TOPIC 29
COUNTRY STUDIES

TAIWAN'S PROSPECTS AS AN ASIA-PACIFIC REGIONAL OPERATIONS CENTRE

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Abstract

The success of Singapore and Hong Kong as multi-functional regional operating centres has prompted Taiwan's attempt to develop as an Asia-Pacific transport and telecommunications hub. The likelihood of its success will depend on removing restrictions on official contact, direct trade and direct travel with mainland China.

INTRODUCTION

The Asia-Pacific region stretches from the Russian Far East to Australia. Four major sub-regional areas can be recognised: Northeast Asia, Central Asia, Southeast Asia and Australia. Each has metropolitan areas vying to be *regional operations centres* for major transnational companies. In Northeast Asia Tokyo, Osaka and Seoul have already been developed as key centres ahead of Beijing. In Central Asia Hong Kong's dominant position is now under scrutiny in a sub-region encompassing Manila, Shanghai and Taiwan. In Southeast Asia Singapore is seeking to make its position unassailable against Bangkok—its most likely challenger. In Australasia Sydney is favoured ahead of other Australian state capitals (Langdale 1992). Attention here is focused on Central Asia where the reversion of Hong Kong to the Peoples Republic of China in 1997 has prompted Taiwan's Ministry of Foreign Affair to canvass the prospects of establishing a regional operations centre there in competition with the former Colony, Manila and Shanghai. If successful, Taiwan would be the regional base for major transnational companies exercising control over subsidiaries in the Asia-Pacific region. Specialised business firms—management consultants, accounting and legal services—would be developed to cater for transnational clients throughout the region.

The development of Taiwan into an Asia-Pacific regional operations centre and the acceleration of industrial upgrading are the twin props of the Government's Economic Revitalization Program designed to promote private investment and a long-term perspective for economic development (CEPD 1993). Although Taiwan's annual growth rate in Gross National Product (GNP) of 6.7 per cent outstripped the world rate of 2.8 per cent between 1988 and 1992, there was increased stagnation in the growth of investment. The ratio of capital formation to GNP had declined from the 25-30 per cent range in the early 1980s to 22 per cent between 1988 and 1992—a level less than Japan, Singapore and South Korea. The growth in private investment was less than 8.5 per cent. It was even lower in manufacturing which hitherto had been the driving force behind domestic economic expansion. Manufacturing's share of Gross Domestic Product had declined from 39 per cent in 1988 to 32.9 per cent in 1992. Spurred by the appreciation of the New Taiwan dollar in the late 1980s, large numbers of manufacturers have moved their low-skill, labour-intensive processing and assembly operations to Indonesia, the Philippines (eg Subic Bay) and Vietnam. Mainland China, however, has been the most favoured destination, attracting an estimated ten to fifteen thousand small and medium-size businesses from Taiwan's industries (eg shoes, toys, umbrellas, bicycles, electronics and computer components). As offshore production locations offer low wage costs (US$70-86 per month), provide lower land rates, help diversify risks and overcome trade barriers, there has been a substantial outflow of capital from Taiwan (estimated at US$10 billion).

A decline in private investment has been attributed to both economic and non-economic factors. Economic factors have included such hindrances to private investment as inadequate infrastructure, the high cost of industrial land, rising labour costs, and manual labour shortages and difficulties. Non-economic factors embrace uncertainties in the business sector stemming from debates over unification and independence, the inadequacy of existing laws and regulations, and administrative inefficiencies. In a bid to overcome these difficulties the government has devised a strategy based on both public and private investment. Encouragement of private investment is being carried out through the Economic Revitalization Plan and public investment through the current US$303 billion Six-Year National Development Plan (1992-97)—one-third for transport and communications.

The Economic Revitalization Plan's rationale has focused on the need to capitalise on drastic changes in both external and internal environments. Taiwan's external environment reflects: (a) the growing strength of the Asia-Pacific economy; (b) the freer flow of resources across national boundaries exemplified by the Asia-Pacific's 'open regionalism'; (c) the pressure from the General Agreement on Trade in Services (GATS) debates for a wider opening of Taiwan's economy; and (d) the likelihood of greater economic dependence on mainland China. The internal factors mirror the pressing shortage of land and dwindling natural resources which have

diminished Taiwan's comparative advantages to two factors—high-quality manpower and abundant capital. These concerns have prompted the Government to develop policies to offset the loss of capital and goods from Taiwan's growing direct foreign investment by recapturing some of the high-value spin-offs. The policies are designed: (a) to enable domestic industries to upgrade to high-technology and high value-added production by developing R&D capabilities and strategic alliances with larger foreign corporations; and (b) to capitalise on the advantages and resources of the Asia-Pacific region and mainland China in particular.

The long-term goal of building Taiwan into a highly liberalised and open economy is to be achieved by channelling massive investment into a regional operations centre—a strategy capitalising on its financial potential, high-quality manpower and strategic geographical location, and tapping the resources of the Asia-Pacific economy, especially China. Great play is to be made of Taiwan as an attractive environment for international investment by transnational companies as they are the prime source of technology, capital, and managerial and marketing know-how (Siew 1993). Appealing in particular to corporations headquartered in Japan and North America, Taiwan's incentives include: (a) its key geographical position in the Asia-Pacific region; (b) its outstandingly low business environmental risk ratings and high overall economic performance assessed by internationally prominent economic research institutions; (c) its economic strength and trading experience in an economy several times larger than Singapore and Hong Kong; and (d) its large pool of professional expertise stemming from higher levels of technological education than the other three Newly Industrialising Economies (NIEs). Even further 'liberalisation, internationalisation and institutionalisation' are being promised to improve the environment for foreign investment (Lee 1994). Outmoded laws and regulations, for example, were to be revised and government enterprises reformed by subjecting them to competition from the private sector (CEPD 1993).

By incorporating a R&D and manufacturing centre, off-shore banking unit or financial centre, and *transportation and communications hub*, it is hoped that the regional operations centres will introduce Taiwan to fresh economic horizons (see Lee 1994 for a discussion of Taiwan's potential as a regional financial centre). The 'liberalisation, internationalisation and institutionalisation' of the financial sector has already led to sixteen new private banks being established; now, the pivotal importance of transport and communications has been recognised. However, no real assessment of the strengths and weaknesses of their infrastructure has been attempted. Consequently, Taiwan's transport and communications infrastructure is evaluated here because it is critical to the regional operations centre's ultimate success in countering the adverse effects of switching from an export-oriented economy to a foreign-investment oriented strategy.

As Taiwan has a modal approach to transport and communications development its attempts to develop as an international telecommunications hub, air hub and hub port have to be considered separately. Then the capability of domestic transport and communications plans to integrate them can be assessed. Initially, though the nature of Taiwan's concept of a regional operations centre needs to be elaborated.

REGIONAL OPERATIONS CENTRE

As large transnational corporations have developed their overseas operations they have created a widespread production network and decentralised their strategic business units to better control their local activities. An integral part of this strategy has been the development of regional headquarters. In locating them, certain metropolitan areas have been favoured over others. At least one headquarters has been chosen in each of the European, North American and Asian cores of the world economy. Acer Corporation, for example, chose Dusseldorf in Germany, San Jose in the United States, and Singapore in Asia in preference to Hong Kong and Taiwan (Ricklefs 1993). Presumably the preference for Singapore stems from uncertainties about Hong Kong's future as a regional services city after 1997, and the quality of Taiwan's transport and communications infrastructure together with the lack of direct access to mainland China—the largest potential resource supplier and market.

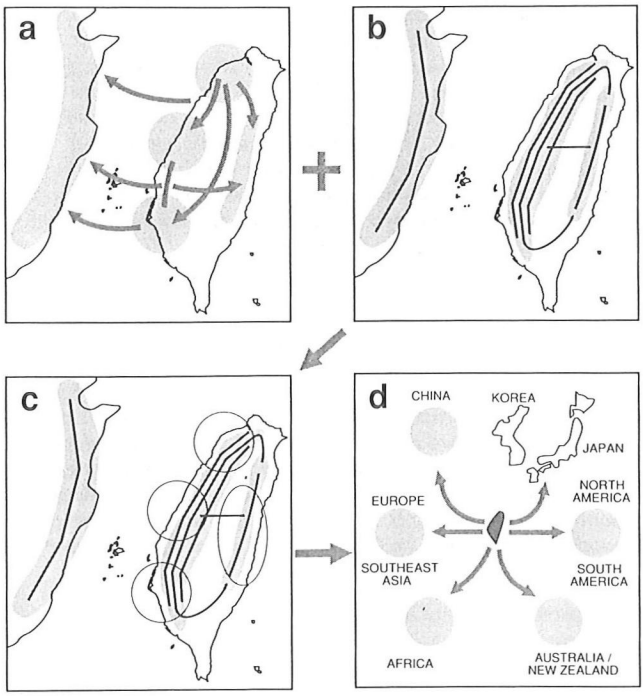
Singapore has deliberately planned to capitalise on its pivotal location in Southeast Asia and develop as an Asia-Pacific network centre for major transnational corporations. Apart from the incentives under the Operational Headquarters (OHQ) scheme, transport and telecommunications are seen as the main ingredients of the Singapore Government's strategy. They are the basic building blocks for creating Singapore's multimodal transport system, logistics and distribution centres (including warehousing), and satellite systems. A well developed telecommunications and information technology infrastructure, and frequency of scheduled air and shipping services, have given Singapore power beyond that based on serving its local market. Recognising that warehousing and transport have become high-growth industries, Singapore has streamlined its Customs service and expanded as a key international procurement and supply centre. Major transnational corporations located in Singapore, therefore, have been able to make better use of its physical distribution and information facilities to reduce distribution costs and enhance just-in-time delivery. Further, the Singapore Government has encouraged express freight transport companies, such as DHL, to establish warehouses there and use it as a hub for smaller ports. Singapore's policy recognises that some manufacturing companies are 'outsourcing' transport, distribution and warehousing to express freight companies so that they can concentrate on their core manufacturing activities.

Hong Kong, in contrast to Singapore, has relied on unrestricted competition in international transport and communications to attract major transnational companies. The unpredictability of mainland domestic politics, however, may undermine the territory's role as a conduit for overseas funds to the mainland. Some firms have moved selected functions to other locations (Langdale 1992). (Reuters now use Tokyo and Singapore as their regional telecommunications headquarters.) Consequently, Taiwan is challenging Hong Kong's dominant role in Central Asia, and is also in a position to offer mainland China an alternative model of regional management to Singapore. Taiwan's regional operations centre differs from that of Singapore (and Hong Kong) because the ultimate intention is not to focus on a single city but to transform the entire island (and possibly adjacent areas in mainland China) into a single hub.

As shown in Figure 1 the regional operations centre concept pinpoints key regions in Taiwan—North (centred on Taipei), Central (Taichung), South (Kaohsiung) and East (Hualien). Then the key transport axes are identified; these link together the west coast regions into a continuous Western Corridor which has a trans-island connection to the east coast. When the regions and axes are combined, Taiwan has four regions and four transport (and communications) axes. Collectively they provide the basis for Taiwan becoming a hub serving world regions and key countries—notably Japan and South Korea. The arrows showing Taiwan's connections with the rest of the world, however, should be reversed because the regional operations centre implies a change in emphasis from a preoccupation with access to world markets towards the enhancement of access to Taiwan.

An important departure in the schematic diagram is the recognition of another region and transport (and communications) axis in mainland China. This fifth region and fifth axis could become an additional part of the regional operations centre if more realistic cross-straits economic and trade relations are established. A shortcoming of the schematic diagram, however, is the preoccupation with transport axes and the neglect of hubs. Yet growing tangible international networks—telecommunications, air and sea—invest a higher share of their investment on nodes rather than links. Attention here, therefore, is focused first on international transport and communications hubs and then on the domestic connections necessary to make the regional operations centre a viable proposition.

Initially, interest is centred on the telecommunications hub because it is unlikely to be a major barrier to the realisation of the regional operations centre. Once telecommunications have been outlined, therefore, attention can be focused on the less tractable transport hubs and connections which have the capacity to centralise passenger and goods movements, and generate value-added spin-offs to Taiwan from additional passengers and re-exports.



Source: based on Feng (1994) and Wu (1994)

Figure 1 **Plans for restructuring Taiwan's spatial structure; (a) regions; (b) transport axes; (c) five regions and five transport axes; (d) regional operating centre (transport hub)**

TELECOMMUNICATIONS HUB

Taiwan's plans to become a regional operations centre have resulted in massive investments in telecommunications so that it can become a major hub within the Asia-Pacific region (ie it can alternate routing to and from end destinations through its links with other hubs). Only key developments are highlighted here because Taiwan already has one of Asia's most modern telecommunications systems. Although a penetration rate of over 37 lines per 100 people in 1993 is high by Asian standards it is lower than advanced capitalist countries. Nevertheless, the Six-Year National Development Plan (1992-1997) incorporates an Integrated Services Digital Network (ISDN). Further, the Directorate of Telecommunications—the state-owned monopoly—has already completed three of its proposed nine projects under the Telecommunication Network Modernization Plan (1991-1996). These projects included the construction of an Intelligent Network which was concluded in 1994 (ie for advanced collect calls and telephone cards services). When the Plan is realised the telecommunications network will be fully 'digitised, fibreised and intelligent'. This investment is tacit recognition that Taiwan's future prosperity as a regional operations centre for banking and finance, and information equipment suppliers from the United States and Japan depends on the availability of reasonably priced, modern international telecommunications facilities; the integration of computer and communications; and smooth international information interchange.

Taiwan is linked with telecommunications organisations around the world engaged in laying optical fibre submarine cables (DGT 1993). Following the completion of the Asia-Pacific International Optical Fibre Cable (APIOC), Taiwan is in a position to become a hub for all submarine cables in the Asia-Pacific region. As the Cable links Japan, Singapore, Hong Kong and Malaysia, its installation reinforces Taiwan's goal of becoming a regional operations centre. The Cable also provides the direct circuits for communication between the coast of Taiwan and mainland China which have increased markedly since the renewal of economic relations (an annual growth rate of 83 per cent in 1993 alone). At present the interchanges pass through intermediate means (ie Taiwan to mainland China via Hong Kong, Japan and the United States). Two-thirds of Taiwan's international communications pass through optical fibre cables and one-third by satellite transmitted through the Yangminshan Communications Centre in the north and Fangshan Communications Centre in the south.

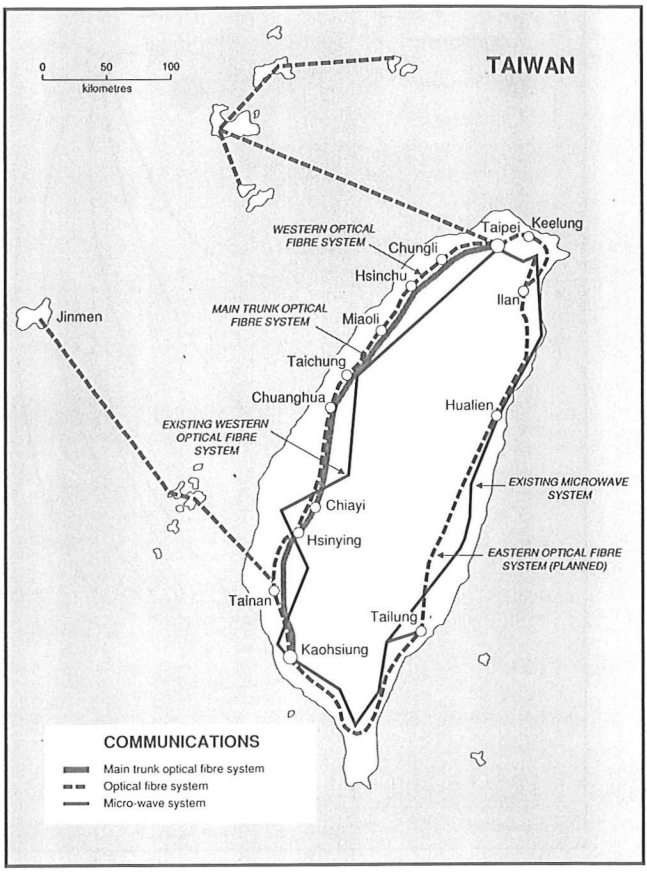
A domestic north-south optical network on the west coast had already been completed along the Sun Yat-sen Highway in 1989 to provide long-distance telecommunications between Taipei, Taichung and Kaohsiung—the three regional administrative centres. In 1990 the initial link was connected to a round-the-island transmission network (Figure 2). A second north-south optical fibre transmission network was completed along the Chungshan Freeway between Taipei and Kaohsiung in 1992 and is used for video conferencing, video telephone and cable TV. Long-distance transmission facilities are being expanded from trials in four cities (Taipei, Kaohsiung, Hsinchu and Taichung) as part of efforts to develop Taiwan's Integrated Services Digital Network by the year 2000 to provide companies with voice and data services (eg banks for interbranch communications). Since 1989 approved private companies have been allowed to operate Value Added Networks (eg electronic mail and remote transactions)—75 per cent of users being in the financial sector.

As part of the promised 'liberalisation, privatisation and internationalisation' process associated with the Government's Economic Revitalization Program, the Directorate General of Telecommunications with more than 36,000 staff and assets of over US$14 billion is moving towards corporatisation. This process will involve the listing of shares on the local stock exchange and a reduction of the government's holding by selling off shares in a number of tranches—a step towards eventual privatisation. The intention is to subdivide the Directorate into two separate units to overcome its ambiguous position. At present the Directorate is both the player providing the services and the umpire regulating, certifying and controlling the services of its competitors. Under the new arrangement the Directorate will retain responsibility for regulation; a new state-owned telecommunications company, the Chinese Telecommunications Corporation, will be engaged in business operations. The latter will find itself in competition with other service providers if the Government heeds suggestions to privatise the telecommunications sector (Chen 1994). Otherwise no competition will occur in basic services. The lack of equal regulatory treatment within the market, and barriers to the movement of people and goods, not only undermines trade in services but could immobilise the regional operations centre concept. Provided there is no backtracking on Taiwan's policy to 'liberalise, internationalise and institutionalise' telecommunications, attention can be concentrated on the transport hubs (Rimmer 1994).

AIR HUB

Another major thrust of Government's regional operations centre policy is to create an air hub at Chiang Kai-shek (CKS) International Airport (IOTC 1992a). At present CKS International Airport has no domestic services because of lack of space, and the only other international airport is in Kaohsiung (Figure 3)—the subject of a separate study (IOTC 1992b). This prevents business people making one-day return trips to nearby international destinations for face-to-face contact. There is no direct service between Taiwan and mainland China. Since 1988 visits by residents of Taiwan to the Mainland have involved transfers at Hong Kong or Tokyo. If CKS International Airport became a hub location, passengers and shippers would benefit from a wider choice of destinations, greater frequency of flights, lower charges (provided there is adequate competition)

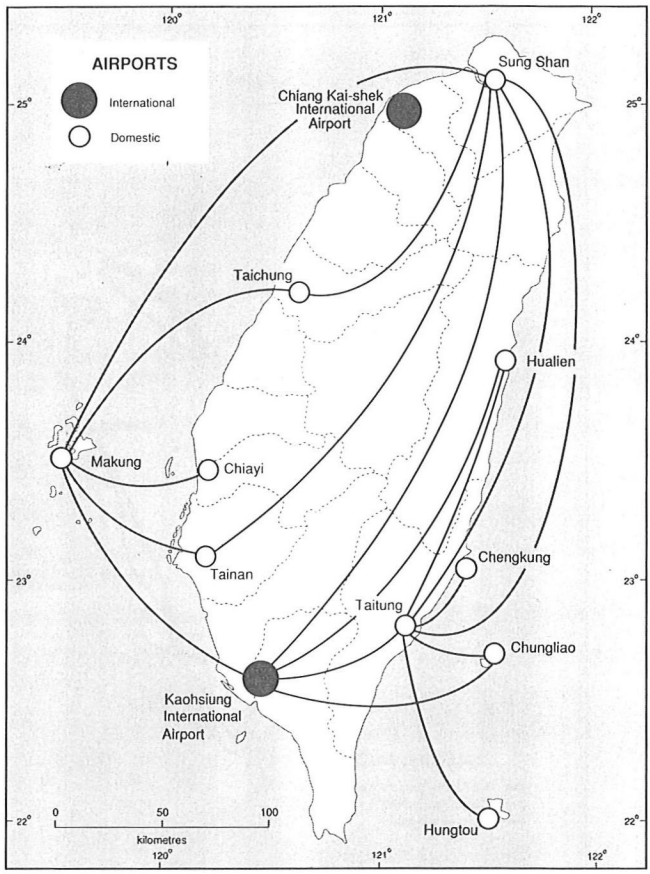
and fewer delays due to on-line transfers. However, there would be greater congestion at peak hours.



Source: based on MOTC (1991)

Figure 2 Taiwan's communications systems

Development of a hub at CKS International Airport will depend on the provision of: (a) physical facilities and an operating environment which can handle the arrival and departure of aircraft over a relatively short period; (b) high levels of policy coordination to facilitate hub airline operations (eg bilateral rights, flexible fares and designated terminals). Apart from the two Taiwan-based international carriers—China Airlines and EVA Air—the hub would have to attract at least one large American passenger carrier, one large European passenger carrier and a specialised cargo carrier to give it a multiline status (Federal Express could fulfil the air freight role but the Airport's monopolistic control over loading and unloading make it incompatible with the firm's high technology, 'time definite' operations.) Without multiline status CKS International Airport would be disadvantaged in competition with the new Hong Kong airport at Chep Lap Kok.



Source: based on MOTC (1991)

Figure 3 Taiwan's international and domestic airports

Two feasibility studies canvassed a large number of issues including access to first freedom rights for aircraft serving Taiwan, thereby allowing them to operate direct flights to New York and Chicago over the Soviet Union. The studies produced markedly different results emphasising that the forecasting of air traffic is still an 'inexact and debatable' art (IOTC 1992d: 3). The Chinese-American Technology Corporation based its predictions on the passenger kilometres travelled for each country in the study area. Its 'best outcome' for the year 2010 was 61 million passengers (the 'worst outcome' was 25 million passengers) (IOTC 1992a). Conversely, the second forecast—undertaken as part of updating CKS International Airport's Master Plan—used Taiwan-wide forecasts for visitor arrivals and resident departures to major markets based on gross domestic product and population trends (IOTC 1992c,d). It suggested that the estimate for 2010 of 61 million passengers was excessive, and that this be replaced by a revised figure of 38 million passengers (Table 1).

Table 1 Chiang Kai-Shek International Airport annual passenger movements, 1990-2020

Year	Baseline	Baseline + Mainland	Baseline + Domestic	Baseline + Domestic + Mainland
	thousand	thousand	thousand	thousand
1990	11,260	11,260	11,260	11,260
2000	18,900	25,700	23,400	30,900
2010	28,700	37,600	38,900	51,900
2020	36,200	54,200	65,500	90,100

Source: IOTC (1992c: 0-4)

By the year 2020 the revised estimate in the Master Plan Update anticipated that the CKS International Airport would handle 36 million passengers with the continuation of the *status quo*. If the hub added direct services to and from the mainland to its baseline forecast after 1995, 54 million passengers would be expected assuming: (a) existing air travel between Taiwanese residents and Hong Kong reflected the latent demand for mainland travel; (b) the mainland market was slow to mature. If domestic traffic (presently handled by Taipei's Sungshan Airport) was added to its baseline forecast, over 65 million passengers would be anticipated. If the hub's baseline figure is combined with both mainland and domestic traffic, over 90 million passengers are forecast. This scenario is considered to be the most realistic and should be the foundation for planning an expanded airport capable of handling 25,000 passengers during the peak hour. The proposed design incorporates a future third terminal offering a higher level of service to compete with other hubs in the Asia-Pacific region.

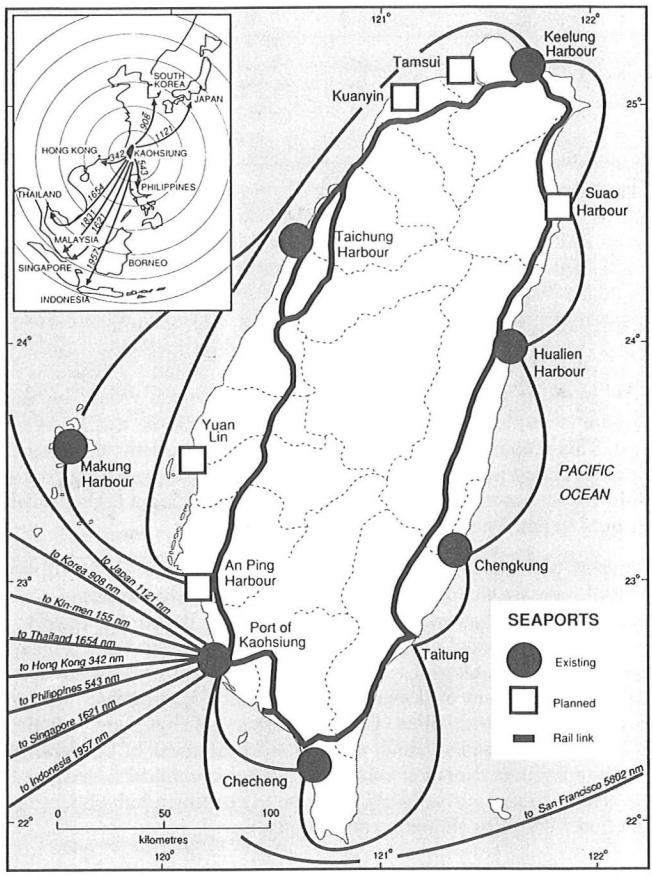
The hub airport will boost Taiwan's economic ties and counter its diplomatic isolation. Cargo 'hubbing' will increase the airport's attractiveness for manufacturing and warehousing. Also an Aeropolis or airport city has been planned (Feng 1994). Before the benefits of a hub airport can be realised, several institutional changes are required including: (a) a relaxation of visa controls to eliminate immigration bottlenecks; (b) an 'open-skies' policy between Taiwan and the rest of the world; (c) the deregulation of domestic airlines; and (d) automated customs procedures and the elimination of cargo monopolies. Other necessary changes are: (a) the elimination of cross subsidies in financial arrangements; and (b) an assessment of corporatisation and privatisation options. Although international air services, like telecomrnunications, are pivotal to the regional operations centre, first priority should be given to creating a hub port because Taiwan's economy cannot function without its shipping connections.

HUB PORT

Reflecting the plans for a regional operating centre the southem port of Kaohsiung was designated an 'offshore shipping centre' in January 1995 (Figure 4). Subject to Beijing's agreement ships registered abroad would then be able to ply between Taiwan and mainland China without contravening the ban on direct trade links. Thus, Kaohsiung would be able to capitalise on its potential as a re-export centre—the lack of such a facility being the key reason why it ranks behind Hong Kong (Table 2).

The nomination of Kaohsiung as Taiwan's hub port stems from recommendations derived from research commissioned by Taiwan's Institute of Transportation and Communications (IOTC 1992e). Researchers undertook a detailed examination of traffic on four major shipping routes: (a) direct Trans-Pacific mainline services; (b) Europe-Far East mainline services (also referred to as Trans-Suez); (c) intra-Asia deep-sea feeder services between Northeast, Central and Southeast Asia; and (d) intra-Central Asia short-sea feeder services connecting Hong Kong, Mainland China and the Philippines. This research confirmed the feasibility of a hub port in Central Asia centred on Taiwan. Not only does Taiwan have cost advantages over Hong Kong within Central Asia but it could attract direct services on the other three routes by offering shipping lines lower operating

costs. Its advantage would be even greater if the hub port had a distribution zone in which goods could be received and shipped without clearing customs or paying tariffs.



Source: based on MOTC (1991)

Figure 4 Taiwan's planned and existing seaports

Table 2 Analysis of container throughput in Hong Kong and Kaohsiung, 1990

Type	Hong Kong thous TEUs	Kaohsiung thous TEUs
Domestic	2,053	2,164
Transhipment	1,788	1,341
Re-export	1,059	0

Source: IOTC (1992d Vol. I. 1-10)

The choice of Kaohsiung was not a difficult exercise. By world standards Keelung had limited space for expansion; the prospect of a new international port at Tamsui to serve northern Taiwan was an unlikely proposition; and Taichung is still only a small container port. Assuming that fragmentation of cargo between competing ports is to be avoided, this left Kaohsiung as the best prospect. It is already the Asian hub port for the Trans-Pacific services of the American President Line drawing transhipments from the Pearl River Delta. Compared with Hong Kong, it had land available without the necessity for costly reclamation. Also it offered lower transhipment costs (ie terminal handling charges and port dues). Indeed, the main difference in the container tonnages handled by Hong Kong and Kaohsiung were the transhipments. Before Kaohsiung could assume the role of an 'offshore shipping centre', however, the proposed distribution park for re-exports would have to be completed.

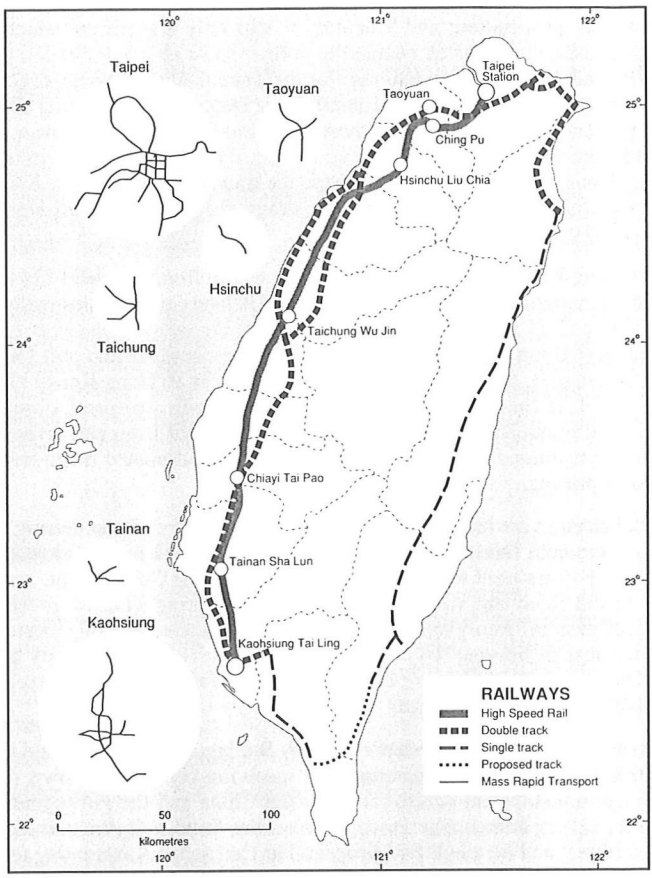
At present Hong Kong is the focus for re-export traffic from mainland China. After processing in the Colony, commodities are reloaded for onward delivery to other destinations including Taiwan. If processing occurs in Kaohsiung 'offshore shipping centre', the port could capitalise on its advantages over Hong Kong. Kaohsiung could also become the hub port for Fuzhou, Xiamen and Shanghai (Huangpu). By cutting out the 300 km journey to Hong Kong, 17 hours in sailing time could be saved. If the reunification of Hong Kong with mainland China in 1997 aggravates political sensitivities, Kaohsiung is in a position to benefit from any diversion of trade. If direct trade with the mainland is resumed a state-of-the-art, automated mega-terminal is warranted to handle transhipments.

Institutional changes are required. Continuation of the policy of maximising revenue from the port for local government finance would be counterproductive to establishing the regional operations centre. These powers need to be transferred to the Central Government, and an independent port authority should be created with the express task of ensuring all direct revenue is used to enhance the hub-port system. Reorganisation is necessary because existing customs regulations have resulted in a loss of between 10 and 20 per cent of stevedoring capacity during periods of high activity. Once these problems are dealt with, the privatisation of port facilities at the 'offshore shipping facility' could be resolved.

If the 'offshore shipping facility' is accepted by Beijing, Kaohsiung should have developed by the year 2000 as a major cargo-generating and receiving centre in its own right serving as: (a) a Central Asian transhipment centre for mainland China and the Philippines in competition with Hong Kong; (b) an interchange point between the Southeast Asian feeders and Trans-Pacific mainline services; and (c) a hub for European-Far East services (assuming they do not terminate in Singapore); and (d) a hub for Trans-Pacific services (IOTC 1992e). By 2020 Kaohsiung would be in an ideal position to develop the required high-quality entrepôt facilities for re-exports from the 'New Golden Triangle' emerging between Hong Kong, Taipei and Shanghai. Assuming the volume of Intra-Asian container movements will have exceeded the Trans-Pacific trade by then, Kaohsiung could be handling 25 million TEUs under the most optimistic conditions (ie 75 per cent of Taiwan's domestic TEUs and 40 per cent of transhipments in competition with Hong Kong). This increase will mean new infrastructural developments.

INTERMODAL CONNECTIONS

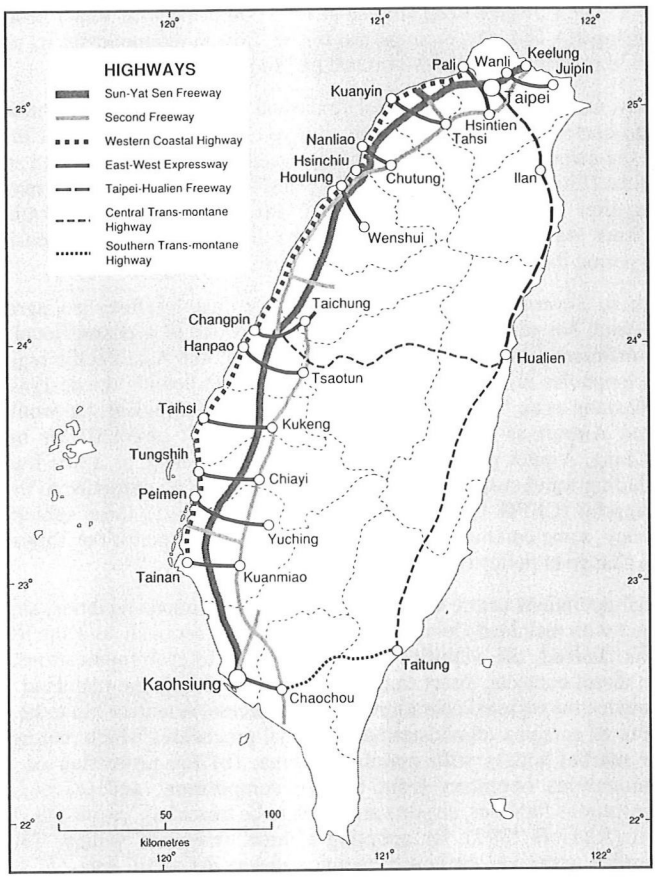
A hub port in Kaohsiung could be linked with the International Container Depot at Taoyuan on the outskirts of Taipei by transforming the Western Corridor's existing rail system into a dedicated intermodal container facility (Figure 5). Such a proposition hinges on transferring rail passengers to the proposed West Taiwan High-Speed Rail which will travel between Taipei Main Station and Kaohsiung in 93 minutes (MOTC 1992). If the construction of this railway proceeds it could be incorporated into the proposed air hub. This would eliminate the need for a Southern International Airport at Kaohsiung and a parallel Mass Rapid Transit (MRT) System linking the air hub and the domestic airport in the city. The priority given to constructing six MRT systems in the metropolitan areas should be re-examined and the possibility of creating truckways considered in order to overcome delays created by congestion.



Source: based on MOTC (1991)

Figure 5 Taiwan's proposed railway projects in the Six-Year National Development Plan (inset shows mass rapid transit systems in metropolitan areas)

At present the most important facility for moving people and goods is the 373 km Sun Yat-sen Freeway between Keelung and Kaohsiung which has a 9 km spur to the Chiang Kai-shek International Airport (Figure 6). Delays stemming from severe congestion on the Freeway north of Hsinchu have prompted the construction of the Second Northern Freeway. A proposed Western Coastal Highway will be augmented by twelve east-west routes to create a network in the Western Corridor and relieve pressure on north-south routes. More efficient use of road space will be achieved through the application of transport systems management (TSM). Transport demand management (TDM) will be applied to rationalise travel patterns (Feng 1994).



Source: based on MOTC (1991)

Figure 6 Taiwan's highway projects on the Six-Year National Development Plan

CONCLUSIONS: A 'THREE REMOVALS' POLICY?

If these infrastructural projects are completed, Taiwan has the opportunity to assume ascendancy in Central Asia through its policy of creating a regional operations centre. It could become the pivot of a new 'Golden Triangle' bounded by Hong Kong, Shanghai and Taipei (Rimmer 1992, 1994). Although Hong Kong's demise is by no means certain there are a variety of factors which could undermine its dominant position. They include: (a) the growth of international airport and container port facilities in China's Guangdong Province; (b) the loss of international passengers and transhipments to Taiwan following the re-establishment of direct cross-strait links with the mainland; and (c) recurrent uncertainty about the situation after 1997 (Rimmer 1992). Shanghai is ill-equipped to replace Hong Kong given the limitations of its telecommunications, airport and port facilities.

Taiwan, however, is in a dilemma. Its political and economic objectives are diametrically opposed. It does not want a political relationship; as encapsulated in the three "no's" policy of no contact

with mainland China, no trade (in goods and services), and no travel. Paradoxically, its economy is increasingly tied to the mainland. (According to data from Hong Kong, the mainland accounted for 5.6 per cent of Taiwan's trade volume in 1993 compared with 30 per cent for the USA and 20 per cent for Japan.) This development has forced Taiwan to ameliorate its policy to no 'official' contact', no 'direct' trade (and services) and no 'direct' travel.

Subsequently, unofficial contacts, indirect trade and services, and indirect travel have occurred via intermediate centres (eg Hong Kong, Singapore and Japan). Between 1987 and 1993 indirect travel with the mainland alone has cost an estimated US$2.2 billion and 18 million extra hours of travelling time (Liu 1994). Attention is now being focused on alternative intermediate centres for Hong Kong after 1997: Tokyo for northern China, Okinawa for central China, and Manila for southern China. As the extra costs would make them prohibitively expensive, a new statute is required to permit the Taiwanese to deal through Hong Kong after 1997.

The Taiwanese Government has appreciated the dilemma. It refuses any agreement with Beijing, however, which has to be signed within the framework of a central-local relationship. Yet it recognises mainland China as a key economic player in the Asia-Pacific region. Consequently, it has sought loopholes in its own policy (Ching 1995). Following the designation of the southern port of Kaohsiung as an 'offshore shipping centre', the next logical step would be to specify CKS International Airport as an 'offshore' facility to permit direct flights between Taiwan and mainland China. A pilot regional operations centre is planned as a free trade zone on the west coast—including warehousing and shipping—which would be expanded to the whole of Taiwan if it was successful (CEPD 1993: 14-15). Rather than resort to these subterfuges to circumvent national policy, some commentators believe the time has come for the Taiwanese Government to announce a change in policy (Ching 1995).

Any regional operations centre which bans telecommunications facilities, airports and ports from direct contact with mainland China cannot be considered seriously as a site by major transnational corporations. Indeed, the viability of investment in telecommunications, airports and ports depends on direct contacts, direct trade and direct travel with the mainland. Infrastructure alone cannot guarantee the regional operations centre's success. Attention has to be paid to the 'shadow' infrastructure of complex administrative and legal procedures which require the removal of: (a) barriers to market access with mainland China; (b) the protection of local transport and telecommunications operators from foreign competition; and (c) controls which permit telecommunications facilities, airports and ports to be treated as 'cash cows' by different levels of government (Ricklefs 1993). By adopting a three 'removals' policy, Taiwan would be in a stronger position to become the new economic gateway in Central Asia.

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