with Hong Kong and Taiwan for several reasons. It led to a reduction in foreign investment and lending, while reduced authority of the central government allowed regional governments more latitude to pursue economic reforms. Limits to inter-provincial trade within China, have raised the relative importance of the trade links between Taiwan, Hong Kong and Southern China. Provincial governments, such as Guanxi and Hunan, have periodically imposed border controls against neighbouring Guangdong inter alia to prevent traders from benefiting from the two-tier price system.

Taiwan is less open to China than it is to other countries since it fears that close economic ties with the mainland will make it vulnerable to economic blackmail. However, the Nationalist government began to gradually relax restrictions on trade, investment and travel to the mainland in 1987. The government still intends to limit trade with the mainland to 10 per cent of

total exports and imports to prevent becoming dependent on China. The list of products that may be imported from the mainland is restricted to about 250 raw materials; less than 10 types of semi-finished products are allowed (16). The dramatic growth of trade China-Taiwan economic links since 1987, however, suggests that geographic and cultural proximity can enable businessmen to evade formal barriers to trade and investment. Almost a quarter of imports from China in 1991 are thought to have been illegal, prompting Taiwan to impose stricter checks on goods arriving from Hong Kong. Investment from the mainland in Taiwan remains banned, but Taiwanese firms have been able to invest in China indirectly via third countries since September 1990. Investment in the manufacturing sector is limited, though, to 3 319 products, which are primarily labour-intensive.

China, in contrast to Taiwan's policy toward the mainland, is more open to Taiwan than to other countries. "Adjustment taxes" imposed on Taiwanese goods are slightly lower than import tariffs and import controls on goods from Taiwan are less stringent. Taiwanese investors have also received more favourable treatment than other foreign investors since 1988, reflecting China's hope that closer economic ties with Taiwan will help bring the island back under its control (17).

#### B. Economic integration

Trade. As China decentralised foreign trade, Hong Kong regained its importance as an intermediary between a multitude of Chinese producers/traders and buyers in the world market. China's exports to Hong Kong increased by almost nine times between 1979 and the 1990. Goods re-exported from Hong Kong accounted for 90 per cent of the increase, while the value of Chinese goods retained in Hong Kong has fallen since 1987 as Hong Kong became more affluent and the mainland lost market share in Hong Kong to Japan and other advanced economies. While Chinese statistics show Hong Kong as the largest export market and supplier of imports, it falls to third place behind the United States and Japan when re-exports are attributed to their final destination. In 1990, 62 per cent of China's shipments to the United States passed through Hong Kong, as did one-fifth of US exports to China.

The importance of Hong Kong's role as a middleman between China and the world is reflected in the tremendous growth of Hong Kong's re-exports in the 1980s. Re-exports, which surpassed domestic exports in 1988, were equivalent to 75 per cent of GDP in 1990 compared to only 22 per cent a decade earlier. Domestic exports, meanwhile, fell from half of GDP in 1980 to 41 per cent in 1990. Re-exports were especially important in the case of China, accounting for 70 per cent of shipments from Hong Kong to the mainland in 1990. The mainland was the second largest market (after the United States) for Hong Kong's domestic exports, accounting for 21 per cent. Of the US\$6 billion in Hong Kong domestic exports to the mainland in 1990, more than half were semi-finished products shipped for assembly in China. Taiwan, with a share of 2.5 per cent, ranked seventh.

Taiwan's indirect trade with China has increased from less than US\$50 million in 1978 to US\$4 billion in 1990 and further to US\$5.8 billion last year. In 1992, it is expected to reach US\$7 billion with a substantial surplus in favour of Taiwan (18). Imports from the mainland, which are

restricted to primarily raw materials, account for only 1.8 per cent of Taiwan's imports. Despite the restrictions, trade is increasingly intra-industry in nature, with textiles accounting for a significant share of both imports and exports with the mainland. Direct trade, which consists of smuggling and "minor trade" in ships of less than 100 tons, is also thought to have increased, although it is difficult to measure.

<u>Direct Investment</u>. Taiwan and Hong Kong accumulated a substantial stock of direct investment in the mainland during the 1980s. According to Chinese statistics (Hong Kong does not measure capital flows), Hong Kong accounted for 60 per cent of total direct investment in China at the end of 1990. figure is likely to be too high, since it includes investment by foreign subsidiaries located in Hong Kong (including some from Taiwan). Hong Kong investment is concentrated in Guangdong, where an estimated 2-3 million work for Hong Kong firms. Taiwan, meanwhile, is the fourth largest investor behind the United States and Japan accounting for almost 5 per cent of the total. According to Taiwan estimates, 2 500 firms on the island have invested about US\$3 billion on the mainland. Guangdong and Fujian provinces have received the largest shares of investment, estimated at US\$600 million and US\$400 million, respectively. Investment from Taiwan to date has been focused on light industry enterprises producing exports for third countries. The trend is toward more capital-intensive investment aimed at supplying growing consumer demands in Southern China.

While Chinese investment is not permitted in Taiwan, it has become significant in Hong Kong, estimated at US\$9 to US\$10 billion in 1989, surpassing the US\$8 billion invested by Japan and the US\$7 billion invested by the United States. It is likely, therefore, that Chinese investment in Hong Kong exceeds Hong Kong investment in the mainland.

Financial Flows. In addition to direct investment, there are growing financial flows between China, Hong Kong and Taiwan. Although Hong Kong does not extend official loans, its share of China's external loans rose from less than 1 per cent in 1983 to almost 10 per cent in 1989. Another aspect of Hong Kong's middleman role are syndicated loans for China, 80 per cent of which are raised in Hong Kong (19). Chinese-owned firms began raising capital on the Hong Kong stock market in 1987. Investments in equity are beginning to cross the border in two directions following the introduction of special shares for foreigners by China's two stock exchanges in Shanghai and Shenzhen in In April, Hong Kong Securities and Futures Commission decided February 1992. that investment funds that invest in Chinese shares may be sold to the public in Hong Kong. Another channel of financial flows was opened in May 1990 when Taiwan lifted a 40-year ban on remittances to the mainland. Residents of have since sent more than US\$120 million to relatives on the Taiwan mainland (20).

Transport Links. The economic integration of China and Hong Kong has improved the transportation links between them. An estimated 50 000 Hong Kong residents cross the border each day and there are reports that others are buying apartments in Shenzhen, which cost only about one-fourth as much as similar dwellings in Hong Kong. A superhighway from Canton to Shenzhen (bordering Hong Kong) is being built by a Hong Kong firm and scheduled to open in 1993, while another Hong Kong firm is building a ringroad around Canton. There are also plans to introduce high-speed trains on the Canton to Hong Kong

line, which was opened in the early 1980s. In addition, Guangdong plans to invest US\$35 billion in infrastructure that will help link more remote areas of the province with the prosperous Pearl River delta region (21). Many observers anticipate the establishment of direct air and shipping links between Taiwan and the mainland, a move that would accelerate trade and investment.

#### C. Political ties

China - Hong Kong. In the Sino-British Joint Declaration of 1985, Britain declared that it will restore Hong Kong to the People's Republic of China on 1st July 1997. China, in return, promised to maintain Hong Kong's capitalist system and way of life for 50 years after 1997 under the principle of "One Country, Two Systems". Hong Kong's status as a Special Administrative Region (SAR) of China is established in the Basic Law approved by Beijing in 1990. The Basic Law, which will become the constitutional document for Hong Kong after 1997, states that Hong Kong will have a chief executive, an elected legislature with the power to make laws, and a judicial system independent of the mainland. Laws currently in effect will remain valid after 1997 provided they are consistent with the Basic Law. Human rights, including freedom of speech and assembly, are to be maintained, while migration from the mainland to Hong Kong will be strictly controlled.

The Basic Law also contains numerous provisions to maintain Hong Kong's economic system. The right of private ownership, including foreign investment, will continue. Hong Kong will be allowed to supervise its financial markets independently so as to maintain its status as an international financial center. The public expenditure and taxation system in Hong Kong will remain independent of that in the mainland. Funds raised in Hong Kong will be used exclusively in the SAR and will not be handed over to Beijing. In addition, China will not have the right to levy taxes in Hong Kong.

Hong Kong will also maintain its own currency and an independent monetary policy. The government of the SAR will have the right to designate banks to issue its currency. The Hong Kong dollar will remain freely convertible and no controls are to be applied to foreign exchange or capital movements. Hong Kong will continue to participate in GATT, which it joined in 1986, as a separate customs territory. The Basic Law states that Hong Kong will remain a free port and will pursue a "policy of free trade and safeguard the free movement of goods, intangible assets and capital".

Despite the assurances in the Joint Declaration and the Basic Law, the prospect of Chinese control has created considerable uncertainty in Hong Kong. The events of June 1989 in China and the difficulty in obtaining Beijing's approval for the construction of a new airport reduced confidence in Hong Kong's future. In addition, China has been accused of obstructing plans to make Hong Kong more democratic prior to 1997. The lack of confidence is reflected in emigration which increased from an average of 21 000 per year in the first half of the 1980s to 45 000 in the second half, and 50 000 in 1990. In addition, many enterprises, including Hong Kong's de facto central bank, the Hong Kong & Shanghai Banking Corp., have diversified their activities away from Hong Kong. Still, given China's US\$10 billion of investment in Hong Kong, it seems unlikely that China would intentionally damage the stability and viability of Hong Kong as a center of trade and finance.

China - Taiwan. The "One Country, Two Systems" idea has also been proposed by China as a way to unite Taiwan and the mainland. Taiwan, though, believes that communism will eventually collapse in China as it has elsewhere and remains at least officially committed to its policy of "Three No's": no contact, no communications, no compromise. Still, an increasing number of coordinating mechanisms exist between Taiwan, Hong Kong and China. All three are members of the Asian Development Bank, where Taiwan participates as "Taipei, China". In November 1991, China, Hong Kong and Taiwan joined the potentially powerful Asia-Pacific Economic Cooperation group (APEC), which includes the United States, Japan, Australia and New Zealand. There also reports that China and Taiwan will be simultaneously accepted in 1993 as members of GATT, which accepted Hong Kong in 1986.

Increased economic ties between Taiwan and China have led to direct bilateral contact as well. In March 1992, Taiwan announced that it would seek to sign an investment quarantee pact with China to protect its rapidly growing investments on the mainland. Taiwanese enterprises have long asked for such an agreement to protect them in legal disputes with China. Taiwan stated that China's agreement to such a pact would be a "friendly action" on its part which would allow Taiwan to continue removing curbs on economic ties with the mainland. The agreement will be negotiated by the Straits Exchange Foundation, a semi-official group that handles contacts with the mainland. An investment pact would be only the second signed by Taiwan and China. The first, negotiated by Red Cross representatives in 1990, concerned the repatriation of illegal immigrants and criminals. In addition, there have been private sector contacts aimed at promoting integration. For example, a January 1992 meeting brought together 100 academics, industrialists and politicians to discuss the creation of a greater Chinese economic zone. The following month, a delegation Taiwanese businessmen and scholars visited the mainland to discuss establishing a "Chinese Common Market". Taiwan has also proposed establishing an unofficial representative office in Beijing and allowing the mainland to have a similar office in Taiwan.

#### D. Factors underlying the process of integration

The expanding range of economic interaction in the Chinese economic area is giving rise to the creation of quasi-political fora to discuss issues of mutual concern to the three Chinese economies. The process appears to be the reverse of that of a "normal" free trade arrangement, where a negotiated agreement promotes economic integration. What, therefore, drives the integration process in the CEA? Hong Kong has not adjusted economic policy, but gained in importance as the provider of marketing and financial know-how for the low-cost producers of the mainland, who were no longer required to export through rigid state export monopolies. Taiwanese policy initially sought to retard the emerging economic exchanges with the mainland, while later accommodating gradual opening. Therefore -- if policy was responsible -- it must have been the reforms in the PRC since 1978 that have enabled integration to proceed.

But have the reforms done more than simply enable integration to proceed as opposed to actively advance it? By the standards applied in the analysis of most developing countries the policy framework that now exists in the PRC appears heavily distorted and conducive to socially wasteful rent-seeking rather than productive activity. The policy regime of the PRC now resembles that of countries like Pakistan, Egypt or Nigeria rather than that of successful, open East-Asian economies or that of emerging Latin American economies like Chile and Mexico. However, the reforms have removed the tight grip of central planning and the outlook for further market-oriented reform appears to be auspicious. So far the reforms appear to have resulted in:

- -- basic macro-economic stability and control over inflation albeit as a result of a somewhat erratic conduct of macro-policy;
- -- scope for many individuals and firms to operate outside the framework of the plan, albeit in a framework of rights where many "contractual" details are ill-defined (e.g. tax treatment, infrastructure provision);
- -- opportunities for arbitrage and rent-seeking (e.g. price arbitrage under the two-tier system; abuse of tax privileges in special economic zones; arbitrage in the dual foreign exchange market);
- -- highly-distorted and rigid factor markets (labour and financial) with weak profit incentives and widespread government interference;
- -- weakened central government authority in exchange for greater autonomy of provincial and local bureaucracies who own companies, set and adjust taxes, influence credit decisions, and at times erect provincial trade barriers.

Yet the outcome has been extremely rapid growth during the 1980s, which has, however, not been translated into important increases of per capita income in dollars due to frequent and large devaluations of the Chinese currency (see Figure 6). Contrary to the cases of many other developing countries, there has been a strong and positive supply response in a highly distorted policy framework. One interpretation would be to regard this as a once-and-for-all effect of abandoning the even more distorted world of central planning (22). The consequence would be that further rapid growth could only be sustained if the policy framework were streamlined to conform to the market paradigm. The slowdown in agricultural production in the second half of the 1980s would be consistent with such a view. The recent experience of Eastern Europe, however, suggests that mere abolition of central planning does not lead to growth. explanation might be to proclaim the pre-eminence of basic macro-economic stability over structural policies. Yet, according to this criterion many low-inflation African countries should show strong growth performances.

It is difficult to conceive of a full explanation for the success of the PRC (23) without taking recourse to the social bases of economic development in the PRC. The areas of fastest growth are the southern provinces, which are de facto integrating with Hong Kong and Taiwan. Development is not restricted to the favoured special economic zones but widespread across the provinces containing the SEZs. Technical, managerial, marketing and financial know-how

is provided by entrepreneurs from Hong Kong and Taiwan. Infrastructure is created as production sites are opened further and further inland in the provinces (24). Wildly-growing capitalism supported by local officials and accompanied by a certain amount of corruption seems to reign (25). Formal property rights and judicial process appear of limited importance. The basic puzzle is, how binding contracts can be concluded and how markets can function in this atmosphere.

It appears that in the southern provinces -- more so than in provinces closer to the central power of Beijing and more distant from the influence of Taiwan and Hong Kong -- the official framework of policies is not fully binding. Local authorities and entrepreneurs have scope to conclude a wide set of contracts, which allow rents generated by official policy to be allocated among interested parties. As a result of this arbitraging process many firms de facto face prices, which are relatively undistorted (26). The allocation of rents appears to broadly follow profit-sharing arrangements with efficiency properties similar to those identified in the literature on share-cropping. Firms would, for example, conclude deals with -- often competing -- local authorities to receive regular electricity supply in return for a share in the firm's profit. As many firms belong to local authorities in any case such profit-sharing arrangements are compatible with existing ownership rights. One might thus consider southern China as an application of the Coase Theorem (27), which implies that private parties have an incentive to mutually agree to allocate external costs and benefits (28) so that the overall outcome is efficient.

The more or less spontaneous development of profit- (or rent-) sharing arrangements requires that the contracting parties trust each other to fulfil the contract. Economic theory suggests that repeated interaction in groups with stable ties can produce outcomes resembling that of efficient markets (29). Essentially the expectation that one party will deal repeatedly with another for an indefinite time provides incentives to engage in mutually profitable exchange. In the case of larger firms and some governmental institutions repeated interaction can be expected by contracting parties, because they are based on sizeable location-specific investments and cannot easily move. Ironically, restrictions on factor mobility might also help conclude binding contracts as they increase the likelihood of repeated interaction among the same parties. Extended and overlapping family ties as well as "Chinese" behaviour patterns have probably facilitated the development of southern China.

The absence of such conditions may be the key to understanding problems of supply response in other countries with similarly distorted policies, e.g. African countries such as Nigeria, which otherwise possess a relatively dynamic private sector. Economic theory may have little to say about why Chinese families have strong and far-reaching ties and why relations among Chinese are supported by learned patterns of behaviour. Yet, it appears well-known that these ties and behaviour patterns exist (30) and that they are partly the explanation of why other countries that had distorted policies —— like Thailand —— experienced strong booms of activity (31). If one believes in the above explanation of Chinese growth one is still left with the conclusion that over time policies should become more coherent and market-oriented as the extent and stability of family and cultural networks is limited and restrictions on mobility would ultimately hamper productivity.

#### E. Prospects for the Chinese economic area and impact on the world economy

From Roman times worries about the persistent -- albeit at the time unimportant -- trade deficit with East Asia are known. In 1990, China's trade surplus with the United States of \$7 to \$10.3 billion -- depending on how one treats Hong Kong transit trade -- is the second largest after Japan's (32). What will the future bring and what would be the impact of further rapid growth and enhanced outward-orientation on the OECD countries? In the following paragraphs these questions are briefly pursued in a simple scenario projecting the size of the Chinese economic area in world trade to the year 2000 and 2030 respectively.

The factors that could combine to sustain rapid economic growth of the CEA are Taiwan's capital and its technical and managerial know-how, Hong Kong's intermediation services and China's cheap labour and natural resources (33). Most important for such a development is continued economic growth and expansion of trade of mainland China. China's revealed comparative advantage resembles that of other East Asian countries (34). While China's profile fits most closely with Thailand and Indonesia, with a comparative advantage in foods, refined petroleum, and miscellaneous manufacturing, this deviation from the profiles of Hong Kong and Taiwan is due mainly to China's abundance of natural resources (see Tables 4 and 5). Internal trade barriers in China imply that foreign trade and the potential for short- and medium-term expansion of trade is concentrated in the coastal areas, where comparative advantage resembles closely that of Taiwan.

While trade from the economic zone as a percentage of OECD trade has increased in all categories at the one-digit SITC level (except SITC category 9, which is goods not classified), the fastest growth appears to be in animal and vegetable oils and miscellaneous manufactured goods, largely garments (see Figure 7 a-b). The high quality of Chinese production in garments, footwear, and toys suggests that these categories will continue to perform strongly for years to come (see Table 6). As low cost labour on the mainland combines with technology, management, and marketing skills from Hong Kong and Taiwan one may expect a surge in exports of electrical goods, pharmaceuticals, hand tools, and small machine tools.

If the rapid growth of the past decade in the CEA can be maintained for about one generation -- as it has in the Asian NIEs -- this would have major implications for world trading patterns including those of OECD countries. To illustrate this we take the following scenario for the 1990s (35) as a starting point (36). Under the scenario world trade is expected to grow by 5.8 per cent in the 1990s and real GDP in the OECD countries by 2.9 per cent. We assume these rates to continue until the year 2030 and China to grow by  $7\ \mathrm{per}$  cent per year or about 5.6 per cent per capita -- well below the rate of 8.1 per cent maintained during the 1980s. Such a performance would be outstanding by most developing countries' record but fall short of that of the East Asian NIEs. This growth performance would allow China to reach today's per capita income As the Chinese economy implements outward-oriented level of Mexico by 2030. policies and further integrates with the world economy growth of exports of goods and non-factor services is assumed to expand by 8 per cent over the long-term raising China's export to GDP ratio from today's 14 to 20 per cent.

By the year 2000 the CEA (netting out intra-trade) will under these assumptions account for 4.4 per cent of world GDP and about 6.5 per cent of world trade up from 3 and 4.2 per cent respectively in 1990. By the year 2030 the share of world GDP would have risen to 12 per cent and that of world trade to 20 per cent surpassing the share the United States accounts for today of about 14 per cent.

Already by the end of the 1990s the CEA's share of world exports would exceed that of Japan. Chinese exports would principally compete with those of middle-income developing countries and the lower end of exports from OECD countries. At the same time OECD countries will benefit from higher exports to China of capital goods and technology-intensive products. If the Chinese economy with its large and growing population follows the path of Taiwan changing its production structure from agriculture and the processing of primary products to manufacturing based on unskilled labour (37), there may also be room for increased food imports as well benefiting in particular food exporters such as the United States, Australia and New Zealand.

#### NOTES

- 1. See Braga and Yeats (1992), p. 8.
- 2. See "Regional Integration and Developing Countries", TD/TC/WP(92)14, 20 March 1992.
- 3. The Economist, 5 October 1991, pp. 19-21; Business Week, 6 April 1992, pp. 22-24; and Asia Pacific Review, Second Quarter 1992, pp. 17-18.
- 4. United Nations Development Programme, 1991.
- 5. Data about Hong Kong's labour force is from the Census and Statistics Department.
- 6. According to the *Human Development Report*, 1991, China's per capita GDP in purchasing power parity terms was US\$2 470 in 1988. Unfortunately, no estimate was available for Taiwan.
- 7. Much of the description of reforms draws on Blejer et al. (1991).
- 8. See Schmidt-Hebbel (1991).
- 9. See Byrd and Gelb (1990).
- 10. Owned by township, village, collective bodies or private parties including foreigners.
- 11. Oral communication by Prof. W. Kraus, University of Bochum, Germany.
- 12. This is a conservative estimate. According to the Far Eastern Economic Review, 10 October 1991, two-thirds of State firms are "chronically in the red" (p. 77).
- 13. Tariff rates vary greatly between 3 and 180 per cent. Trade policy interventions are multifarious and appear highly distorting.
- 14. The framework, under which Special Economic Zones operate, illustrates the special mix of free-market policies and legacies from the planned system, which permeates much of current policy. The zones provide commercial freedoms to firms. Each zone is nevertheless supposed to serve distinguishable foreign markets. While the zones are officially intented to provide special incentives to exporters, less than five per cent of exports originate there and many firms sell part of their production in the domestic market.

- 15. Yun-Wing Sung (1991).
- 16. Reuters, 16 March 1992.
- 17. Sung, op. cit., p. 7.
- 18. These figures and estimates by Taiwanese authorities were reported by Reuters on 17 April 1992. The 1990 figure of US\$4 billion is substantially higher than the US\$2.5 total for two-way trade that was reported by the Chinese authorities.
- 19. The Asian Wall Street Journal Weekly, 18 November 1991, p. 5.
- 20. Reuters, 12 February 1992.
- 21. Far Eastern Economic Review, 16 May 1991, pp. 64-68.
- 22. For such interpretations see J.C. Park (1989) and Byrd and Gelb (1990).
- 23. See Byrd and Gelb (1990).
- 24. See Bateman and Moody (1992).
- 25. See International Herald Tribune, 2nd and 7th April 1992.
- 26. See Byrd and Gelb (1990).
- 27. See Coase (1960).
- 28. Many costs and benefits are in this case "external", because property rights are partly undefined.
- 29. See Kurz (1977) and Radner (1980).
- 30. See Redding (1990).
- 31. See J. Clad (1989), The Economist, July 18, 1992.
- 32. Yun-Wing Sung (1991).
- 33. China produces 25 per cent of the world's tungsten and antimony, and over 20 per cent of the world's anthracite and bituminous coal, magnesite, mercury, graphite, and tin. It also has large resources of iron ore, fluorspar, and petroleum.
- 34. Yeats, Alexander J. (1991).
- 35. The scenario is that of the World Bank's 1991 World Development report.

- 36. The scenario is based on the assumptions that:
  - -- the Uruguay Round is successful in all areas of negotiation except agriculture;
  - -- growth will rebound in industrialized countries;
  - -- oil prices will rise slightly in real terms;
  - -- real interest rates will remain high in the medium term;
  - -- the United States will reduce its structural deficit; and
  - -- project 1992 will yield a long-term growth dividend for Europe.
- 37. See Kym Anderson (1990), "Changing comparative advantages in China", OECD Development Centre Studies.

#### **BIBLIOGRAPHY**

- BATEMAN, Deborah A. and Ashoka MODY (1991), "Growth in an inefficient economy: a Chinese case study", World Bank, Washington.
- BLEJER, Mario, David BURTON, Steven DUNAWAY and Gyorgy SZAPARY (1991), "China: Economic reform and macroeconomic management", Occasional Paper N° 76, IMF, Washington.
- THE BANK OF JAPAN (1989), "Recent developments in the Chinese economy Economic reform, its success and problems", Special Paper No 176, Tokyo.
- BRAGA, C.A. Primo and Alexander J. YEATS (1992), "The simple arithmetic of existing minilateral trading arrangements and its implications for a post-Uruquay Round world", World Bank, Washington.
- BYRD, William and Alan GELB (1990), "Township, village, and private industry in China's economic reform", World Bank, Working Papers  $n^c$  WPS 406, Washington.
- CHENG, Hang-Sheng (1992), "China's foreign trade reform, 1979-91", Federal Reserve Bank of San Francisco, Economic Research Department, Working Paper N° PB92-01, San Francisco.
- CLAD, James (1989), Behind the myth Business, money and power in Southeast Asia, Grafton Books ed., London.
- COASE, Ronald (1960), "The problem of social cost", The Journal of Law and Economics.
- GEE, San (1992) "Taiwanese corporations in globalisation and regionalisation", Development Centre, Technical Papers N°61, OECD, Paris.
- HARDING, Harry (1987), China's second revolution Reform after Mao, The Brookings Institution Ed., Washington.
- HEADY, Christopher J. and Pradeep K. MITRA (1992), "Taxation in decentralizing socialist economies The case of China", World Bank, Working Papers  $N^{\circ}$  WPS 820, Washington.
- HONGKONG BANK (1992), "Hong Kong's re-export trade", Economic Report, Hong Kong.
- KRAUS, Willy (1991), Private business in China, Hurst & Company Ed., London.
- KURZ, M. (1977), "Altruistic equilibrium" in B. Balassa, R. Nelsson (Eds.), "Economic progress, private values and public policy", Amsterdam.

- MARTIN, Will (1991), "China's foreign exchange system", World Bank, paper for presentation to the Conference on China's reform and economic growth, Australian National University, Canberra, 11 November 1991.
- OHASHI, Hideo (1991) "Economic relations between China and Hong Kong", Jetro, China Newsletter N° 95, November-December.
- PARK, Yung Chul (1989), "The Little Dragons and structural change in Pacific Asia", The World Economy, London.
- PEOPLE'S REPUBLIC OF CHINA (1991), China Statistical Yearbook 1991, State Statistical Bureau, Beijing.
- RADNER, R. (1980), "Collusive behaviour in non-cooperative epsilon-equilibria in oligopolies with long but finite lives", Journal of Economic Theory.
- RAJARAM, Anand (1992), "Reforming prices The experience of China, Hungary and Poland", World Bank, Discussion Papers N° 144, Washington.
- REDDING, Gordon S. (1990), The spirit of Chinese capitalism, De Gruyter Ed., Berlin, New York.
- REPUBLIC OF CHINA (1990), Taiwan Statistical Data Book, Taipei.
- SCHMIDT-HEBBEL, Klaus and Aihua XU (1991), "Price reform and inflation in China", World Bank, Washington.
- SUNG, Yun-Wing (1991), "The re-integration of Southeast China", Chinese University of Hong Kong, paper prepared for the Conference on China's reforms and economic growth, Australian National University in Canberra, 11-14 November 1991.
- WORLD BANK (1990), China: between plan and market, Report N° 8440-CHA, Washington.
- WORLD BANK (1991 and 1992), World Development Report, Washington.
- YEATS, Alexander J. (1991), "China's foreign trade and comparative advantage Prospects, problems and policy implications", World Bank, Discussion Papers  $N^{\circ}$  141, Washington.

Table 1. Structural indicators (for 1990 unless otherwise indicated)

	Hong Kong	Taiwan	PRC
GDP (\$ billion)	67	163	420
Population (million)	5.8	20.4	1 133.7
GDP per capita (\$)	11 490	7 997	370
Investment/GDP (%)	28	22	39
Saving/GDP (%)	33	30	43
GDP growth (1980-90) (%)	7.1	8.0 (1)	9.5
GDP per capita growth (1980-90) (%)	5.7	6.7 (1)	8.1
Population growth (1980-90) (%)	1.4	1.4 (1)	1.4
Exp/GDP (%)	137	47	18
Agricultural output/ GDP (%)	0.0	4	27
Annual inflation rate (1980-90) (%)	7.2	9.5 (1)	5.8
Life expectancy (years)	78	74 (2)	70

<sup>1. 1980-89.</sup> 

Source: World Bank (1992); Republic of China (1990).

<sup>2. 1987.</sup> 

Table 2. Ownership structure of Chinese industry, selected years (percentage of total industrial output value)

Category	1971	1978	1983	1987
State	85.9	77.6	72.6	59.7
Urban collective	10.9	13.7	14.4	14.6
Urban individual (1)	<del>-</del>		0.1	0.6
Urban other	<del>-</del>	-	0.8	2.0
Rural nonstate (TVP)	3.2	.8.7	12.1	23.1
Township	1.6	4.8	6.3	9.3
Village				8.4
Below village Individual firms	1.6	3.9	5.8	5.4 3.3

Includes partnerships.

Source: Byrd and Gelb (1990).

Table 3. China in comparative perspective

	Inflation (1980-89)	GDP per capita (1989)	Annual growth of GDP per capita (1980-89) in local	Population growth (1980-89)	Exports/GDP (1989)	Illiteracy in 1977
	o/o	in dollars	currency %	%	<i>o1</i> 0	% of population
China	5.8	350	8.2	1.4	14	34
Korea	5.0	4 400	8.4	1.2	34	<u>L</u>
Thailand	3.2	1 220	5.0	1.9	36	16
Mauritius	8.5	1 990	6.4	1.0	67	13
India	7.7	340	3.1	2.1	88	64
Pakistan	6.7	370	3.1	3.2	14	97
Indonesia	8.3	200	3.1	2.1	26	38
Malaysia	1.5	2 160	2.2	2.6	74	40
Sri Lanka	10.9	430	2.5	1.5	27	15

Source: World Bank (1991).

Table 4. 1987 revealed comparative advantage indices of selected east Asian economies

SITC Groups	China	Hong Kong	Taiwan	Thailand	Malaysia
Foods	1.27	0.13	0.59	4.62	1.05
Beverages & Tobacco	0.48	0.08	0.03	0.08	0.17
Crude Materials	0.11	0.09	0.31	0.42	4.61
Refined Fuels	0.72	0.01	0.10	0.25	0.89
Animal & Vegetable Oils	0.69	0.07	0.03	0.43	21.76
Chemicals	0.62	0.09	0.24	0.24	0.26
Manufactures by Material	1.46	0.49	1.04	0.93	0.67
Machinery & Transport	0.23	0.58	0.80	0.51	1.04
Miscellaneous Manufactures	2.82	4.11	2.54	1.99	0.78

Source: Yeats (1991).

Table 5. Correlation of China's revealed comparative advantage with that of selected Asian economies 1986/87

i.	Country	Spearman Correlation Coefficient
	Hong Kong	0.538
•	India	0.492
	Taiwan	0.481
	Thailand	0.377
	Korea, Republic of	0.363
	Philippines	0.288
	Indonesia	0.201
	Singapore	0.086
	Malaysia	0.074
	Brazil	0.011
	Japan	-0.174

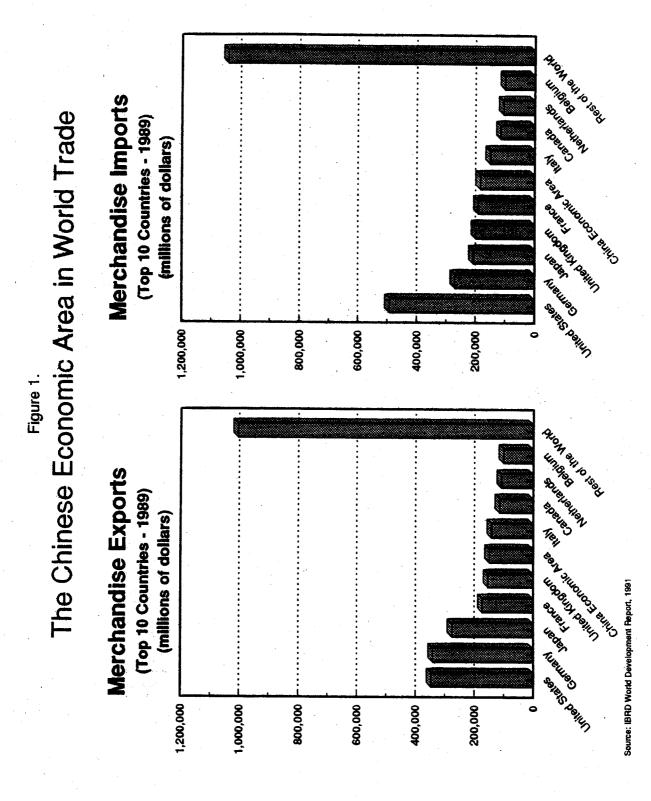
Source: Yeats (1991).

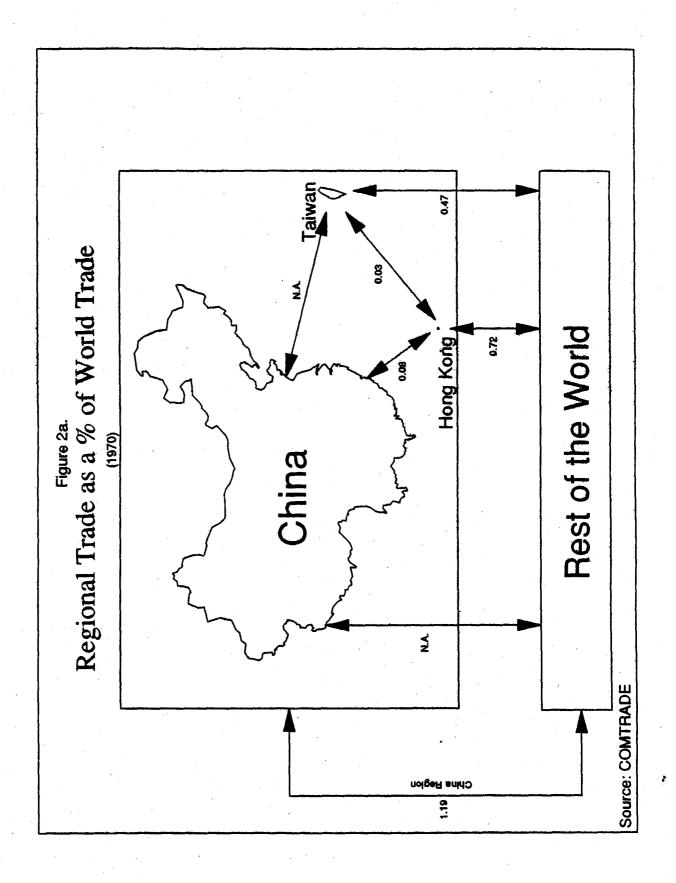
Table 6. The share of China's ten most important exports in world exports (1) in 1989 (percentage)

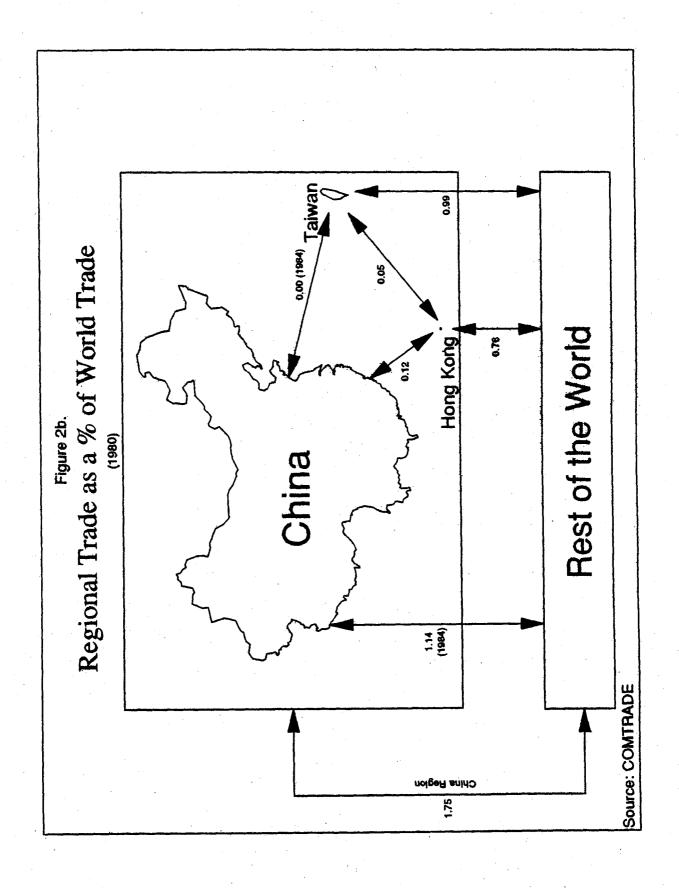
Explosives, pyrotechnic products	33.5	
Travel goods, handbags	28.4	
Clothing and accessories	15.2	
Textile, yarn, fabrics, etc.	11.2	
Footwear	10.4	
Wastes of textile fibres	9.4	
Crude animal and vegetable materials	8.6	
Miscellaneous manufacturing goods (incl. toys)	8.0	
Telecommunications and sound equipment	5.9	
Crude fertiliser	5.4	

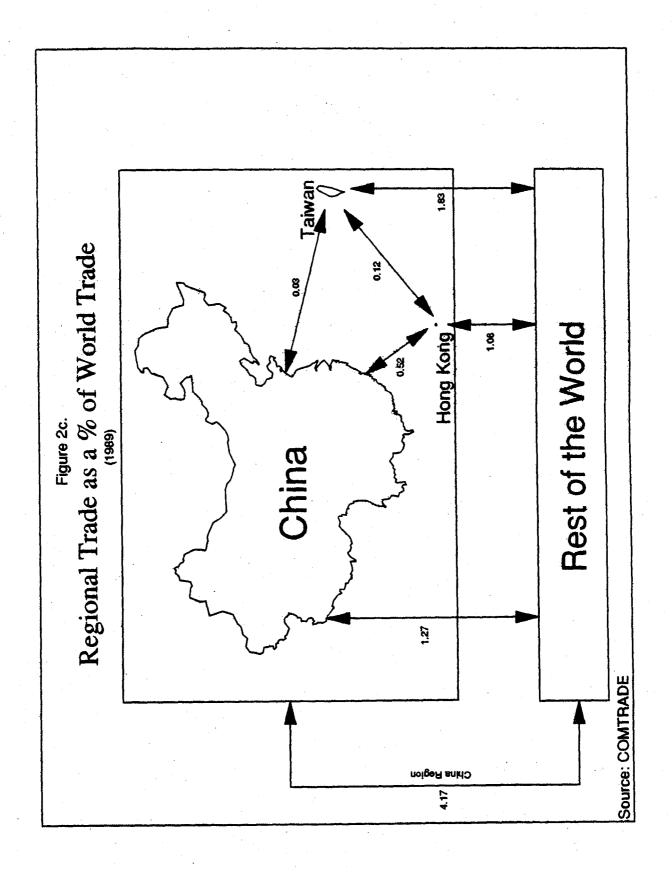
<sup>1.</sup> At 2-digit SITC level.

Source: Bateman, Mody (1991).

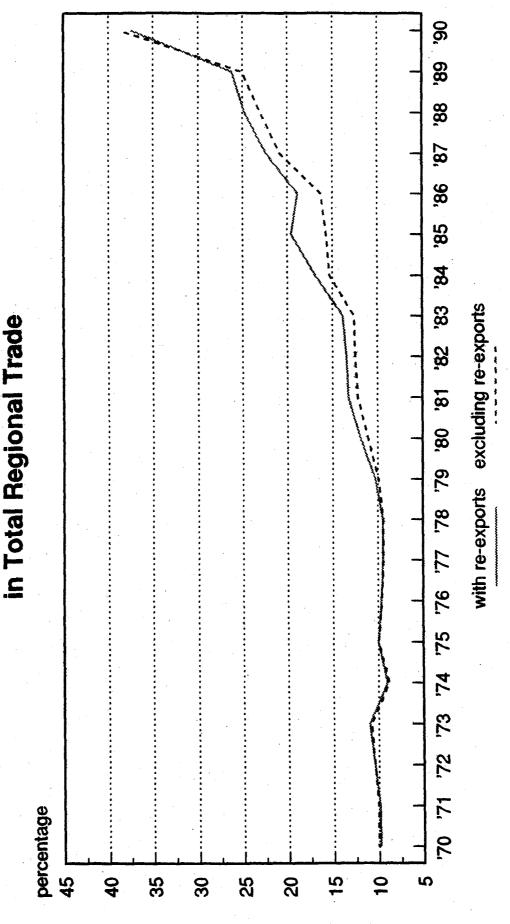






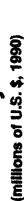


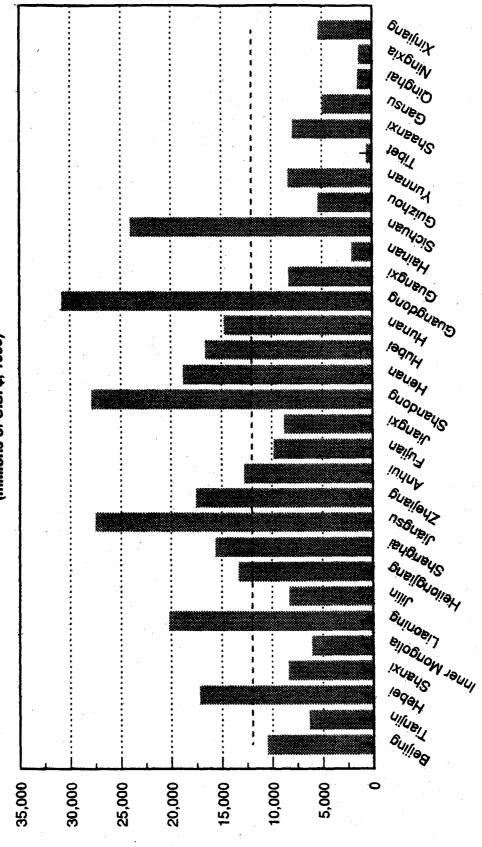
Share of Intra-Regional Trade



Source: COMTRADE

China: GNP by Province (millions of U.S. \$, 1990)

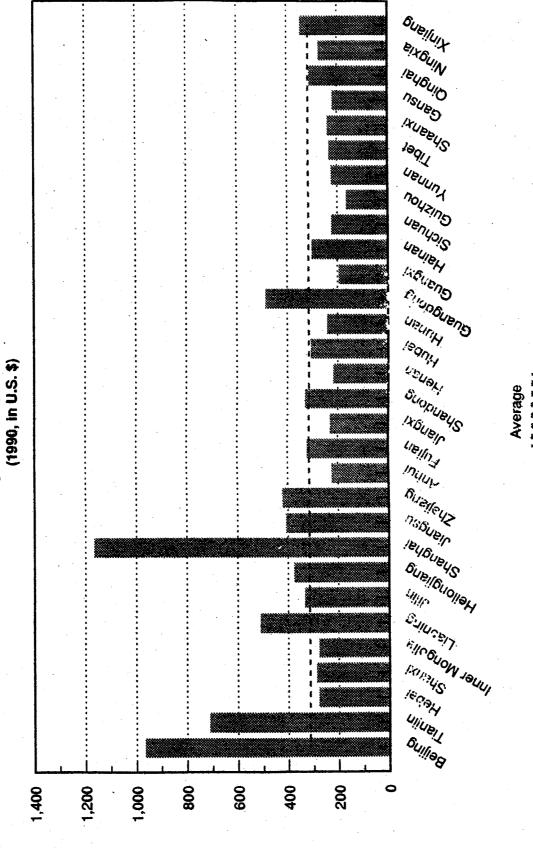




Average

Figure 4b:

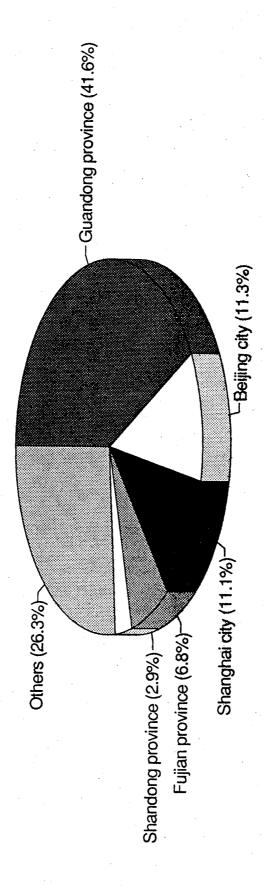
China: GNP per capita, by Province



Source: Statistical Yearbook of China, 1991

Figure 5. Inflows of foreign investment by province (1)

(1985-89)



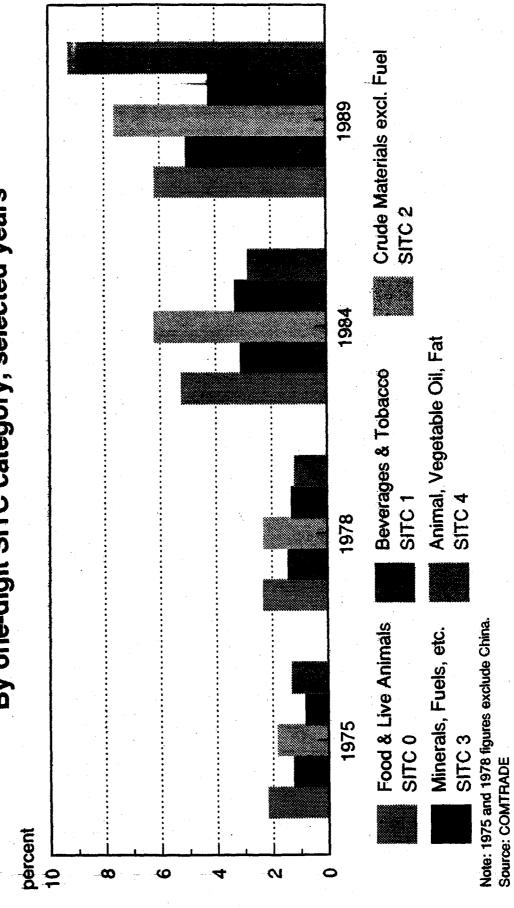
(1) Special Economic Zones and open coastal cities account for 21.8 per cent of the total

Source: Bateman and Moody (1991)

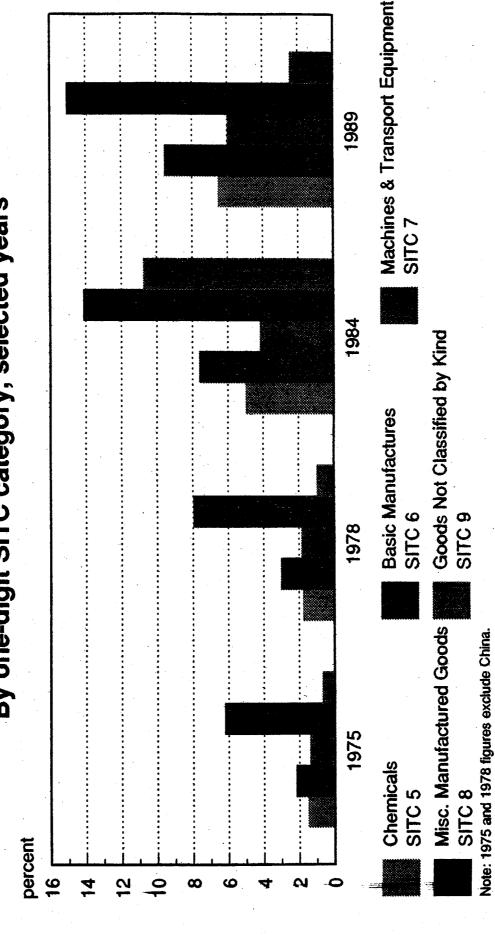
Thalland **₽**€ **₹**○ Thalland China Economic Zone **∞** Figure 6. GNP per Capita (current U.S. dollars) **₽** 9/ Thalland o India Per 

Source: IBRD World Development Report, 1991

**Economic Zone Trade as Percent of OECD Trade** By one-digit SITC category, selected years Figure 7a.



**Economic Zone Trade as Percent of OECD Trade** By one-digit SITC category, selected years Figure 7b.



Source: COMTRADE

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