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Small- and medium-sized enterprises in cross-border networks: Empirical evidence from the Pearl River Delta

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April 1997

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Abstract

The Pearl River Delta is one of the most successful cases of economic re-integration after a long period of separation. Hong Kong's traditional policy of non-interventionism and China's open-door policy have induced a rapid increase in cross-border trade, outward processing and outward investment.

The paper focuses on the different modes of integration as well as on the driving forces behind. It argues that small- and medium-sized enterprises have played the pivotal role in the Delta's economic development. Their cross-border operations have been mainly facilitated through two channels: through subcontracting networks among manufacturers and through links with trading houses which are frequently small in size.

The paper underlines three main keys to the Delta's economic success: a non-interventionist policy favourable for growth, a pronounced outward orientation in business which consequently exploits complementaries in comparative advantages and, last but not least, the so-called Chinese factor — the special attitudes adopted by local entrepreneurs, their adaptability and flexibility, their work ethics and their common cultural heritage.

In some respects, the Pearl River Delta can serve as a model for developing border regions in Central Europe along the former Iron Curtain. Despite their great potential, these regions are integrating only slowly. The paper suggests that border regions after a long period of political and economic division are predestined to become an economic power-house. (F2, O53, R12)

I Introduction: Economic Integration in Border Regions[1]

In recent years, the economics of border regions have repeatedly been covered in the literature [Altzinger and Maier 1996; Hanson 1995; Jones, King and Klein 1993]. There are mainly two reasons for the increasing attention given to this subject: first, a renaissance of the market system as a means of liberalizing and deregulating cross-border trade and factor movements in western market systems, and second, the collapse of the socialist system in Central and Eastern Europe has opened rather closed economies. Economic theory suggests that countries, when moving from autarky to free trade conditions, tend to speed up mutual integration without difficulty. If the regional conditions of production are different and if in this case a rich and a poor country share a common border, there is a large potential to be tapped by the international division of labour across very short distances. Thus, economic integration usually starts in border regions where information and transport costs are lower than in regions lying farther apart.

There are only a few places in the world where countries with considerable differences in development and income, caused by a long period of economic and political separation, share a common border. Three examples do stand out:

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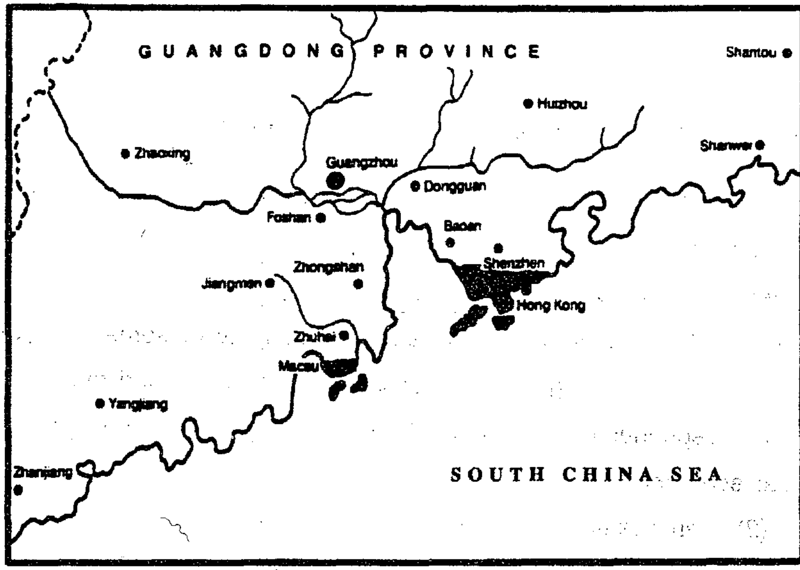
[1] Research for this paper was undertaken with support from the European Commission's Phare ACE Program 1995 „Integrating Small- and Medium-Sized Enterprises in Transformation Countries into the European Trade Flows and Co-operation Schemes", project-no. 94-0724-R. An earlier version of the paper was prepared for a workshop held at the Università degli Studi di Trento in Trento on March 7–8, 1997. Maciej Grabowski, Katja Gerling, Birgit Sander, Jana Sereghyová and Dean Spinanger have given very useful comments, and Wolfgang Winkler has improved the language.

- The first example is the Pearl River Delta, which is the area around Hong Kong, Macau and Guangdong in Southern China. This area has experienced an enormous economic growth since the Peoples' Republic of China started to open the country for foreign investment in 1978.
- The second example comprises the regions along the border between the United States and Mexico from the Rio Grande to the Pacific Ocean, the so-called Maquiladoras. There, we can also find a strong dynamic process based on the introduction of free economic activity zones in the 1960s on the Mexican side in connection with offshore processing legislation on the US side.
- The third example are the regions along the former Iron Curtain, from the Baltic Sea to the Adriatic Sea. Despite their great potential, these border regions are integrating slowly. Close co-operations between enterprises on both sides of the border are still rare. Commercial activities are basically concentrated on ambulant vendors and prostitution. It is not easy to explain this lack of interaction.

The current paper examines the ongoing integration process between Hong Kong and the Guangdong province. It outlines some of the features and specific issues of positive collaboration which has made the Pearl River Delta distinctive in economic terms. The region can be taken as a contemporary experiment of successful territorial re-integration. The aim of the paper is to analyze the process and to find out to which extent this experiment can serve as a model for the development of a prospering border economy in Central Europe.

Chart 1 – Pearl River Delta



Source: GATT [1994].

The paper

- first illustrates the specific conditions relevant to Hong Kong–Chinese relations,
- second examines the forms of cross-border operations,
- third highlights the driving forces behind integration,
- fourth explains the role of SMEs in co-operation, and finally
- draws lessons for developing border regions.

The paper is based on official statistics published by the Hong Kong government as well as on the vast amount of literature available on the topics concerned. Some personal interviews with academics in Hong Kong provided further information for reviewing economic development in the Delta.

II Specific Conditions of Hong Kong–Chinese Relations

Although capitalist Hong Kong and communist China maintained various degrees of economic relations after 1949, the major breakthrough only came after 1978 following the implementation of economic reforms in China. In 1979, China greatly increased the autonomy of some of its southern provinces allowing them to carry out foreign trade and foreign investment independently. Four types of privileged areas were legalized: (1) special economic zones (SEZs) in Shenzhen, Zhuhai, Shantou and Xiamen, (2) open coastal port cities (CPCs) in Zhanjiang, Guangzhou, and Fuzhou, (3) economic and technical development areas (ETDAs) in selected cities, and (4) open coastal economic areas (OCEAs) in the Pearl River Delta and in Fujian Province. Of these, the three SEZs in Guangdong Province have played the most important role in the integration process.

Privileged areas have three outstanding features [Dezhao 1994; Kwok and Ames 1995]:

- They are windows to the outside world and are aimed at attracting modern technology, capital and managerial skills.
- They are open, although clearly demarcated and guarded areas for experiments in capitalist market economy.
- They are filters to shelter the rest of China from foreign influences.

Chart 2 – Comparison of Preferential Treatment for Foreign-Funded Enterprises in the Special Economic Areas of South China

	Special Economic Zones (SEZs)	Coastal Port Cities (CPCs)	Economic and Technical Development Areas (ETDAs)	Open Coastal Economic Areas (OCEAs)
Income Tax	Enterprises engaged in production with co-operation over 10 years: •Reduced rate of 15 percent; •Exempt from taxes for 2 years after first profitable year; •50 percent reduction from 3 years to 5; •50 percent reduction for 3 more years for enterprises using advanced technology; and •10 percent reduction for enterprises with export volume of 70 percent.	Enterprises engaged in production that are technical or knowledge-based; and/or with investment over $30 million; and/or engaged in infrastructure development: •Reduced rate of 15 percent (with approval from Ministry of Finance). Enterprises engaged in machine-building, electronics, metallurgy, chemicals, building materials, light textiles, packing, agriculture, forestry and related activities, and building: •Reduced rate of 20 percent (with approval from Ministry of Finance).	Enterprises with co-operation over 10 years: •Reduced rate of 15 percent for income from manufacturing and production in specified forms of technical development; •Exempt from taxes for 2 years after first profitable year; •50 percent reduction for 3 more years for enterprises using advanced technology; and •10 percent reduction for enterprises with export volume of 70 percent.	Enterprises engaged in production or research activities: •Reduced rate of 24 percent. Enterprises engaged in energy, transportation, port construction, technology-intensive and/or knowledge-intensive production: •Reduced rate of 15 percent (with approval from Ministry of Finance). Enterprises with foreign investment of $30 million that require several years to realize profit: •Reduced rate of 15 percent (with approval from Ministry of Finance).
Consolidated Industrial and Commercial Tax	•Exempt from taxes for exports except petroleum and other specified products, and for imports of equipment, raw materials, office equipment for own use.	•Exempt from taxes for imported production equipment, building facilities and materials, vehicles, office equipment for own use; and •Exempt from taxes for export commodities, except items prohibited for export.	•Exempt from taxes for imported production equipment, raw materials, building facilities and materials, vehicles, office equipment for own use; and •Liable for taxes on above items which are sold domestically (taxes based on imported content).	•Exempt from taxes for exported products except petroleum, refined oil, and other specified products.
Export Tariffs	•Exempt for petroleum products and other specified products.	•Exempt except for items prohibited for export.	•Exempt for products produced within zone, except petroleum, refined oil, and other specified products.	•Exempt except for petroleum products and other specified products.
Import Tariffs	•Exempt for equipment, raw materials, office equipment for own use.	•Exempt for production equipment, building facilities and materials, vehicles, office equipment for own use.	•Exempt for building materials, production equipment, raw materials, spare parts, vehicles, office equipment for own use; and •Liable for tariffs on above items which are sold domestically (tariffs based on imported content).	All enterprises: •Exempt for production equipment, building materials for use in foreign investment, raw materials, spare parts, packing materials, vehicles for enterprise use, office equipment, personal appliances and vehicles for foreign investors and staff. Enterprises engaged n export-oriented agriculture or animal husbandry: •Exempt for seeds, machinery and other production materials, petroleum products, and other specified products.

Source: Dezhao [1994].

The choice of the southern provinces and in particular of the Guangdong Province as locations for privileged areas was mainly based on geographic considerations. Their proximity to Hong Kong, Macau and Taiwan was regarded as the most compelling factor: neighbours tend to trade with each other, in particular with culturally similar ones, not just because transport costs are low but because transaction costs at all levels are low.

In order to attract foreign investors, preferential treatments were initiated by the Chinese government. They included income tax allowances and exemption from industrial and commercial taxes as well as from export and import tariffs for foreign-funded enterprises (Chart 2). For instance, SEZ-based manufacturing enterprises enjoy a preferential 15 percent income tax rate, full exemption from customs duties for their imported raw materials, intermediate inputs and equipment and their exported goods. Thus, these enterprises are encouraged to export most of their production output.

Whereas the Chinese authorities have to a certain extent actively promoted, guided and controlled the economic development in the Pearl River Delta, on the Hong Kong side, the government has almost completely abstained from public intervention. Consonant with its basic free-market policy stance, Hong Kong has neither pursued a policy to ease adjustment pressure on industries which have been outstripped by low-cost competitors nor has it pushed industries with favourable prospects. It was up to entrepreneurs to rapidly expand trade and investment links with adjacent territories beyond the borders, either near or far. In doing so, only industries in line with Hong Kong's comparative advantages remained, thus setting the condition necessary for strong overall expansion. The role of economic policy was to focus mainly on removing impediments to structural change and spurring factor productivity through upgrading the territory's infrastructure and skill base [GATT 1994; Chau 1994].

On 1 July 1997, the sovereignty over Hong Kong will be reverted to China — to the central government, not to the provincial government in Guangdong. The process of political integration with the mainland will be designed and controlled by Beijing. As an autonomous Special Administrative Area (SAR), Hong Kong cannot become the political center of the Pearl River Delta. Economically, however, it will remain or even strengthen its leading position [So and Kwok 1995]. The direction of Hong Kong's capitalist economy towards increasing integration with the market-socialist economy of China, especially South China, is more or less a fact for business life — whatever Hong Kong's political future might be.

III Forms of Hong Kong–Chinese Cross-Border Operations

Economic integration between regions can occur by different modes: by cross-border trade, by investments and by other forms of co-operation such as outward processing arrangements. Historically, Hong Kong was, besides Shanghai, the most important entrepôt for China. In the late 1970s, when Beijing opened up its door to the western world, it re-emerged as a conduit for the trade between China and the rest of the world.

Meanwhile, Hong Kong and, in particular, Guangdong Province have reached a higher stage of co-operation — along with the shift of Hong Kong manufacturing production beyond the border. The most common types of business in the Pearl River region are consignment and, respectively, commissioned processing and compensation trade. Hong Kong's manufacturers, confronted with soaring labour costs and land prices, have gradually relocated their production basis to the mainland, especially to the neighbouring province of Guangdong, where a plentiful supply of cheaper labour and land is available. This has led to a shift in Hong Kong's export composition away from domestic exports towards re-exports, and to a shift in its economic structure away from manufacturing towards services.

The establishment of Hong Kong factories has made that region the largest recipient of foreign direct investment in China. Most of the investment is concentrated in small- and medium-sized companies producing light industrial products, primarily for export to Hong Kong and third countries. In addition to direct investment, Hong Kong has been an important middleman in raising foreign capital for China. However, Hong Kong's and China's economic integration has not remained a one-way street. Investors from China have become big players in the Hong Kong capital market. They have, e.g., become the largest external investors in the colony's property market and have reached a sizeable claim on Hong Kong's banking system. It is tempting to view China's growing position in Hong Kong's economy as part of a grand design to control it effectively after the political take-over of the colony in 1997.

1 Foreign Trade

The explosive growth of cross-border trade between Hong Kong and China is mirrored in the statistics (Table 1). In recent years, two-way trade increased by some 25 percent per annum. China is now Hong Kong's largest trading partner, with a volume of 1,582 bill. HK dollars in 1995, 39 percent of Hong Kong's total two-way trade, compared with 11.3 percent in 1980 and 8.1 percent in 1970.

- China is Hong Kong's largest supplier of imports, accounting for 42 percent of Hong Kong's total imports. However, 52 percent of the imported goods are re-exported overseas.[2] This underscores the role of Hong Kong as an entrepôt for trade between China and the rest of the world.

- China is Hong Kong's second largest destination for exports, accounting for 33 percent of Hong Kong's total exports.

Table 1 – Hong Kong's Visible Trade with China 1970–1995 (mill. HK dollars)

	1970	1980	1990	1995
Total exports to China	64	6,247	154,359	447,599
Domestic exports to China	30	1,605	43,452	63,555
Re-exports to China	34	4,642	110,907	384,043
Total imports from China	2,830	21,948	476,483	1,134,409
Imports retained in Hong Kong	2,143	13,554	236,073	539,480
Re-exports to elsewhere	687	8,394	240,410	594,929
Note:				
China's contribution to Hong Kong's trade (percent)				
Exports	0.2	3.6	21.0	32.5
Imports	16.0	19.0	36.8	41.6

Source: Sit [1995]; Hong Kong Monthly Statistics [1996].

Official trade statistics do not provide separate figures on cross-border trade flows in the Pearl River Delta. Chinese customs statistics are not available on the provincial level. However, there is no question that Hong Kong as well as neighbouring Guangdong account for the bulk of mutual trade. According to Sung [1995], in 1990 Guangdong's exports to Hong Kong can reliably be estimated to amount to 86 percent of its total ex-

2 Although China re-classified the destination of its exports via Hong Kong since 1993, a substantial share of its exports is still classified as exports to Hong Kong because China argues to be unable to trace the final destination of all its exports.

ports. Reciprocally, Guangdong's imports from Hong Kong accounted for 72 percent of its total imports.

Apart from trade in commodities, trade in services between China and Hong Kong has become extremely important.

- On the one side, Hong Kong is a net exporter of transportation services, tourist services, trading services, financial services and business services. It raises, for instance, 80 percent of China's syndicated loans. Although in many cases the colony is not the direct source of funds, it serves as a convenient window for China. The shares of numerous state-owned Chinese enterprises are listed at the stock exchange in Hong Kong [Tang 1994].
- On the other side, China is very active in construction projects in Hong Kong. A large number of workers from the mainland are working in Hong Kong. In recent years, China's export of medical services has also sharply increased: Hong Kong residents are travelling to the mainland for medical treatment as the prices for those services are lower than in Hong Kong [Sung 1995].

Since Hong Kong has rapidly moved from a traditional manufacturing to a service-oriented "manufacturing management" [Tuan and Ng 1995a], a change in the mix of its trade with China is observable — from the export of goods to the export of services.

2 Outward Processing

A special feature of Hong Kong–Chinese cross-border operations is the high share of outward processing trade in total trade. In 1994, nearly 50 percent of Hong Kong's total exports were destined to and about

80 percent of its total imports originated from outward processing (Table 2). Since 1980, manufacturers in the colony began to relocate their production across the border, specializing in "front office operations" such as finance, marketing, design, packaging and quality control [Chau 1993]. About 95 percent of their outward processing arrangements are located in the Pearl River Delta, mostly just north of the border in and around Shenzhen [Tang 1995]. According to an often cited estimate, Hong Kong-based companies and their mainland partners in Guangdong Province employed in the early 1990s about three million workers in over 25,000 factories [Financial Times 1993], but meanwhile the number of workers is considered higher, probably close to five million. This vast off-shore force is tenfold the colony's own working population in manufacturing which has come down to less than half a million, while in the early 1980s the number of manufacturing employees in Hong Kong was twice as high [Tuan and Ng 1995b].

Table 2 – Share of Outward Processing Trade in Hong Kong's Total Trade with China 1989 and 1993

	1989	1994
Total exports to China	53.0	47.7
Domestic exports to China	76.0	71.4
Re-exports to China	43.6	43.3
Total imports from China	.	79.1
Imports retained in Hong Kong	58.1	75.9
Re-exports to elsewhere	.	82.0
Note:		
Share of OPT imports from Guangdong in total OPT imports from China[a]	93.4	93.6

[a]Except re-imports of Chinese origin.

Source: Hong Kong Monthly Statistics [1995].

Table 3 – Exports by Hong Kong Companies by Origin of their Production and by Selected Commodity Groups 1993 (percent)[a]

SITC classification		Produced in Hong Kong[b]	Produced in Guangdong[c]	Share in total
83	Travel goods and handbags	4.6	95.4	3.1
894	Toys	6.0	94.0	9.8
76	Telecommunications and sound recording equipment	22.1	77.9	10.7
69	Metal goods	37.8	62.2	2.2
65	Textiles	40.6	59.4	7.1
84	Clothing	51.3	48.7	24.9
77	Electrical machinery and appliances	51.4	48.6	7.8
75	Office machines and automatic data-processing machines	63.5	36.5	4.8
885	Watches and clocks	66.8	33.2	3.5
	Subtotal	38.6	61.4	73.9
	All commodities	39.6	60.4	100

[a]Ranked in descending order of share of exports produced in Guangdong. – [b]Hong Kong's domestic exports. – [c]Re-exports of Guangdong origin involving OPT.

Source: Sung [1995].

Detailed investigations regarding exports carried out by companies based in Hong Kong and operating in the colony as well as in Guangdong by commodity groups indicate that so-called footloose industries and, above all, labour-intensive industries are the most important candidates for outward processing (Table 3). In 1993, for instance, 95 percent of Hong Kong-based firms' exports of travel goods, handbags and toys were produced in Guangdong. More skill-intensive industries such as office machines and automatic data-processing machines still held a lower share. However, there is a trend towards technology-intensive products: Hong Kong manufacturers are increasingly setting up R&D and design divisions in China, making use of the relatively low salaries of scientists and professionals there. Surprisingly, the shares of textiles and clothing are relatively small. This can be explained by the existing origin rules which govern the export of wearing apparel and textile products to Hong Kong's major markets. These products are subject to restrictions on locally-made contents. As a result, many Hong Kong textile and garment manufacturers have retained their production base in the colony.

Outward processing in the mainland is manifested in a number of forms, in particular

- processing of materials provided by Hong Kong companies,
- processing of products in line with specifications based on designs or samples sent by Hong Kong companies,
- assembling and processing of components or semi-finished products delivered by Hong Kong companies,
- producing components or semi-finished goods as payment for use or lease of machinery and equipment provided by Hong Kong companies.

It is easy to understand why Hong Kong companies have a preference for commissioned production: this form of co-operation does not necessarily need a substantial equity involvement and poses, therefore, no capital risk. In addition, it does not require approval by the Chinese central and provincial governments but can be readily approved by local authorities.

3 Outward Investment

Hong Kong has accumulated a substantial stock of investment in the mainland, making China the largest recipient of foreign direct investment (FDI) in Asia. Most of the capital was invested in the Pearl River Delta with its two Special Economic Zones of Shenzhen and Zhuhai and some other principal cities such as Guangzhou, Dongguan, Foshan, Jiangmen and Zhongshan. It was estimated that from 1986 to 1991 the colony accounted for 60 percent of FDI in China and for 80 percent in Guangdong Province (Table 4). From 1986 to 1991, the share of FDI to Guangdong in total FDI to China increased steadily. As a result, Guangdong is now one of the top performers among all Chinese provinces in terms of economic growth.

Table 4 – Realized Foreign Direct Investments in China 1986–1991

	Stocks (mill. US-$)				Share in total (%)
	1986	1989	1991	1986–1991	1986–1991
Total	1,875	3,393	4,366	18,628	100
from:					
Hong Kong	.	2,037	2,405	11,110	59.6
United States	.	284	323	1,887	10.1
Japan	.	356	533	2,328	12.5
Others	.	716	1,105	3,303	17.7
Note:					
Guangdong	.	1,156	1,823	6,596	100
from:					
Hong Kong	.	953	1,357	5,237	79.4
United States	.	52	98	370	5.6
Japan	.	39	79	302	4.6
Others	.	112	289	687	10.4

Source: Tang [1994].

Most of the investment is strongly linked with Hong Kong-based manufacturers' cross-border processing. Although an offshore plant can be expected to work on its own, frequently support on part of the contractor is desirable — in order to improve and control product quality, to safeguard delivery times, to install modern machinery and equipment and to prefinance wage and overhead costs. However, much of Hong Kong's outward processing tends to be relatively sophisticated. Therefore it requires a higher degree of co-operation and, in particular, a long-term commitment among the partners. As a result, a large number of Hong Kong companies is involved in joint ventures and co-operation ventures which are still the dominant type of FDI in China (Table 5). In recent years, there has been a shift towards fully-owned subsidiaries, too. According to a survey among members of the Federation of Hong Kong Industries [1992] the majority of Hong Kong investors favours this form of investment because it allows them to have more control over management and hence more flexibility in responding to market changes. In particular, there is no need for time-consuming consultations with the Chinese side before decisions can be made.

Table 5 – Forms of Realized Corporate Investments in China 1986–1991

	Stocks (mill. US-$)				Share in total (%)
	1986	1989	1991	1986–1991	1986–1991
Total	2,244	3,773	4,667	20,832	100
of which:					
Foreign direct investments	1,875	3,393	4,366	18,628	89.4
Joint ventures	804	2,037	2,299	9,859	47.3
Co-operative ventures	794	752	764	4,385	21.0
Fully foreign-owned firms	16	371	1,135	2,457	12.0
Joint exploration	260	232	170	1,927	9.2
Commercial credits	369	381	300	2,204	10.6

Source: Chen and Hc [1994].

Investment in the Pearl River Delta has not been a one-way street. In recent years, China's investment in Hong Kong has also been progressing very well, especially in construction, building, shipping and manufacturing. China is now the largest investor in Hong Kong manufacturing. Much of Chinese investments are in high-tech industries. Such investments serve as a bridge for importing modern technology and training personnel from the mainland.

IV Driving Forces Behind Hong Kong–Chinese Integration

Economic integration in the Pearl River Delta is, without any doubt, unparalleled by other border regions in the world. In tapping the region's potential for integration, one has to take into account the ideal combination of economic complementaries, geographic proximity, institutional links and cultural ties. From a theoretical point of view

- large differentials in factor endowment and factor prices make an intensive (inter-industry) division of labour mutually beneficial because the use of resources can be optimized;
- short distances reduce transaction costs and transportation costs;
- political commitment of the governments involved and policy co-ordination create a favourable climate for business, and appropriate policies relating to tariffs and quotas, tax rates, regulations and foreign exchange encourage the private sector for cross-border operations;
- common language and culture and close kinship make communication easier.

Needless to say, political and economic partners on both sides of the border must be able and willing to do their best. As long as China is committed to continuing and deepening its open door policy and the Pearl River Delta enjoys its free market environment, the process of integration can be expected to proceed rapidly [Kam and Spinanger 1996].

1 Differences in Factor Endowment

Differences in resource endowment, and accordingly in resource prices, have been the main force driving the integration in the Pearl River Delta:

- Hong Kong suffers from a shortage of land and labour. In particular, rising wages and soaring land prices push firms to relocate their production to the neighbouring province.

- China, in contrast, has abundant labour and land. Therefore, these are relatively inexpensive. Although wages and land prices prevalent in its coastal province are much higher than in the hinterland, they make up only a small fraction of those encountered in Hong Kong.

According to a survey among Hong Kong manufacturing firms, 86 percent of outward processors and outward investors flagged "high labour costs" and 53 percent "high land prices" as major problems in Hong Kong, prompting them to build up an operational base in the Pearl River Delta [Federation of Hong Kong Industries 1992].

Comparisons of differences in production costs in the Pearl River Delta are difficult to establish due to differences in the quality of factor input and factor productivity. Labour in the mainland, e.g., tends to be less skilled and the nature of technology used there is relatively simple and more labour-intensive than in Hong Kong. However, results from different surveys suggest that production expenses incurred in mainland subsidiaries were only one fourth of total costs on average. In Guangdong, productivity was estimated to be about 70 percent of that achieved in Hong Kong for all types of labour, wages to be 20 percent for factory workers and 50 percent for staff in 1993 [Tuan and Ng 1994b]. Even in Shenzhen, where production costs have risen drastically in recent years and where wages are on average three to four times higher than in the Pearl River Delta, Hong Kong firms still enjoy favourable investment conditions.

Nevertheless, the attractiveness of the most highly preferred locations, in particular Shenzhen and Zhuhai, is fading in comparison to the hinterland, since disparities in terms of production costs are dramatically increasing. Already at the beginning of the 1990s, per capita GDP (as a proxy for labour costs) in Shenzhen and Zhuhai was five and, resp., three times higher than in Huizhou (Table 6). While in the hinterland it is relatively easy for workers to move from the inland provinces to the Pearl River Delta, in SEZs immigration is restricted by the so-called Frontier License System or by other policy measures. As a result, the labour market in Shenzhen and Zhuhai has become increasingly characterized by shortage.

Table 6 – Differences in the Gross Domestic Product per Capita in the Pearl River Delta[a] 1990

	Hong Kong = 100	Pearl River Delta = 100
Total	7.5	100
of which		
Shenzhen[b]	17.3	230.4
Zhuhai[b]	10.9	145.9
Guangzhou	9.3	123.9
Dongguan	8.5	113.4
Foshan	7.8	103.8
Zhongshan	6.6	87.5
Huizhou	3.7	49.9

[a]Excluding Hong Kong. – [b]SEZ.

Source: Jun [1994]; own computations.

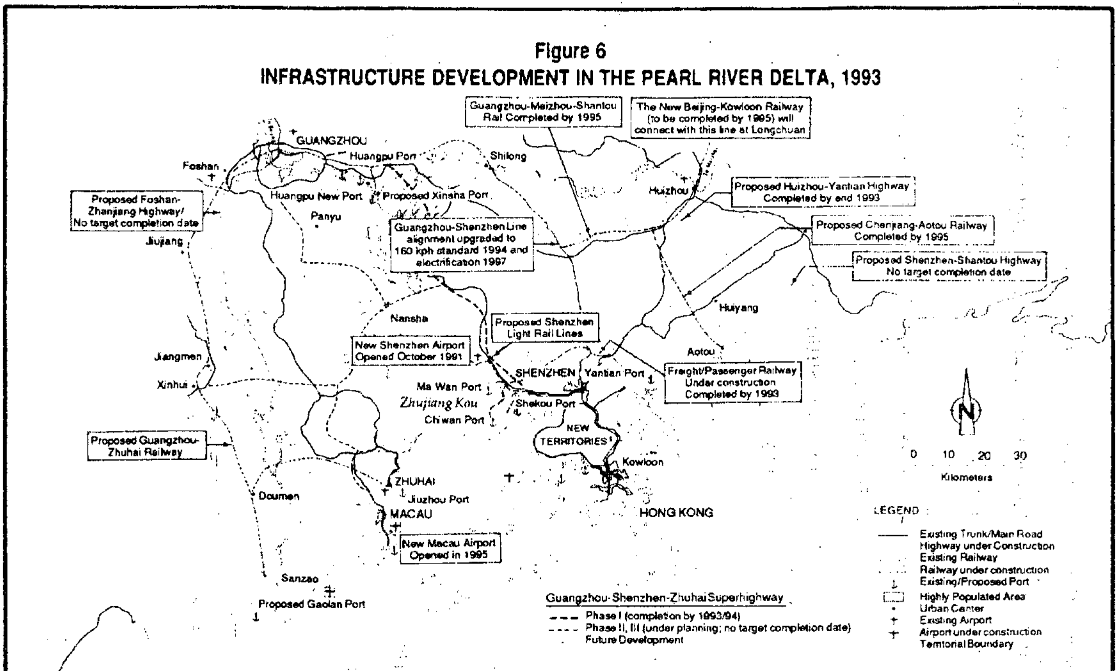
Nevertheless, the existing cost differences are a solid basis for an ongoing economic integration in the Pearl River Delta. They will help to push Guangdong Province from a domestic demand dominated, lesser developed Chinese province to an export-led, open and affluent province. Moreover, they will continue to promote the transformation of Hong Kong from a manufacturing export enclave into the hub of a fully-fledged service-oriented cosmopolitan center in the Asia-Pacific region.

2 Geographic Proximity

According to several polls, geographic proximity is another key factor for Hong Kong firms choosing the Pearl River Delta as a production base which facilitates transportation, management and control, technology transfer and access to back-up services. Seen from Hong Kong, most of the popular places for processing operations and investment are within a distance of less than 100 miles.

Geographic proximity, however, should not only be measured in terms of distances. Rapid economic integration in the Delta has also been based on heavy investment in the infrastructure with the greatest burst in the 1980s following the adoption of the open door policy by China [Yeung 1994]. While Hong Kong steadily expanded its investment since World War II, China neglected the development of transport facilities, of water and electricity supply and of housing projects until the early 1980s. As a result, many factories in the Delta could not operate at full capacity due to shortages in transport and power supply. In this respect, China has made considerable efforts to improve the situation. Particularly, provincial and local authorities have taken the initiative in making large infrastructure improvements. In recent years, an impressive number of new projects have been planned, started or implemented (Chart 3).

Chart 3



Source: Yeung [1994].

Importantly, a large share of projects have been privately financed. In recent years, self-financing of infrastructure has even become the most important modality. Raising funds in the capital market had not been a problem, except for those projects in Hong Kong which the Chinese side had opposed for political reasons.

3 Institutional Links

The institutional framework constitutes a symbiosis of China's market socialism practised in the coastal regions and Hong Kong's laissez-faire system. Therefore, both pushing and pulling factors deserve credit. In 1978, China started its open-door policy as part of its Economic Reform. In the years to follow, the government established selected frontier zones (Special Economic Zones (SEZs), Open Coastal Cities (OCCs) and Open Regions (ORs)) which are all located in South China, the most important of these being Guangdong. In contrast, Hong Kong has always been an open entrepôt for trade and financial transactions. Although legally the United Kingdom (still) assumes financial responsibility, the territory has long benefited from a considerable amount of autonomy, allowing to define and pursue its own policy in foreign trade, money and finance. This has helped to establish one of the world's most liberal trade and investment regimes.

Nevertheless, economic integration in the Pearl River Delta has been advanced from the bottom rather than from the top — from markets rather than from governments. Even after 1 July 1997, when China will resume sovereignty over Hong Kong, the region will be politically less integrated than the member countries of the EU. Hong Kong will become a Special Administration Region (SAR), will remain a separate customs territory and will be shielded from migration. Clearly, since the Sino-British Joint Declaration of 1984 which scheduled the return of Hong Kong to China, political ties have become closer. Since then, the governments of Hong Kong and of Guangdong Province have concluded agreements regarding border-crossing procedures, train, truck, ferry and airflight services and direct telephone networks.

4 Cultural Ties

Finally, the cultural ties between Hong Kong and the mainland are close. Many Hong Kong residents have their ancestral roots in the Pearl River Delta. Despite being separated for a long period of time, they have been in close contact to their relatives. Closeness of kinship is traditionally an important factor in Chinese business. Besides low labour costs and geographic proximity, familiarity with the environment in the Delta is considered one of the most important factors for investment there [Federation of Hong Kong Industries 1992]. Familiarity can substantially reduce the transaction costs of business. In recent years, after the border-crossing procedures became easier, millions of Hong Kong people visited their native villages and took advantage of the opportunity to refresh family ties that have lasted for generations [Guldin 1995]. Although residents in the Pearl River Delta are internally divided into various groups (depending on the location of their native villages within China) and have distinctive dialects, Cantonese is the lingua franca which is understood by almost all of them. A communication problem, usually the main impediment to economic integration in border regions, does not exist.

In recent years, social and cultural integration in the Pearl River Delta has been efficiently facilitated by the mass media. Television, radio, movies and videos have become the conduit for mutual cultural penetration. This has helped to stop or even to reverse the ongoing process of linguistic bifurcation which had progressed during the period of separation [Guldin 1995].

V Role of SMEs in Hong Kong–Chinese Co-operation

An outstanding feature in Hong Kong's outward processing and investment in the Pearl River Delta is the predominance of SMEs. In 1960, soon after the start of the colony's industrialization, the average firm size in manufacturing was 41 employees, which was already small by international standards. By 1970, the average number of employees had fallen to 15. SMEs accounted for 99 percent of total establishments and 88 percent of employment in the manufacturing sector in 1990 (Table 7).

Table 7 – Hong Kong Manufacturing Firms and Employees 1960–1990

	1960	1970	1980	1990
Number of firms	5,346	16,507	45,409	49,087
of which: SMEs (p.c.)	96	97	99	99
1 – 49	88	89	90	90
50 – 199	7	7	8	8
200 – 499	1	1	1	1
Number of employees	218,405	549,178	892,140	730,217
of which: SMEs (p.c.)	69	76	83	88
1 – 49	27	33	38	43
50 – 199	24	26	31	31
200 – 499	18	16	15	14
Gross output (mill. HK$)	.	.	107,890	277,420
of which: SMEs (p.c.)	65	72	79	83
1 – 49	.	25	33	34
50 – 199	.	27	29	33
200 – 499	.	20	17	16

Source: Sit and Wong [1989], Chau [1993].

Interestingly, SMEs were able to expand their share in total manufacturing — in terms of gross output from 65 percent in the early 1960s to 83 percent in the early 1990s. A closer examination of the statistics suggests that the shares of small- and medium-to-small-sized firms substantially increased whereas the share of medium-to-large-sized firms declined. Growth in manufacturing output in Hong Kong resulted from the SMEs' rapid increase in number rather than from their increase in size.

A systematic analysis of the factors of growth of SMEs is beyond the scope of this paper. However, rapid responses to changes in the market situation, permanent improvement with respect to product quality and design, quick and punctual delivery times and a high standard of production techniques are considered the most important elements behind this dynamism [Sit and Wong 1989]. Since the costs of market entry and exit for SMEs are relatively low, the set-up and fatality rates are high.

Although Hong Kong manufacturing firms are small in size, many of them are strongly involved in cross-border operations such as trade, subcontracting and even in outward investment. This is mainly facilitated through two channels: first, through subcontracting networks with larger firms, and second, through links with trading houses, which are frequently SMEs, too.

1 Subcontracting Networks

Many Hong Kong small- and medium-sized manufacturers are linked with other local and foreign factories through a network of contracting arrangements. According to a field survey made in 1987, 27 percent of SMEs in the sample operated as contractors (which gave out orders) and 16 percent as subcontractors (which received orders). Interestingly, small firms are more heavily involved in subcontracting than medium-sized ones [Sit and Wong 1989].

Table 8 – Hong Kong SMEs with Outward Processing Activities in China by Type of Industries in 1987

	Share in total (p.c.)	
	SMEs	All enterprises
Garments	15.9	31.5
Textiles	13.0	18.5
Plastics	24.1	24.1
Electronics	24.4	18.5
Precision equipment	26.7	7.4

Source: Sit and Wong [1989].

On average, 20 percent of the sample SMEs had outward processing facilities in China (Table 8). The share was highest in precision equipment (27 percent) and lowest in garments (16 percent). Compared to all enterprises, SMEs are overrepresented in electronics and precision equipment and underrepresented in garment and textiles.

With respect to employment size, there is an asymmetry between firms in Hong Kong and firms in the mainland. While Hong Kong manufacturers involved in subcontracting are relatively small, the average size of their partner establishment north of the border is a multiple: in 1991, it was 787 employees for factories in the Pearl River Delta. About 40 percent of firms employed over 500 workers, about 20 percent even over 1,000 workers (Table 9). However, this picture still reflects to a great extent the historical pattern of manufacturing production under state-ownership, which has been dominated by large-scale factories. However, production under private ownership is rapidly increasing.[3] Compared with state enterprises, non-state enterprises are generally small [Xu, Kwok, Li and Yan 1995].

Table 9 – Employment Size of Hong Kong Manufacturers' Mainland Establishments in 1991

	Share in total (p.c.)
Less than 500	57.5
500 – 999	17.6
1,000 – 1,999	10.9
2,000 and above	11.7
N.A.	2.3

Source: Federation of Hong Kong Industries [1993].

2 Export Intermediaries

Many of the Hong Kong outward oriented SMEs make use of effective intermediaries for exports and re-exports. There is a strong correlation between manufacturers' firm size and the mode of their exports: the smaller the size, the higher the share of indirect exports by interlinking trading companies [Rhee and Soulier 1989]. The intermediary role played by trading companies is to collect market information, to facilitate contracts, to provide product design and specification, to make quality controls, to secure the intermediate inputs, to bundle and distribute orders, to finance pre-shipments and to bear the risk of non-payment from buyers.

Hong Kong trading companies handle the bulk of the Chinese trade (China's imports and exports transmitted through Hong Kong). They have gained this position not only from Hong Kong's favourable location: an

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[3] In 1990 already 60 percent of industrial production in Guangdong Province stemmed from the non-state sector (1978: 28 percent).

important advantage is their excellent and often family-based connection to Chinese-led overseas companies which hold a prominent position in export and import markets. Consequently, trading companies also play an important role in the economic integration process in the Pearl River Delta.

VI Lessons for Developing Border Regions

The Pearl River Delta provides a unique experience to illustrate the successful re-integration of two regions after several decades of political and economic separation. It also provides interesting insights into the pivotal role of SMEs in this process. Can the Delta serve as an example for other developing border regions, in particular in Central Europe along the former Iron Curtain? The answer is: possibly.

The best way to start learning lessons from success is to look at the causes: economic integration can be favoured by government actions facilitating trade and investment across regions, such as lowering or cutting tariff rates or establishing free trade areas. It can also be largely driven by market forces. In a new book on Hong Kong economy [Enright, Scott and Dodwell 1996] it is argued that Hong Kong's companies have prospered in the past mainly by what the book calls the 'hustle factor'. Actually, the region is particularly rich in entrepreneurs. Most of the enterprises in Hong Kong are small to medium in size. They mainly operate in highly competitive production fields like garment, textiles, toys, watches and other light consumables and are almost wholly geared to exports. They are highly integrated among themselves and with larger firms, in particular through the system of subcontracting. SMEs' advantages extend to being able to respond rapidly and often efficiently to changes in the market. By that, they can find a profitable niche somewhere in the business network. While the strength of large enterprises heavily relies on economies of scale, SMEs, linked in groups, can benefit from economies of scope [Sit and Wong 1989].

There are three key factors contributory to the Delta's economic success: a non-interventionist policy promoting growth, a pronounced outward orientation in business which consequently exploits complementaries in comparative advantages and, last but not least, the so-called Chinese factor — the special attitudes adopted by local entrepreneurs, their adaptability and flexibility, their work ethics and their common cultural heritage:

- Hong Kong's traditional policy of non-interventionism and — beginning in 1979 — China's open-door policy have provided an excellent atmosphere for "grass root capitalism" [Kraus 1988]. This type of policy involves a minimum of regulations and gives governments little influence on business. It is in sharp contrast to the European-style industrial policy which tends to play an active part in economic development.

  The primary role of the government in the Delta has been to provide the adequate and appropriate infrastructure. Thanks to a sophisticated transport and communication network, which has no parallel in Central European border regions, the costs of doing business are low. And more important: the business community on both sides of the border has quickly and efficiently responded by exploiting new opportunities — unlike on both sides of the former Iron Curtain, where cross-border activities are relatively rare.

- Hong Kong's traditional outward orientation and China's progressive opening-up have laid the foundation for a new division of labour in the Delta. Hong Kong-based manufacturers have access to modern technology, sales networks and financial sources. Manufacturers in Hong Kong, large and small, have relocated parts of their production, in particular the labour- and land-intensive, across the border, preferably by outward processing. Their Chinese partners have willingly accepted this co-operation, since they have recognized that they benefit from it. In Central Europe, subcontracting relationships are frequently considered with mistrust. Particularly, subcontractors in transition countries complain about "unfair practices" of their partners — about unstable orders, excessive quality requirements and low prices. However, subcontracting is usually a necessary step to upgrade a manufacturer's operations. From the Pearl River Delta we can learn that the spatial division of labour is rapidly changing: Shenzhen, in the early 1980s a concentrated area of simple processing and assembling of important materials and components, has stepwise become a center of technology-intensive production. Lower level subcontracting, in terms of the scale of investment, skills and wages, has gradually moved into the hinterland.

- The Hong Kong, and generally the Chinese type of merchant entrepreneur, who is ever alert to all sorts of business, seems to have inherited a gift for being successful. The European type, in contrast, is more an industrialist who considers himself as a producer rather than a trader [Wu 1988, Chau 1993]. This appears to be the main reason why the Hong Kong/Guangdong model is probably of limited scope for Central European border regions. Clearly, there are some differences: Polish local business appears to be more trade-oriented and has more successfully proved its ability to adapt quickly to changing circumstances rather than their Czech or Hungarian counterparts. However, eight years after the fall of the Iron Curtain, also Polish border regions vis-à-vis Germany are still far from becoming an economic power-house.

Drawing lessons does not mean to borrow or to reject blindly the experiences of others. Experiences from elsewhere, however, can be used for inspiration — how to deal better with a problem.

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