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Profiting from protection in an open economy: Hong Kong's supply response to EU's MFA restrictions

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**Profiting from Protection in an Open Economy
- Hong Kong's Supply Response to EU's MFA Restrictions -**

by

Dean Spinanger

September 1994



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**Profiting from Protection in an Open Economy
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Profiting from Protection in an Open Economy

- Hong Kong's Supply Response to EU's MFA Restrictions -*

1. Introduction and Overview

The spreading of highly labor-intensive MFA¹ industries throughout Asia and into LDCs in other parts of the world is a phenomenon, which was not even foreseen a mere 25 years ago, even though the seeds for this development were already being sown back then.² Of course, under competitive, undistorted conditions it is basically nothing else than the result of "natural" structural adjustment, both in countries with highly developed MFA industries as well as in those just beginning. That is, on the one hand it involves the process of spinning off industries in higher income countries no longer producing in line with their factor intensities. On the other hand, it reflects the process in lower income countries of allowing labor-intensive industries to develop in line with changing comparative advantages. It thus represents a movement along the continuum of the development process when dealing with

* This paper on Hong Kong's responses under the MFA was written in connection with an OECD project on "Trade Policy, Productivity and Foreign Investment: The Textile and Clothing Industry in Europe" in 1992. The original paper on Hong Kong was entitled "MFA and the Spillover of Export Capabilities: The Case of Hong Kong". Given its relevance it has been updated, revised and extended to cover the implications of the Final Act of the Uruguay Round Multilateral Trade Negotiations.

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¹ The term MFA industry refers to the textile and clothing industry generally speaking and not just those individual products covered by the MFA. Under the foreign trade classification used in this paper clothing (SITC 84) includes knitwear, as opposed to the industrial classification (ISIC) which classifies knitwear under textiles.

² In Myrdal's *Asian Drama* [1968, pp. 676 ff.], which was to provide an all-encompassing review of Asian countries, it is explicitly stated that while the "expansion of export outlets played a crucial role in the early period of development in all the now highly developed Western economies...", Asia didn't profit beyond "initial spurts in production for export ... In any event, the epoch of rapidly growing export markets had ended ... The outlook for their [i.e. Asian countries'] export earnings is not bright...". Note: over the 80's total manufacturing exports in the world increased by a yearly rate of about 8 percent; corresponding values for major Asian exporters ranged from around 15 percent for Hong Kong, Korea, Singapore and Taiwan to 25 percent for Thailand and 35 percent for Indonesia.

Heckscher-Ohlin-Samuelson-Stolper (HOSS) products [see Anderson, 1992, pp. 2-6, for a succinct discussion of the theoretical underpinnings].

However, it cannot be overlooked that most of the more successful of these countries lie on a crescent in East and Southeast Asia (ESEA), extending from Korea to Indonesia, whereby close to the center Hong Kong is located. This economy alone accounted for roughly three quarters of non-industrial country exports of clothing to industrial countries (ICs) in the early 60s (in value terms). But already by the eve of the MFA (1973) its share had dropped to about one third, then to about one fourth by 1980 and to one eighth by 1992.³ What has remained remarkably stable over this period, however, is the share of clothing exports from ESEA to ICs, namely about 75 percent. In other words, to the extent that Hong Kong lost export market shares, other countries in the region were able to gain them. The shift away from Hong Kong and the higher income countries would no doubt be even more significant if volume figures were to be used.

Given such industrial development patterns across Asian countries and knowing that the exports of MFA products from these countries were successful in penetrating the markets of industrialized countries⁴ despite an ever more all-encompassing MFA (see Table 2), it is relevant to investigate factors behind the drive and success of Asia T+C exporters. Specifically, the question needs to be asked whether or to what degree entrepreneurs from the dominating exporter of clothes over the past two decades, i.e. Hong Kong, have been instrumental in engendering these developments by extending their MFA activities beyond the borders of the Crown Colony across Asia. This implies not only that - in light of the protectionism they face in IC markets and structural adjustment pressures in Hong Kong itself - Hong Kong entrepreneurs have made decisions vis-à-vis the size and structure of their Hong Kong operations, but also that they effectively induced or established production in other (Asian) locations. Spreading production activities across Asia must be seen as being all the easier in light of multifaceted and ubiquitous ties existing between Hong Kong clothing manufacturers and their extended families or Chinese communities throughout Asia.⁵

³ See also Table 1 which ranks total T+C exports of major suppliers.

⁴ Clothing exports from ESEA countries recorded import penetration ratios of 3.7 percent (1970-73) and 15.0 percent (1986) in ICs versus 9.8 percent and 20.9 percent from all other countries. The figures in the EC were 3.7 percent/11.7 percent for ESEAs and 21.3 percent/49.0 percent for ICs in 1970-73/1986 respectively [see Anderson, 1992, pp. 207-208].

⁵ See overview article by Mackie [1992, pp. 41-64]. In the context of this study perhaps the most interesting piece of evidence which can be culled out of the sources in this overview is that as regards the textile and clothing industry there are no particularly useful data which can be tapped. While there are mentionings of Hong Kong Chinese involvement in the T+C complex here and there, none of the sources examine the importance of the Hong Kong connection, let alone the impact of the MFA. See also Wu, Wu [1980] and Khanna [1991].

It is thus the purpose of this study to attempt to investigate the degree to which protectionistic measures instituted by and within major importing industrialized countries - in this case the EC - have impacted on and snafued the textile and clothing industries of the EC's major external supplier (i.e. at least through 1992), Hong Kong. This particularly focuses on its setting up of production facilities outside its domestic market and also takes Hong Kong's changing comparative advantages into account. Of particular importance in this constellation is the impact of rents which are posited as accruing to Hong Kong's entrepreneurs due to the nature of quotas, given prevailing demand and supply parameters.

This study begins by briefly overviewing the relevant issues shaping the trade links between Hong Kong and the EC (Section 2). This is then followed by an analysis of Hong Kong's trade patterns with the EC in order to determine how they have been influenced by the prevailing protection (Section 3). Of interest here is the degree to which rents and product upgrading can be established, given the specific product-by-product non-tariff protection incorporated into MFA (Section 4). The question to be answered in this context deals with the production and investment decisions of textile and clothing entrepreneurs being influenced by the degree to which profit expectations encompass rent seeking, upgrading and/or locational flexibility (Section 5). A more general issue in this context is whether the "hydra-like" MFA actually created an environment which essentially nourished the exportation of textiles and clothing to the EC thereby aggravating European producers all the more by making it difficult to counter the productive additional exporters. Should this prove to be the case, one possible conclusion could well be that - regardless of other possible effects - the longer the MFA was upheld, the greater the additional pressure generated and hence the more inevitable its elimination eventually became. Before concluding (Section 7), comments on the thrust and implications of MFA trade policies after the Uruguay Round agreement are reviewed (Section 6). It also focuses on the unfolding new economic landscape in Europe, which does not just cover the implications of the EC common internal market or the European Economic Space (EES), but rather extends deep into Central and Eastern Europe.

2. Hong Kong, the EC and the MFA: Trading under Regulated Access

The framework of Hong Kong's textile and clothing trade with the EC over the past decades has not only been shaped by the MFA or its predecessors (i.e. the STA and LTA). These were merely the most important agreements or rather restrictions affecting the ability of Hong Kong to efficiently tap its factor endowment. Aside from the omnipresent postwar non-tariff barriers in Europe, Hong Kong was "punished" by its own mother country, i.e. the United Kingdom, in the 50's when the Lancashire Pact (covering cotton textiles) was evoked in 1959. These and the ensuing additional trade restrictions enacted by the United States hit the textile industry particularly hard, but in essence proved to be a type of cleansing shock which consolidated the industry and improved efficiency. But even more important, the imposed sanctions induced "forward linkages with the finishing and garment sectors" [Riedel, 1974, pp. 26-28].

Likewise they generated, on the one hand, the process of upgrading in the clothing industry, which - until the early 60's - had been exporting low quality knitwear. On the other hand, the measures caused a shift into clothes produced from synthetic fabrics during the 60's, since such products were not covered by quota restrictions at that time. Needless to say, this type of flexible behavior had already been put to its test in the ten years following World War II when the Chinese civil war caused refugees to swell the population by almost 2 million (or roughly 300 percent) and the United Nations imposed an embargo on trade with China in 1951, thereby cutting Hong Kong off from its lucrative entrepôt trade [see e.g. Szczepanik, 1958, and Chou, 1966, for more details]. The economic miracle which resulted therefrom also brought forth a clothing industry which was later able to react all the more effectively in the face of adverse trade policies.

The framework imposed upon Hong Kong's T+C trade relations with the EC over the last 20 years has been based on the principle of "managing trade but mangling the consumer" [see Spinanger, Zietz, 1986]. Out of this situation Hong Kong has been able to profit at the expense of consumers in all those countries restricting its trade by imposing quotas [see Hamilton, 1988, p. 207 and 1991, p. 381].⁶ In other words, although the Hong Kong government rejects the trade restraints placed on its textile and clothing exports to the EC (or to other destinations), since these run counter to the basic principles of free trade, the substantial monetary benefits in the form of rents which have been accruing to those entrepreneurs affected by the (MFA) trade barriers cannot be overlooked.

⁶ In a brief survey carried out in mid 1992 (120 firms received questionnaires) all seven responses either stated that they had definitely or to some extent profited from the quota rents MFA allowed them to "pocket".

It is quite likely that these benefits have even tended to increase over time, given the option that EC producers have always had to try to stem the flow of imports through tighter and more effective MFA quotas, be it vis-à-vis lower growth rates, less flexibility or extended product coverage (see Table 2) ever since the inauguration of the MFA in 1974. This was particularly the case between MFA I and II when the EC "discovered" that the all-encompassing framework permitted imports from non-ICs to expand too rapidly. However, such opportunities occurred only every 3-4 years in the course of MFA renegotiations.

There was thus a "backdoor", as recourse to a "safeguard" clause embodied in the Treaty of Rome, namely Article 115, could be taken by an individual EC country for a specific product against one or more non-EC countries. It was therefore only "natural" (and convenient) that in those EC countries, where further measures were deemed necessary to protect the textile and clothing industry against certain specific foreign competitors that this article was frequently involved (see Tables 3 and 4).⁷

Hong Kong was "afflicted" by about 20 percent of the Article 115 cases directed against MFA products during the 1981-1991 period as opposed to about an 8 percent share in clothing imports.⁸ Hong Kong, together with China, Korea and Taiwan, accounted for almost 60 percent of all Article 115 cases covering MFA products. Thereby Hong Kong's cases were concentrated primarily on clothing products, whereas the other three countries were hit more often in capital-intensive processes (i.e. categories 1-3).

More recently (March, 1989) the EC even enacted antidumping proceedings against Hong Kong producers of certain textiles (denim cloth). Although the proceedings against Hong Kong were later terminated (August, 1990), the impact of antidumping measures on prices and quantities is well documented [see e.g. Messerlin, 1989]. That is, even if antidumping proceedings fail or are otherwise terminated they inevitably cause the volume of imports to decrease and prices to rise.

⁷ Spinanger [1989] shows how clearly these measures were directed against Asian countries; see also Pelkmans [1993, pp. 25-30].

⁸ Article 115 cases were virtually non-existent in 1992, as a prelude to the common internal market. However, the measure is not necessarily "dead" as it is still included in the Maastricht Treaty, as well as - surprisingly - in the accord on textiles and clothing in the Uruguay Round Agreement.

3. Hong Kong's MFA Trade Pattern with the EC and the Spillover Potential

As can be seen from Table 5 the shares of clothing exports⁹ destined for the EC have increased just slightly in recent years, but are still well below the level in 1980 (or earlier).¹⁰ Aside from the two (listed) EC countries, where growth of exports exceeded the total growth of Hong Kong's exports in both time periods, namely France and Italy, Ireland exhibited even higher growth rates. These three countries were also those applying Article 115 most often, although Italy directed its measures more against China, South Asia and Eastern Europe. The degree to which this Article was applied would seem to reflect the relatively small size of their quotas (on a per capita basis), which amounted to but a small fraction of those for Germany (e.g. the quota for men's shirts (Cat. 8) for France is 1/19 and for Italy 1/11 of Germany's).

In focussing more closely on Hong Kong's performance in the EC (see Table 6) the shares in total imports reveal a reduction of almost one half (from 10.1 to 5.2 percent), while LDCs as a whole (i.e. including Hong Kong) increased their share by about a third (from 32.8 to 46.4 percent). As of 1991 Hong Kong yielded to China the position of the EC's largest external supplier. Furthermore, it has been nudged further down the list of overall suppliers (i.e. from EC and non-EC countries); it now ranks fifth, having been also overtaken by the Benelux countries and Germany.¹¹

Greater and more revealing detail is provided in Table 7 which breaks down the imports from Hong Kong and selected LDCs/LDC groupings - to which investments from Hong Kong are known to have been directed - for key EC countries. Here Hong Kong's slow performance can clearly be seen: On average its share dropped by almost 50 percent or by over 50 percent in Germany, its largest market (for comparative purposes EFTA is included). To summarize this table: Whereas Hong Kong's share of EC imports from LDCs in 1980 was 125 percent above the other listed important MFA exporters, by 1985 this lead had decreased to 60 percent, by

⁹ Hong Kong's textile exports will not be dealt with in this paper since it is the clothing industry which has been causing the "problem" for EC producers. It might, however, be noted that large increase in textile exports to the rest of the world (REST) during the period 1980-89 reveals that Hong Kong was becoming a more important supplier of inputs for clothing firms in Asia. More specifically, about half to this trade in 1989 was headed for China presumably in connection with operations of Hong Kong companies there. By 1992 almost 75 per cent of REST was destined for China. Without the surge of textile exports to China Hong Kong's share in world exports would have fallen by almost 50 percent between 1980 and 1992, instead its share increased (see Table 1).

¹⁰ In 1990 and 1991 the higher shares can be mainly attributed to the German unification, i.e. the additional demand from 17 mill. new consumers. In 1991 this increased Germany's share in Hong Kong's clothing exports to 15.5 percent and the EC's to over 33 percent.

¹¹ In Germany, the largest EC importer of Hong Kong clothing products, Turkey and Yugoslavia had already moved ahead of Hong Kong by 1988. Furthermore, given the growth rates since 1991 (over 30 percent/year) imports from Poland can be assumed to exceed those from Hong Kong by 1995; five years ago (i.e. 1989) they were but 1/5 of Hong Kong's!

1990 it lay 40 percent and by 1992 by 60 percent below the other countries. All in all, however, Hong Kong and the other Asian countries could increase their share from 36 percent to 43 percent of total EC clothing imports from LDCs over the ten years. Given the fact that Hong Kong's transnational investments in the textile and clothing industries of Asian countries are known to have been directed to these countries [see sources in Mackie, 1992], even if the amounts are not known, the above trade shifts between Hong Kong and the listed LDCs are perhaps an initial indication reflecting the impact of Hong Kong firms in the T+C industry in these key countries.

4. Hong Kong's Entrepreneurs: Innovational Response to Regulated Access

For two reasons the impact of trade restrictions on Hong Kong MFA exports to EC countries are expected to be significant. First of all they have permitted those domestic firms to survive, which - under truly competitive conditions - would have not been able to compete. This means that a certain amount of pent-up structural change has developed, which - when MFA is dissolved 10 years hence - implies considerably larger structural shifts to be absorbed.¹² Secondly, for those companies which would also have been competitive under normal conditions they were either able to invest all the more in up-grading activities to remain competitive in Hong Kong or invest in activities beyond Hong Kong's borders to tap the quota potential in other Asian countries. In other words, the snafu induced is considerable and the issue being addressed here covers the domestic implications of induced technological changes and product upgrading, as well as the cross-border ramifications engendered by the shifting and/or establishing of manufacturing facilities "offshore".

Underlining the importance of this last aspect in the context of this paper is the fact that although Hong Kong's domestic clothing exports accounted for slightly over 8 percent of 1990 world clothing exports, it is estimated that via the "Hong Kong connection" it is actually involved in or rather responsible for trade adding up to maybe 2-3 times this figure. That is: barriers placed on Hong Kong's MFA exports - inter alia by the EC - shifted and/or accelerated "natural" structural adjustment paths, led to a rapid increase in clothing production capacities in other countries and thereby to pressures on EC producers being aggravated. It is attempted to demonstrate this above in connection with Table 7, in which import shares to EC countries were calculated for selected Asian countries, into which Hong Kong investment was known to have been directed. If Hong Kong actually does command - as a conservative estimate - at least an additional share equal to its own share in EC clothing

¹² In a paper by Spinanger, Piatti [1994] on Germany it is noted that major German buyers in Hong Kong could foresee a reduction of 50 percent in their purchases in Hong Kong once the MFA no longer restricts suppliers.

imports, then its 1992 EC share would be around 26 percent or five percentage points below its 1980 share. This turns out to be the equivalent of making the assumption that Hong Kong firms - since 1980 - were capable of replacing market shares lost from the Hong Kong location with production from facilities established in other locations. This difference, 18.1 percentage points is just 1.2 percentage points larger than the gain exhibited by the other countries listed. Realizing that Hong Kong firms were already offshore in 1980, then the figure does not seem implausible and will be reexamined later.

In addition to influences stemming from the MFA and income-level induced structural adjustment, productive investment decisions were also snafued by the application of Article 115. In choosing this option, EC countries were more clearly revealing those product areas in which international competitiveness was lacking, i.e. where the prices of domestically produced items were no longer competitive. To the extent that entry into these markets was still possible, it could be expected that - *ceteris paribus* - exports to them would tend to be more profitable than to other, relatively liberal EC economies. And since it is profitability rationale which shapes entrepreneurial decisions, it could be expected that protection-induced price/profit differentials across EC countries affected the value and direction of trade flows from a given country as well as decisions to establish facilities in countries where quotas permitted new, efficiently-sized plants. Concomitantly with building such production capacities, the possibility to earn further quota rents in these countries also arises. In connection with the creation of the common internal market and with the proposed phasing-out of the MFA, trade policy decisions are still pending vis-à-vis the modalities and structure of the phase-out. Therefore, it is helpful to understand what the impact of the prevailing system in the EC has been on a major supplier such as Hong Kong.

If in the past Hong Kong's entrepreneurs have reacted to the distortions embodied within the MFA framework by attempting to structure their production and trade flows in a manner so as to take advantage of the rent differentials in the various EC countries, the same will, no doubt, apply in the future, as long as trade continues to be restricted. Perhaps a first "stab" at trying to substantiate this can be examined in a pedestrian manner. It is posited that Hong Kong producers - in order to maximize quota rents - would try to use the varying degrees of restrictiveness between EC countries and expand the value if not the volume of exports to those countries known for being more restrictive. To the extent that offshore facilities had already been established they too could aim in this direction. To examine this point the percentage increase of Hong Kong's imports over the period 1980-1990 was calculated for the EC total and individual countries (plus EFTA). Likewise the change in value of all LDC imports into the EC was calculated. The ratio of Hong Kong's rate of increase was calculated. The ratio of Hong Kong's rate of increase for all EC (i.e. 68.52 percent) was then divided by the EC's rate (241.93) to produce the relative changes in value of clothing imports portrayed in Diagram 1A. This result (28.32) was used as the denominator for the changes in all other

(listed) EC countries to determine if the relative changes in the value of imports into more restrictive countries were higher than in the more liberal countries. The horizontal axis lists the EC countries in line with presumed restrictiveness based on indications gained from per capita imports for major categories and the frequency with which Article 115 was used. The line drawn through the Hong Kong calculations shows that the presumed tendency to ship more (in value terms) to more restrictive countries.

As a matter of fact other countries in Diagram 1A reveal this tendency as well. On the one hand countries like Taiwan, Korea and Macau represent similar conditions where the clothing industry shifted offshore during the 80's. And since these countries were also in a position to capture quota rents given their market position, they too could attempt to structure their domestic production in a manner to engender the largest possible rents. On the other hand, Sri Lanka and Thailand are two countries where a considerable amount of Hong Kong (overseas Chinese) investment did flow [see e.g. Finnerty, 1991, for Thailand and Ramanayake, 1982, for Sri Lanka] so they could also reveal a similar pattern. The fact that this is only very weakly the case merely points to necessity to be able to produce products which will permit quota rents to be demanded.

That this diagram is "telling" a valid story can be seen in the right-hand side of Diagram 1 portraying - inter alia - two countries in which production/exportation is not (basically) distorted by import constraints. They are Mauritius, an ACP member and Turkey, a Mediterranean country with preferential access based on an associate status. If MFA and Article 115 impact on unit values and thus tend to shift trade to those countries with higher possible unit values for given quotas, then the pattern of their exports should not be structured in a manner similar to Hong Kongs. In fact they aren't. That the line drawn for Hong Kong in the diagram reflects increasing unit values can be strongly verified by the data for Ireland which, given its relatively frequent use of Article 115 for major imported clothing items (see Table 8), is posited as being the most protected country in the sample. Pressure on unit values would be further increased by fact that Ireland was importing from Hong Kong at or near full quota capacity in the period under consideration.¹³ It can also be pointed out that in period 1985-1989 the volume of exports just barely increased while unit values rose by over 160 percent.

These results corroborate those from Faini and Heimler [1992]. They note that - in general - LDCs have been improving the quality of their exports at a rate similar to Italian producers. In particular Korea, and to a lesser degree Hong Kong and Taiwan, upped the quality of their production in recent years. Since the MFA exports have been subjected to considerable

¹³ Since quota utilization levels were often lower at the end of the period than at the beginning this means that there was no upward bias.

constraints - especially clothing in the period investigated - "these results tend to confirm the hypothesis that, at least for these countries, a binding quota leads to quality upgrading". Moreover, they could have added in the context of this paper, that is in the case of Ireland, "where constraints in clothing are likely to have been more binding, the quality of clothing imports from developing countries (in particular from South Korea and from Hong Kong) improved more than in the other European countries" [Faini, Heimler, 1992]. Of course what they consider to be quality could also be embodying quota rents as well. On the other hand, in those countries which were not subject to binding MFA restrictions (in this case Mauritius and Turkey, in their case Morocco and Tunisia) no significant differences in the level and quality of the other exporting countries were revealed. This could be considered - in more general terms - as applying to Diagram 1B.

The above graphical reasoning leads us to the question about the overall strategy (or package of strategies) be adopted by Hong Kong suppliers. Numerous options were available, e.g. capturing quota rents, upgrading, shifting Hong Kong production to other, less restricted products, exporting to more open countries or moving out of manufacturing into trading, relocating/establishing production facilities in other countries and - in this connection - profiting from their well-established ties to capital equipment suppliers to secure prices in the new venue at least equal to if not better than in the home market.

In a more macro-sense it was intended to investigate the extent to which initiating manufacturing in a particular product line in a new country would impact on the transfer of technology and human capital imports. Furthermore the all important sales/marketing links would be compared with the ramifications and phasing of production activities under less distorted structural adjustment conditions. Instead of being able to gather evidence on these points through a survey,¹⁴ it is attempted by statistical reasoning, drawing on secondary sources and being backed up by econometric estimates of factors shaping prices for Hong Kong's clothing exports to the EC.

5. Possible Determinants of Changes in Price Proxies: Analysis and Consequences for Spillovers

Following the above argumentation, this section attempts to specify more precisely to what extent quota rents, upgrading and Article 115 were actually shaping prices being charged for exports from Hong Kong to the EC and thus influencing export patterns as well as investment

¹⁴ A small survey (about 120 carefully selected clothing manufacturing companies exporting primarily to the EC) carried out in Hong Kong, which was to provide the necessary micro-underpinnings for this paper, unfortunately did not meet with the expected response.

strategies of Hong Kong clothing manufacturers. The following basic model was set up (see Table 9 for meanings of individual variables):

$$UV = f(Q, S, UP, 115, Y).$$

In this analysis unit values (UV) are used as proxies for the prices of imports. Crucial in this context is the specification of the denomination of unit values. Whereas US\$ per unit of import are used here, this differs from other investigations [see e.g. Faini, de Melo and Takacs, 1992] where ECUs are applied. However, using ECUs injects exchange rate variations into any analysis which extends beyond one time period. Specifically, possible "add-ons" accruing to exporters, like Hong Kong, like quota rents, upgrading and/or other factors increasing the price (e.g. decreased exports due to application of Article 115) can only be correctly captured if denominated in the currency they receive for their exports. Thus, in the case of Hong Kong it is deemed essential to value the time series in US dollars, since it is the currency relevant for sales contracts made with Hong Kong.¹⁵ The unit values were furthermore expressed in real terms,¹⁶ with each MFA product category (i.e. 4 through 8) being deflated with a product specific price index. The MFA product itself (i.e. the denominator) was expressed in the units stipulated by the MFA; for those products covered in this paper this meant actual numbers of shirts, blouses, pants, etc.

Quota utilization variables (Q) were calculated as actual number of imports in a given year from Hong Kong in percent of designated quota.¹⁷ They were specified in various functional forms, since, for instance, it was not known whether an increase in utilization rates by 5 percentage points at the 27 percent level would induce the same possible price effects as the same increase at the 90 percent level. Likewise a lagged version was included as well, since it

¹⁵ The HKGS was fixed at the rate of 7.8 HKGS/US\$ during the period.

¹⁶ The price index was based on German data [see Statistisches Bundesamt, various issues], using the information contained in the consumer price survey (all private households), which is disaggregated to a level allowing individual products to be identified. It is assumed the law of one price prevails, at least as concerns price trends over the relatively short period of time (1985-1989) being used in the analysis here. Average prices for the following products were selected to correspond to MFA categories 4-8: Cat.4 = T-shirt; Cat.5 = average for men's pullover (medium-high quality) and women's pullover (medium-lower quality); Cat.6 = average for men's pants (medium quality) and women's slacks (medium to high quality); Cat.7 = women's blouse; Cat.8 = average for men's shirt (cotton, medium-high quality) and men's shirt (cotton/MMF, medium quality). On average prices increased by about 6 percent over the period. The average prices were converted into index numbers, setting 1985 = 100.

¹⁷ The quotas were not expanded to include carrybacks, carryforwards or swings, hence actual utilization levels could well be higher than 100 percent (see Table 7). Rather than using a maximum possible limit including all possible additions, it was felt that a clothing manufacturer would tend to orient his behavior vis-à-vis the known parameters rather than those which additionally evolve in the course of the year in line with strong demand. Furthermore, there is a statistical problem to the extent, for instance, that the use of a carryback one year implies the non-possible use of a carryforward in the next year.

seemed possible that the impact of changes in quota utilization rates on prices may not - given existing contracts - feed through until the following year. The expected sign is (+).

The supply variable (S) was specified in terms of quota units per capita in the importing country. It was assumed that - relatively speaking - the more units which could be imported, the more open the economy and hence the lower the potential to profit from quota rents. The expected sign is (-).

The variable designed to capture (primarily) upgrading (UP) was a simple time trend.¹⁸ In light of the fact that quotas were generally highly utilized throughout the period (see Table 7), this variable could also be reflecting quota rent developments. The expected sign is (+).

The impact of Article 115 (115) was specified in various configurations since a priori considerations could not delineate which (if any) form would most likely capture their possible impact. It was, first of all, expected to be captured by the number of cases a given country applied to a given product in one year. This was specified in terms of cases against Hong Kong, other countries and all countries. These were then extended to encompass the duration of cases (in months) and a lagged version. The expected sign is (+).

Income variables (Y), i.e. per capita income, were included primarily to test for the possible existence of a positive correlation between income levels and unit values. Such a correlation would have revealed the existence of differing demand functions between EC countries with higher and lower income levels and implied the necessity to adjust the sample accordingly. The expected sign is (+).

In Table 10 unit values and the quota specifications are calculated in terms of actual number of pieces as specified in the EC MFA regulations.¹⁹ On a simple correlation basis it can be seen that only the supply and trend variables reveal the correct signs and prove to be significant. Furthermore, since there does not seem to be a consistent significant bias in the unit value with respect to income levels across the individual category specifications, the problem of differentiated demand by income levels does not have to be dealt with. On the country breakdown, Y's significant positive sign reflects to a large degree the trend component incorporated into time series of per capita income.

¹⁸ Generally speaking increases in unit values over time are interpreted as reflecting increases in quality levels [see e.g. Aw, Roberts, 1986].

¹⁹ It should be noted that calculations based on weights (that is tons of apparel instead of pieces) for unit values and quota utilization rates produce entirely different correlations since the conversion factors for transforming the pieces in the individual MFA categories into weights are only one-off averages and neither reflect changes over time nor country specific import structures. Obviously, however, weights are correct in those cases where MFA categories stipulate them (e.g. categories 1-3) or other textile - as opposed to apparel - products.

Distilling out the essence from these partial correlations in order to move to a pooled time-series multivariate OLS analysis, the model was respecified to include only the following variables in their final functional forms as listed in Table 9:

$$\text{LNUSV} = f(\text{LNLQNUM1}, \text{LNQNPOP}, \text{TREND}, \text{MONT115})$$

whereby the regressions are run with and without MONT115.

The following conclusions can be drawn from Tables 11 and 12 which contain the product and the country specific analyses. With respect to the regressions carried out across all EC countries for specific MFA categories (Table 10) the results are all significant (at least) at the 5 percent level. For the first five regressions (i.e. without MONT115) all significant coefficients have the correct sign. As could have been expected by the partial correlation coefficients the TREND and the supply variables (QNPOP) were most significant throughout, picking up (respectively) anywhere from 29 percent to 58 percent and 33 percent to 63 percent of the explained variance (based on the beta weights). Both these variables were significant in 4 of the 5 cases. That the quota utilization rate was only significant in 2 of the 5 categories tends to point to the fact that the degree to which quota rents can be extracted depends on other factors, for instance, on competing supplies from other sources. As concerns the overall explanatory power of these regressions (i.e. adjusted r^2 ranging from .24 to .56), the results can be considered to be quite acceptable given the fact that these regressions use pooled time-series data without inserting dummy variables for individual countries.

In expanding the approach to include the impact of Article 115 (MONT115) the above results do not basically change, that is Article 115 does not significantly contribute to additionally explaining price differences in the assumed manner.²⁰ This is somewhat surprising since Article 115 was used by the individual countries as a last resort to maintain competitiveness of high-priced domestic industries. As could be seen in Table 8 Article 115 was applied in all categories in the period 1985-1989, particularly by France and Ireland (see also Table 3). Perhaps the application of Article 115 really did not influence exporters vis-à-vis their pricing policies since there was no ex ante (official) knowledge of continuing of Article 115 restrictions into the coming year if they had prevailed in the past. What is conceivable, however, is that domestic traders took advantage of the situation and increased prices

²⁰ It was assumed that measures further restricting the supply of a given apparel product would - *ceteris paribus* - tend to induce higher prices in the country applying the measure. That reduced supplies are related to higher prices could be shown with the per capita quota variable: it was - across 4 of the 5 products - significantly negatively correlated with import unit values. This would seem to contradict Hamilton [1991, p. 382], who concludes that Article 115 "had little or no effect" since production from domestic or other EC sources would act as a substitute. As theoretically correct as this might be, this would only hold where such producers had the lead time to replace the goods stopped at the border. In other words the condition of instantaneous substitutability is probably not given.

accordingly. This would imply that the benefits of applying Article 115 would only partially accrue to Hong Kong entrepreneurs, whereas the rest would be captured in the EC.²¹ Furthermore, the variables used may not actually reflect what is happening in the market since we are lacking information on additional supplies and on whether Article 115 was imposed after prices had risen. But even testing a lagged version did not change the results.

While the results of the regressions across MFA categories within given countries are less satisfactory, the picture drawn above vis-à-vis the significance of the variables remains roughly the same (see Table 12). With the exception of LNLQNUM1 for Spain all significant coefficients exhibited the correct sign. It was in particular the TREND variable which was most often significant (i.e. in 5 of 8 regressions), with the largest values in those countries with tighter import restrictions, namely IRL, E and GR. The fact that the regressions for Italy and Germany, first and second among exporters of textiles and clothing to world markets, do not include any significant variables, requires an examination.

- In the case of Italy, quota utilization rates (i.e. as expressed in LNLQNUM1) are extremely erratic and seem to reveal a tendency for Hong Kong to be used as a fill-in (see Table 8). The fact that Italy has no major buying organizations in Hong Kong would underline this argumentation as well as the insignificant correlation between unit values and per capita income. This being the case, the unit values of Hong Kong's exports to Italy would seem to be less determined by the impact of the EC trading regime, than by characteristics of the Italian clothing demand. Nonetheless, the fact that the supply variable (i.e. as expressed in LNQNPOP) was significant in the simple correlation should not be overlooked. After all, over the categories 4-8 Germany's Hong Kong quotas were about 13 times larger in 1990 than Italy's.
- As concerns Germany, which is Hong Kong's largest single market for clothing exports outside the USA (see Table 5), the indications drawn from Table 10 would point in the direction of a significant regression. However, with quota utilization rates in all of the 5 categories close to or over 100 percent for the entire period and having been at such levels since the early 80's, the ability to increase quota rents and upgrade must be considered to have reached limits either dictated by market parameters on the demand side (price) and/or the ability to move into increasingly higher quality segments on the supply side. This must be viewed to be all the more the case in light of comments made by German buyers in Hong Kong [see Spinanger, Piatti, 1994]. There it was noted that the relationship between price and quality was too high for Hong Kong products and the only reason purchases were being effected in Hong Kong was due to the availability of quotas.

²¹ As noted above, Hamilton would deny this.

Despite the above, the regressions for those three countries with tight trade restrictions (E, GR, and IRL), be they MFA quotas or other non-tariff barriers, substantiate the significance of the TREND variable and hence the (primarily) upgrading tendencies. In the case of Ireland, the insignificance of the quota utilization variable can be attributed to developments over the time period which tended to lead to roughly the same or lower values at the end of the period than at the beginning. It must be underlined in this connection that (as noted above) while the volume of Ireland's MFA imports from Hong Kong increased by less than 3 percent in the 1985-1989 period, unit values increased by almost 165 percent, roughly twice the EC average.

To summarize, the above results point to significant increases in unit values induced by upgrading/quota rents and/or quota utilization increases. To the extent that such developments can be maintained through exports from Hong Kong, then entrepreneurs in the Crown Colony will continue to attempt to do so, and be less inclined to relocate or expand such production offshore.

Estimates of the magnitude of these quota rents for Hong Kong's exports to Germany and the United Kingdom in the second half of the 80's are presented in Table 13.²² For Germany (the United Kingdom) they range from 2.7 percent (3.7 percent) for category 4 (8) in 1989 (1990) to 22.10 percent (22.20 percent) for category 5 (8) in 1987 (1988). A comparison of quota rents and quota utilization rates also reveals that their levels but in particular their developments seem to be correlated.²³ Based on the above data and in line with the hypothesized connection between the size of the quota rents and the probability of maintaining production in Hong Kong, one would expect to find that knitted goods (e.g. categories 4 and 5) would tend to be kept in the Crown Colony. Indeed this is the case as knitted goods exports did indeed increase faster in the 80's than woven items. In the early 80's they were only roughly half the values of woven items whereas at the end of the period they comprised over 80 percent of woven goods.

In Table 14 an overview of Hong Kong's spillover investments around key Asian countries briefly captures how entrepreneurs reacted in the past to EC - inter alia - MFA non-tariff

²² Unfortunately such a time series was not available to be analyzed in connection with the regressions.

²³ Pearson correlation coefficients established significant relationships across all products in both countries (36 observations, 5 percent level). As concerns changes, the relationship was far more significant (26 observations, 1 percent level). The fact that the correlation for Germany was noticeably higher than for the United Kingdom (.87 vs. .67) could well reflect the impact of the unification process. That is, in 1990 (see Table 13 for large increases in quota rents and utilization rates) when there was a sudden shift in demand for 16 million new consumers caused clothing manufacturers and importers to scramble to procure the required apparel goods. Special increases in the Hong Kong MFA quotas (as well as those for the other MFA countries) were made, although Hong Kong received a relatively small share, perhaps this in itself was an additional bit of protectionism.

barriers as well as other protectionistic measures. They no doubt began in nearby Taiwan (just across the Straits), but also because of ties to those who had left China because of the revolution (e.g. the Shanghai connection). The estimates of the amount of exports influenced by Hong Kong companies should probably be considered to be conservative and do not include the investments in other parts of the world, including Europe.²⁴ While this evidence could not be deepened to more clearly specify why, how, and when, Hong Kong companies reacted, there is little doubt that the MFA did thus increase the pressure to self-destructive. Underlining this contention is the fact that - in almost all of the responses received to the survey carried out (but also backed up by other information) - the countries mentioned vis-à-vis direction of exports once internal barriers fall, were those in the EC where protection was presumed to be highest.

6. Textiles Trade in the Post-Marrakech Era

Ever since the rag trade began to be shunted off the GATT MFN track in the 50's, it was - given the importance of the T+C industries in both developed as well as developing countries - but a matter of time before trade in textile and clothing products had been delinked from GATT principles. "What was originally hoped to be a stable equilibrium between liberalism and protectionism now appears to [have been] a way-station on the road from one point to the other" [Aggarwal, 1985, p. 6]. From US quotas on Japanese exports of cotton products (1955), British restrictions on T+C goods from Hong Kong, India and Pakistan (Lancashire Pact, 1959), through the Short-Term/Long-Term Arrangement on Cotton Textiles (1961/1962) to the MFA (1974) and its three revampings (1978, 1982 and 1987), T+C producers became all the more influenced over time in their efforts to efficiently structure production.

The above analysis has shown - in an eclectic manner - how Hong Kong, especially vis-à-vis the EC, responded to and fared under the MFA. The small British Crown Colony was, after all, the largest exporter of clothing products at the time when the MFA came on stream in 1974 (see Table 1). Hong Kong, however, had only been able to maintain its top ranking through the mid 80's, thereafter being overtaken by Italy and then by China. By 1992, its initial share in clothing exports had been almost halved. Now that it has been agreed upon in the Final Act of the Uruguay Round of Multilateral Trade Negotiations signed in Marrakech in mid-April 1994 that the MFA will be phased out over a ten year period (see below), the question must be asked about what this will imply for Hong Kong in the coming years.

²⁴ A state-of-the-industry study (i.e. clothing, textiles and footwear industries) completed in 1992 for the Hong Kong Industry Department produced highly similar estimates based on more detailed information [Hong Kong Government, Department of Industry, 1994, p. A10].

In the past it was shown that Hong Kong profited for quota rents and upgrading across EC countries.²⁵ Not only was this revealed on the aggregate level, where the most restrictive countries (inter alia those applying most often for Article 115 protection) exhibited the largest increase in unit values, but also on a product category level, where the restrictiveness variable proved to be most significant. However, since imports from Hong Kong were limited to extremely low growth rates by the MFA framework with the EC (by 1992 imports from Hong Kong had fallen to 40 percent of their 1980 share of EC LDC imports), its entrepreneurs spread out across Asian countries and - more recently - particular into China, so that Hong Kong's direct plus indirect share of exports headed for ICs and accordingly to the EC did not really decline.

In the case of Hong Kong perhaps the major distortions emanating from the MFA led to clothing entrepreneurs raking in additional profits at the expense of consumers in ICs. But what will happen in the coming new era, when the MFA is phased out and MFA protection disappears so Hong Kong entrepreneurs can no longer profit from quota rents?

The new era in the field of trade in textile and clothing products was initiated in Marrakech in April, 1994, when - following agreement in Geneva in December, 1993 - the Final Act of the Uruguay Round of Multilateral Trade Negotiations (hereafter: Final Act), and therein the agreement covering T+C trade, was formally signed. As it stands now the Final Act is considered a major breakthrough because "for the first time a coherent set of rules [exists] which cover every aspect of world trade and which should ensure multilateral market access commitments are properly and efficiently enforced" [Sutherland, 1994, p. 8; underlining by author]. Such coherency and enforceability are indeed essential if the textiles trade is to be effectively brought under the GATT MFN principles in the proposed manner and within the agreed-upon time frame.

The agreement on T+C in the Final Act stipulates that textile and clothing products are to be integrated into GATT in 4 stages, based on the volume of imports in 1990²⁶ and including in each of the first 3 stages products from 4 overall groupings.²⁷ In Stage 1 (beginning in 1995/96) T+C products from each of the 4 groupings accounting for 16 percent of the imports (in volume terms) are integrated into GATT. The respective growth rates of the remaining

²⁵ This is not contending, however, that Hong Kong as a whole profited from the MFA regime. Although this could conceivably be the case, e.g. Trela and Whalley [1990] show Hong Kong loosing considerable amounts in a GE analysis of a removal of MFA quotas, reestimating what might have happened under free trade conditions is - given the above-described ramifications - a task requiring more than the usual heroic assumptions. See also Erzan et al. [1990] and Cable [1990].

²⁶ The year 1990 was set not for protectionistic purposes, but rather because agreement had been reached in this connection within the framework of the earlier "Dunkel-Paper" negotiations.

²⁷ The groupings are yarns/tops, fabrics, made-up textile products and clothing.

products are increased during this period by 16 percent. In Stage 2 (from 37th-84th month) another 17 percent of MFA products (based on 1990 shares) are integrated and growth rates of remaining products increased by 25 percent over Stage 1. In Stage 3 (from 85th to 120th month) a further 18 percent of the products must be integrated and the growth rates of remaining products (49 percent) increased by 27 percent over Stage 2. In Stage 4 (i.e. immediately following 120th month) the remaining 49 percent of the products are to be integrated, so that all textile and clothing products will have been incorporated into GATT [for specifics see GATT, 1993b, Final Act, Agreement on Textiles and Clothing, Article 2] and subject to MFN conditions.²⁸

While there is reason to contend that the negotiating countries were serious in their intentions to phase out the MFA,²⁹ questions must be raised about (1) the structure of the phase-out, (2) what this could mean with respect to the structure of 1990 trade and particularly (3) how net exporting countries - e.g. Hong Kong - and net importing countries - e.g. the EU - might react in light of past experience.

1. The structure of phase-out is determined solely by the MFA importing countries (e.g. the EU). Consultations with exporting countries (e.g. Hong Kong) are neither proposed let alone required. Given the above stipulated phase-out procedures, it is a foregone conclusion that the initial integration steps will include all those products where domestic industries are either non-existent or highly competitive - in other words where protection is redundant.³⁰ If it is indeed possible to follow such a path throughout the entire 10 year phasing-out period (i.e. bringing 51 percent of MFA products into the MFA framework), then the remaining 49 percent to be liberalized at once will contain all the highly protected, sensitive products. The agreement is thus possibly pregnant with the seeds of a new round of protectionism, to be born in some ten years hence. This danger can only be eliminated, or at least mitigated, by the ability of the to-be-created World Trade Organization (WTO) [see e.g. Langhammer, 1994] to ensure that the letter of the Final Act is adhered to. In other words, for Sutherland's above statement to hold true the WTO must be able to enforce effective sanctions against those trying to sustain protection beyond the deadline when the remaining 49 percent are liberalized.

²⁸ This does not preclude the use of safeguards as noted in Article 2 and in Article 6. These are, however, not only subjected to GATT XIX stipulations, but also to more liberal application during the phase-out period. It should also be noted (as mentioned earlier) that in a footnote to Article 6, paragraph 2 (safeguard measure restricted to a member of a customs union), Article 115 of the Maastricht Treaty is indirectly sanctioned.

²⁹ One example to underline this contention is the use of the word "promote" in the Final Act as opposed to "achieve" in the earlier "Dunkel-Paper". For "Quo Vadis" MFA see also Schöppenthau [1993].

³⁰ This has been substantiated by individuals involved in this process.

2. What leeway does the structure of a net importer's trade in 1990 give the policymakers in such a country to structuring the phase-out of the MFA? Table 15 exemplifies this issue for the EU's imports by countries/regions, disaggregated by product groups and major MFA groupings.³¹ If the EU selects the strategy of not initially liberalizing MFA groups I and II (i.e. protecting its most sensitive product groups) it could - based on the structure of imports from Non-ICs as a proxy for MFA countries - maintain this course throughout the entire 10 year period. Specifically: 45 percent of EU imports in volume terms (39 percent in value) from Non-ICs are in the very highly sensitive Group I.³² Assuming the EU follows such a strategy and adds on a necessary "made-up" product (e.g. Cat. 20), 56 percent of the imports from Hong Kong (in volume and value terms) would remain under quotas until after the 10 year phase-out period. This implies that Hong Kong could conceivably continue to profit from quota rents throughout the 10 year phase-out period. As can be seen in Table 16 Hong Kong's growth rates and product shares are above average in the most important clothing products. While the overall stepwise increase in growth rates would tend to reduce quota rents, the most severe impact will no doubt stem from the production potential which already was shown to have rapidly expanded in NON-ECRIM countries with easier access to the EU.
3. How could EU countries (i.e. Germany) and Non-ICs (i.e. Hong Kong) react to the above-described MFA phase-out scenario? As far as a large, relatively open EU member state is concerned, i.e. Germany, there is every reason to assume that the clothing industry will continue to expand its tapping of the offshore processing potential to the east and south of the EU. As can be seen in Diagram 2, by 1993 Germany's clothing imports from the NON-ECRIM countries surpassed those from the EC12 and - after being virtually equal in 1985 - are almost double those from the major East Asian suppliers. Likewise

³¹ This table has been constructed basically in line with the GATT aggregation of CCCN 4-digits into four major product groupings [see the 1984 GATT report on Textiles and Clothing in the World Economy, p. 188]; the corresponding HS 4-digits were allocated to the four major groupings as follows: Yarns/tops: 5004-6; 5105-10; 5204-7; 5306-8; 5401-6; 5501-11; 5604-5. Fabrics: 5007; 5111-13; 5208-12; 5309-11; 5407-8; 5512-16; 5606; 5801-4,5,6,8,11; 5901-3,6; 6001-2. Made-up articles: 5601-3, 7-9; 5701-5; 5805,7,9-10; 5904-5,7-11; 6301-9. Clothing: 6101-6117; 6201-6217.

To simplify the analysis, the 100's of EC tariff lines were aggregated to the main 96 MFA categories from #1 to #123. These were concorded to the above 4-digit HS classifications. This resulted in the following allocation of categories to the four major groupings:

Yarns/tops: 1, 22, 23, 41-43, 46-49, 54-56, 115. Fabrics: 2, 3, 32-38, 50, 53, 61-63, 65, 100, 117. Made-up articles: 9, 20, 39-40, 58-60, 66-67, 90, 91, 93-99, 101, 109-114, 118, 120, 123. Clothing: 4-8, 10, 12-19, 21, 24, 26-29, 31, 68-70, 72-78, 83-88.

While neither of the above reclassifications are perfect (e.g. some of the categories are based on CN disaggregations beyond the 6-digit HS data, the checks made did not point to any distortions which could significantly effect the results.

³² Since it is not the purpose of this paper to analyze all possible strategies, further constellations will not be discussed here. It might be noted, however, that if the EU decided to select products to be initially liberalized based on their value shares, the top 10 categories - amounting to almost 45 percent in value terms - could be excluded to achieve the necessary 51 percent in volume terms for those being liberalized. Six out of these ten categories are in group I or II.

shaping the interest in establishing production facilities closer to final demand is the fact that fashions are changing all the faster and quicker turnarounds are demanded. Supporting and of course profiting from this shift in production to locations "just over the border" is the German textile industry which - in the meantime - exports about 30 percent to these countries. Furthermore, since the basis for offshore production activities is an EC regulation (No. 636/82), the countries with a more outward-oriented adjustment strategy would like to shape its pending revision so as to ensure that the current relatively flexible framework is not deliberalized.³³ Finally, the German (but in essence also the Italian) textile machinery industry has strong vested interests in backing such relocation tendencies as the ability to quickly and effectively interface with the textile industry has proved to be of crucial importance in maintaining its own international competitiveness. Of course, to the extent that major shifts in textile machinery technology, from which German (or the European companies) would be first in line to receive deliveries, are not forthcoming, Germany's textile industry will need to expand foreign activities. And this expansion could well be accelerated by the MFA phase-out, as access to EU markets for the final product would no longer be restricted.³⁴

And how might a net exporter like Hong Kong react to the MFA phase-out? Compared with Germany the Hong Kong T+C industry could well be facing a more difficult constellation in the coming years. First of all, major German purchasers of clothing made in Hong Kong have already stated that when MFA quotas are eliminated they will shift a significant share of their sourcing to countries where similar quality levels can be obtained for lower prices. Only to the extent that these intentions embody sourcing in other Asian countries, could this imply that the Hong Kong connection in these countries might be tapped. Whatever, buyers of clothing from the EU will no longer be locked into Hong Kong sources because quotas cannot be obtained elsewhere. Secondly, quota rents will disappear as quotas are eliminated or rather their growth rates are initially increased. Since quotas and quota rents both distort production and trade, adjusting to market-driven supply and demand conditions may be more difficult for Hong Kong producers than for

³³ The regulation is being revised to establish the same offshore processing conditions across all EU countries. As it stands now it is Germany, but also France and the Benelux countries, which have permitted the most liberal interpretation of regulation 636/82, whereas Italy has severely restricted its use and Greece, Portugal as well as Spain already feel threatened by the current situation. Germany accordingly accounts for almost 70 percent of the offshore clothing imports, France and the Benelux countries for another 25 percent, but Italy for only 3 percent in 1992. At both extremes, the argumentation applied was often that tapping offshore processing was in the interests of the T+C industries.

³⁴ One of the factors mentioned as keeping German textile companies from investing abroad was the MFA [see discussion of survey in Spinanger, Piatti, 1994], which restricted exports of final products using German foreign subsidiaries' textile imports from entering the EU. Only the offshore option solves this problem and this - so far - has not been extensively tapped by German textile companies. Of course, once trade is fully liberalized the offshore option is no longer distorted by preferences.

German producers, protected from competition from without but not from within. Third, as is obvious from above, most Hong Kong entrepreneurs merely respond to the demand of purchasers from ICs and thus are only indirectly connected with market developments. While being a supplier to an industry is not a disadvantage in a quota-restricted sellers' market, under more free-market conditions only niches or product-specific monopolies provide similar protection. Clothing products manufactured in Hong Kong do not reveal such characteristics. Likewise but few of Hong Kong's clothing manufacturers are real sellers of their products.³⁵ Fourth, upgrading, a strategy both Hong Kong and German clothing producers followed over the past decade (albeit to some extent for different reasons), is a path which may prove all the harder to follow given the expansion of offshore production activities in Eastern Europe by German companies specifically in this connection.³⁶

Of course it is not only Germany which has been strengthening its T+C ties just beyond the EC-Rim. Italy, despite its (still) prevailing official reluctance to agree to a more liberal EU offshore production regulation (see above), increased its imports from the Non-EC-Rim countries even faster than Germany in 1993. Hence, assuming such trends continue, a rapid expansion of up-market clothing exports to the relatively closed Italian market - on a per capita basis it imports only one fourth of Germany's level³⁷ - would tend to become more difficult. Given these developments and tendencies in the USA, Hong Kong's largest market for clothing exports, to likewise source from just beyond (i.e. south) of its borders, the MFA phase-out is clearly shaped by factors external to Hong Kong's immediate economic environment. In light of this constellation and knowing that the degree of uncertainty about the future is - *ceteris paribus* - an increasing function of time, profiting now from remaining quota rents but at the same restructuring in line with demand-driven principles would be a likely path. Such a strategy implies today's or tomorrow's rents being reallocated to investments in Hong Kong, more in line with its high income levels, or outside of Hong Kong, perhaps as described above in Hong Kong's spillover investments around Asia but not influenced by any quota-based decisions. This

³⁵ To counter such weaknesses recent years some Hong Kong garment manufacturers have either established their own sales offices in the EC or begun marketing their products in other PACRIM countries.

³⁶ For instance, whereas in the period 1988-92 the German import unit values of men's shirts (Cat. 8) produced under offshore processing conditions increased by 29 percent for those from Poland, 36 percent for those from Romania, 49 percent for those from Bulgaria and 52 percent for those from the CSFR. Unit values for shirts from Hong Kong increased by 25 percent (all shirt imports: +17 percent). The unit values of the German fabrics exported to those countries for offshore processing were likewise above average but also above those for Hong Kong.

³⁷ In 1992, Italy imported clothing products worth about 75 US\$/person, whereas the figure for Germany amounted to 310 US\$/person; in the EU only Greece imported less.

already seems to be in process as simple correlation calculations between changes in the ECs T+C imports from Hong Kong and China reveal.

While the above only briefly reviewed how Germany and Hong Kong could be reacting during and after the winding down of the MFA, the extent of the issue can be highlighted by looking at the numbers: we are talking about roughly US\$ 35 bill. of exports in 1992 (14 percent of world T+C exports) and almost 600,000 directly-employed workers in these two countries alone.³⁸ Obviously reallocating the resources to be more efficient locations and/or industries will help to engender the sizeable welfare improvements foreseen by Sutherland [1994].

7. Summary and Conclusions

With Hong Kong's clothing exports having increased at about half the world's rate over the dozen years following 1980 (114 vs. 223 percent) it already yielded its top ranking to Italy in the mid 80's and in 1990 was then overtaken by China. Accordingly, its share in world exports dropped, amounting to 6.4 percent in 1992 as opposed to 11.4 percent at the beginning of the 80's. But Hong Kong's performance vis-à-vis the EC, with the manifold and multifaceted trade barriers erected and upheld by the Community, was far lower. Growth rates amounted to less than 30 percent of the EC's imports from all LDCs (242 percent) and its share in this group of countries fell by 60 percent to just below 13 percent. Nonetheless, the clothing manufacturers in Hong Kong seem to have adapted to the situation in a manner similar to the way they mastered establishing the "rag trade" in Hongkong after World War II. That is, whereas back then they migrated with the industry to Hong Kong, this time they allowed the industry to migrate or rather managed the migration of the industry. Consequently, it is estimated that the actual amount of world trade in clothing attributable to Hong Kong manufacturers is at least 2 to 3 times larger than its 8.2 percent share in 1990 - estimates which could be substantiated in this paper.³⁹

Hong Kong's clothing producers would, of course (see introductory remarks), have scaled down the scope of their production activities in Hong Kong even without the quotas imposed upon them by the EC and other industrialized countries. However, given the system of quotas in the MFA framework and the relatively high degree of quota utilization which prevailed throughout the 80's for Hong Kong's major clothing export items to EC countries, Hong Kong entrepreneurs could not only profit from domestic quota rents and upgrading (which were

³⁸ In the EC (1992) there were over 2 million employed in the T+C industries; T+C exports amounted to 92 bill. US\$ (37 percent of world T+C exports).

³⁹ See also Hong Kong Government, Dept. of Industry [1994].

picked up by the highly significant trend variable), they could probably also tap rents in these countries to which their facilities had migrated and established operations. Throughout Asia the establishment of such operations was facilitated by the ubiquitous overseas Chinese connections. Furthermore, by taking advantage of the differential impact of protectionistic measures between the individual EC countries (e.g. the relative supply as expressed by the significant quota/capita variable) they could additionally influence the degree to which rents could be engendered and could no doubt take this into consideration in establishing offshore operations. Needless to say the easiest step taken offshore in recent years has been over the border into Shenzhen, then further into Guangdong Province and now throughout or beyond the Pearl River delta. Overall it was noted that Hong Kong entrepreneurs are estimated to be responsible for about 65 per cent of garment exports coming out of China.⁴⁰

Unfortunately hard evidence on the impact (i.e. at the microlevel) of these offshore facilities (be they of majority/minority interest, contractual nature or within the extended family) could not be collected. This would have allowed analyses to be made of the efficiencies of enterprises offshore and back in Hong Kong, in order to determine to what degree (if any) efficiency gains were realized offshore and efficiency losses were being incurred by maintaining quota-induced production in Hong Kong. Despite this failure, the evidence gathered leaves little reason to doubt that the efforts taken by these companies were accompanied by a transfer of capital, know-how and essential international contacts which at least could be interpreted as accelerating what might have happened under free trade conditions. While learning by doing it alone may be seen as embodying certain endogeneous benefits, being able to quickly and effectively tap the body of knowledge amassed in Hong Kong about producing and selling clothes to the world is a precious input in becoming competitive faster.

There is another side to this story, however, as with the rents made in Hong Kong large parts of an industry are being maintained, which would no longer be competitive once MFA disappears in 10 years time. Statements (made by German buyers [see Spinanger, Piatti, 1994]) to the effect that up to 50 percent of the demand for products now coming out of Hong Kong would be shifted to Southeast or perhaps even South Asia, give some indication of the size of the massive restructuring which must take place in the coming years. But yet another danger, already having its impact on the allocation of clothing production facilities - albeit in a moderate manner - cannot be neglected, even if it is downplayed in Hong Kong, namely the path taken by an ever increasing number of European firms - particularly from Germany - establishing offshore processing or other contractual links to companies in Eastern European countries. In this connection the propensity of entrepreneurs in Hong Kong to consider

⁴⁰ See e.g. Chan [1992].

production facilities in Eastern Europe has so far been negligible. But the potential of Eastern Europe is reality and already being tapped. It is also enhanced by the simple fact that close, quick connections to textile producers in Europe are ensured - essential elements in marketing and selling high-quality fashion items that have short lead times. It thus remains to be seen whether with the winding down of the MFA, due to be initiated in 1995, Hong Kong will effect the switch from "living off" (an exaggeration, no doubt) of MFA rents, to making it in a world where buyers are no longer "stuck" to certain countries (and producers) just because they have the quotas for the products in demand.

For sure, if Hong Kong reacts as quickly and flexibly as in the past [see e.g. Riedel, 1974] there is probably little reason to believe that those entrepreneurs, who helped create additional pressures on the European clothing industry over the past decades, will not take the essential steps in the future to maintain their dominating role in dealing with clothes. Whether this means venturing into Eastern Europe, so as to tap the competitive potential they seem to ignore today, is an open question, but - given prior tendencies to invest where Chinese communities existed - will probably not prevail. But they are actually already doing this in an Asian sense, that is the (direct or indirect) activities of Hong Kong entrepreneurs - aside from their massive involvement in China - in Vietnam, Laos and Cambodia can be viewed as "ersatz" for becoming involved in Eastern Europe.

It remains to be seen, however, whether this path will be able to dovetail with the above-described strategies of European clothing manufacturers/importers, who in the meantime have begun to appreciate the short distances to production locations just to the east and south of the EU. While it is true that today's transportation systems have significantly cut lead times as well as shortened business travel and state-of-the-art telecommunications infrastructure now permits instantaneous global interfacing, there comes a point where turn-around time and transport cost differentials act as true natural trade barriers. These are furthermore exacerbated by the degree of preferential access granted to the former socialist economies to the east of the EU promotes OPT. But even in a Europe without trade barriers would a net exporter of clothing like Hong Kong have increasing difficulty competing in the ever faster moving European fashion markets if - aside from sizable unit wage differentials - European-made textiles and close, quick interaction with offshore production locations are deemed essential inputs.

To conclude that fulfilling the manifest destiny of a common internal European market, extending from the Atlantic to the Urals, presages a rapid downfall of major Asian clothing exporters could possibly be somewhat hasty. Specifically: Sweden most recently (since August, 1991) completely liberalized its foreign trade with T+C products.⁴¹ As a result the purchasing of clothing products abroad was undistorted by non-tariff barriers. Given this option, Sweden rapidly expanded its purchases from East Asian suppliers (see Diagram 3),⁴² increasing their share by roughly the same amount as the share imports from the EU decreased. Albeit it was Portugal and Greece (within the EU) which drastically lost market shares, rather than high-priced countries like Germany, Italy or France. In other words, it was a shift of sourcing of lower-priced products to East Asia and not those in the higher-priced niches into which Hong Kong aims to move. The potential danger emanating from the non-EU rim countries for countries like Hong Kong would thus still seem to dominate T+C trade flows in the post-Marrakech era.

⁴¹ The irony of Sweden's newly evolving trade structure is that should it join the EU it will have to reinstate quotas based on "historical values" in order to phase them out in line with the EU's yet-to-be-concocted MFA liberalization scheme [see Daines, 1994, p. 117-119].

⁴² While it was imports from China which increased massively imports from Hong Kong decreased less than Sweden's total clothing imports; these two countries account for almost 90 percent of Sweden's imports from East Asia in 1993.

Appendix

Tables and Diagrams.....	A1-A19
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Table 1 - Textile^a and Clothing^b Exports of Selected ICs and DCs: 1965-1992 (Shares^c, Rankings^d and Growth Rates^e)

	1965	1973	1980	1985	1992	Growth rates ^f	
						1973-80	1980-92
Textiles and Clothing							
China	2.5 (11)	2.9 (12)	4.3 (11)	6.9 (3)	10.2 (1)	23.0*	16.2*
Italy	10.3 (2)	8.5 (2)	9.0 (2)	9.5 (1)	9.1 (2)	17.5*	8.2
Germany	8.5 (5)	11.9 (1)	9.5 (1)	8.4 (2)	9.0 (3)	12.8	7.6
Korea, Rep. of	0.5 (23)	3.6 (11)	5.3 (6)	6.6 (4)	6.1 (4)	23.3*	9.3*
Hong Kong	4.3 (10)	5.5 (7)	5.8 (5)	6.4 (5)	4.9 (5)	17.3*	6.7
Taiwan	0.7 (21)	3.8 (10)	4.4 (10)	5.7 (6)	4.7 (6)	18.7*	8.9*
France	9.3 (3)	8.2 (4)	5.9 (3)	4.6 (8)	4.7 (7)	11.2	6.0
USA	6.8 (7)	4.5 (9)	5.2 (7)	3.1 (11)	4.1 (8)	18.8*	5.0
Belgium/Luxembourg	7.2 (6)	6.8 (5)	4.7 (9)	3.5 (9)	3.6 (9)	10.5	5.7
United Kingdom	8.8 (4)	5.7 (6)	5.2 (8)	3.5 (10)	3.4 (10)	14.9	5.7
Japan	13.8 (1)	8.4 (3)	5.8 (4)	5.4 (7)	3.1 (11)	10.4	2.7
Total ^g	72.7	69.9	65.8	63.6	62.8	15.3	7.8
World ^h	10.30	33.27	95.59	105.55	247.60	16.5	8.3
Textiles							
Germany	8.6 (4)	13.7 (1)	11.3 (1)	10.7 (1)	11.9 (1)	11.0	6.8*
Italy	8.2 (5)	6.9 (5)	7.4 (3)	8.4 (3)	8.7 (2)	15.4*	7.7*
China	2.7 (10)	3.4 (9)	4.5 (8)	6.6 (4)	7.4 (3)	19.9*	10.7*
Korea, Rep. of	0.4 (23)	2.0 (16)	4.0 (9)	4.5 (8)	7.0 (4)	25.9*	11.6*
Taiwan	0.6 (20)	2.5 (12)	3.2 (11)	4.4 (9)	6.5 (5)	18.0*	12.8*
Japan	14.5 (1)	11.0 (2)	9.2 (2)	8.8 (2)	6.1 (6)	11.2	2.7
Belgium/Luxembourg	7.6 (6)	7.6 (4)	6.4 (5)	5.3 (5)	5.5 (7)	11.2	5.1
France	9.3 (3)	7.6 (3)	6.1 (6)	5.1 (6)	5.4 (8)	10.6	5.1
USA	6.8 (8)	5.5 (8)	6.7 (4)	4.5 (7)	5.0 (9)	17.4*	3.8
United Kingdom	9.9 (2)	6.6 (6)	5.6 (7)	3.8 (10)	3.7 (10)	11.5	2.8
Hong Kong	1.8 (13)	2.0 (13)	1.6 (15)	1.8 (14)	1.9 (15)	10.6	7.8*
Total ^g	70.5	68.9	66.0	63.8	69.1	13.4	6.9*
World ^h	7.77	22.12	54.99	56.35	116.80	14.1	6.5
Clothing							
China	2.0 (12)	2.1 (12)	4.0 (8)	7.3 (4)	12.8 (1)	32.3*	21.4*
Italy	16.6 (1)	11.7 (2)	11.2 (2)	10.8 (2)	9.4 (2)	19.7	8.5
Hong Kong	11.9 (2)	12.4 (1)	11.4 (1)	11.7 (1)	7.6 (3)	19.0	6.5
Germany	8.3 (5)	8.2 (4)	7.0 (4)	5.8 (6)	6.4 (4)	17.9	9.3
Korea, Rep. of	0.8 (17)	6.7 (5)	7.2 (3)	9.0 (3)	5.2 (5)	21.6*	7.2
France	9.5 (4)	9.3 (3)	5.6 (6)	3.9 (7)	4.0 (6)	11.9	7.2
USA	6.7 (6)	2.6 (11)	3.1 (9)	1.5 (15)	3.2 (7)	23.8*	10.6*
Taiwan	0.8 (18)	6.4 (6)	5.9 (5)	7.1 (5)	3.1 (9)	19.2	4.5
United Kingdom	5.5 (8)	3.9 (8)	4.6 (7)	3.1 (8)	2.8 (12)	23.1*	5.7
Belgium/Luxembourg	5.9 (7)	5.1 (7)	2.4 (10)	1.5 (12)	1.8 (16)	8.4	7.4
Japan	11.5 (3)	3.3 (10)	1.2 (16)	1.5 (14)	0.5 (38)	4.1	2.3
Total ^g	79.4	71.7	63.8	63.1	56.9	18.4	9.2
World ^h	2.53	11.15	40.60	49.20	130.80	20.4	10.2

^aSITC 65, Rev. 2. - ^bSITC 84, Rev. 2. - ^cShare of world trade. - ^dRanking based on values in 1992; covering all textile and clothing exporting countries; coverage dictated by top 11 countries exporting textiles and clothing in 1992; ranking in given year in (.). - ^eAverage annual growth rate. - ^fA "*" designates an above average growth rate. - ^gSum of shares of listed countries. - ^hIn bill. US\$.

Source: Own calculations based on special UNCTAD tabulations and GATT [1993a].

Table 2- Overview of MFA I-IV Non-Tariff Barriers for Textile and Clothing Exports from HKG and Selected LDCs to EC and USA: 1970s and 1980s

LDC ^a	USA ^b				EC ^c			
	I	II	III	IV	I	II	III	IV
HKG	x	x	x(49)	x(63)	16/3	46/1	40/6	31/4
MAC	x	x		x(24)	1/3	23/6	25/12	20/7
PRC	-	x(13)	x(59)	x(66)	3/10	12/5	18/32	22/23
INO	-	-		x(34)	-/-	3/-	14/5	14/5
MAL	x	x	26	39	1/4	10/2	9/4	7/-
THA	x	x	x(29)	x(37)	-/-	3/-	14/5	14/5
MAU	x	x	15	19	-/-	-/-	-/-	-/-
SRI	x	x	24	25	-/-	5/1	4/2	5/3
INA	x	x	x(16)	x(17)	5/3	14/6	14/3	11/-
PAK	x	x	x	x(9)	3/-	9/5	7/7	8/1
ROC	x	x	x(35)	x(64)	-/-	-/-	38/9	39/5
ROK	x	x	x(67)	x(62)	16/3	45/6	46/8	41/3

^aHKG = Hong Kong; MAC = Macau; PRC = People's Republic of China; INO = Indonesia; MAL = Malaysia; THA = Thailand; MAU = Mauritius; SRI = Sri Lanka; INA = India; PAK = Pakistan; ROC = Republic of China; ROK = Republic of Korea. - ^bx means bilateral arrangement in practice; the figure in () represents the number of quotas on products. - ^cThe number to the left of "/" represents global EC quotas. The number to the right represents quotas in individual EC member states. I-II cover EC9; III covers EC10; IV covers EC12.

Sources: GATT [1984, Tables 3.2., 3.4., 3.9. and 3.12.]; other (unofficial) GATT documents; plus own calculations based on US Dept. of Commerce [1989] and EC Official Journal [various issues].

Table 3- Article 115 Cases by Major MFA Categories: 1981-1991

MFA-Categories ^a	Initiating EC-Countries ^b								Affected Non-EC Countries ^c								Total Cases
	F	IRL	I	BNL	UK	E	D	DK	HKG	PRC	ROK	ROC	EE	SA	SEA	NES	
1. Cotton yarns	14		3	5	3					12			2	3		8	25
2. Woven fab.(C)	64		62		6	3	5		1	25	30	5	20	28	16	15	140
3. Woven fab.(MM)	33		7	2	10	5				10	10	9	5	9	14		57
4. T-Shirts	7	36		1	1	6			10	5	2	3	1	11	11	8	51
5. Pullovers	13	33		1					13	1	10	16	2		1	4	47
6. Trousers	3	16		9	5	1			15	1		3	5		2	8	34
7. Blouses (WG)	18	27				3			16	2	5	2		14	5	4	48
8. Shirts, woven (MB)	42	42	1	4	4				26	2	7	8	8	18	7	17	93
15. Coats (WG)	13	7		3	7				4	3	1		15	2	1	4	30
21. Anoraks	13	24							14	2	14	6			1		37
26. Dresses (WG)	11	8		9	5				8			8	10	2	3	2	33
Other ^d	104	84	11	24	15	4	1	1	55	65	26	31	36	13	7	11	244
Total	335	277	84	58	56	22	6	1	162	128	105	91	104	100	68	81	839

^a Abbreviations used: C = cotton; MM = man-made fibers; WG = women's/girls'; MB = men's/boys'.

^b Abbreviations used: F = France; IRL = Ireland; I = Italy; BNL = Benelux countries; UK = United Kingdom; E = Spain; D = Germany; DK = Denmark.

^c Abbreviations used: HKG = Hong Kong; PRC = People's Republic of China; ROK = Republic of Korea; ROC = Republic of China; EE = Eastern Europe; SA = South Asia (India, Pakistan, Sri Lanka); SEA = Southeast Asia (Indonesia, Malaysia, Philippines, Singapore, Thailand)

^d Comprises 40 MFA categories, whereby 92 of these Article 115 cases are concentrated in just 5 categories, i.e. cat. 10 (gloves): 17 cases; cat. 13 (undergarments): 22 cases; cat. 16 (suits, etc. MB): 15 cases; cat. 19 (handkerchiefs): 17 cases; cat. 24 (nightwear): 21 cases.

Source: Own calculations based on data provided by the Wirtschaftsvereinigung Groß- und Außenhandel (Hamburg) and from EC Official Journal.

Table 4 - Article 115 MFA Cases by Initiating and Affected Countries: 1981-1991

	Initiating EC-Countries ^b								
	F	IRL	I	BNL	UK	E	D	DK	Total
Affected Non-EC^a Countries									
HKG	38	112	1	5	1	5			162
PRC	77	7	19	6	10	6	3		128
ROK	38	34	14	4	7	5	2	1	105
ROC	36	27	1	12	10	4	1		91
EE	38	10	17	22	16	1			104
SA	32	39	29						109
SEA	39	24		3	1	1			68
Other	37	24	3	6	11	-		-	81
Years									
1981	32	23	6	15	8		1		85
1982	31	21	4	16	4		1		77
1983	33	47	8	15	14		4		121
1984	22	43	7	8	14				94
1985	30	31	7	2	11				81
1986	44	30	3		3				80
1987	39	38	7	1	1			1	87
1988	28	28	10	1					67
1989	51	11	10			1			73
1990	22	4	12			5			43
1991	2	1	10		1	16			31
Total	335	277	84	58	56	22	6	1	839

^aFor abbreviations see footnote (c) in Table 3. - ^bFor abbreviations see footnote (b) in Table 3.

Source: See Table 3.

Table 5 - Hong Kong Textile (SITC 65) and Clothing (SITC 84) Exports by Major Partners - Shares and Growth Rates 1980-1992

Partner	Shares (%)						Growth rates (%)	
	1980	1985	1987	1989	1990	1992	1980/89	1989/92
TEXTILES								
WORLD (mill.US\$)	909	998	2050	2133	2136	2226	9.94	1.43
USA	13.28	14.22	9.79	9.37	8.58	9.49	5.76	1.59
CANADA	1.41	4.11	2.71	2.56	2.03	2.08	17.48	-2.78
JAPAN	1.86	1.34	1.22	1.79	1.22	0.90	9.48	-19.32
EC12	17.32	10.01	7.69	6.03	6.51	3.70	-2.22	-14.01
BNL	0.93	0.42	0.29	0.24	0.31	0.41	-5.21	20.16
GERMANY, W.	2.08	1.29	0.97	1.02	0.99	1.00	1.55	0.92
FRANCE	1.44	0.47	0.51	0.67	0.93	0.52	0.98	-6.47
ITALY	1.54	0.63	0.46	0.30	0.38	0.40	-8.42	12.20
UNITED KINGDOM	10.90	6.74	5.02	3.40	3.47	2.20	-3.41	-12.30
EFTA	1.65	1.26	0.94	0.64	0.47	0.56	-1.00	-3.00
AUS + NZL	12.82	9.42	5.60	3.67	2.62	3.16	-4.33	-10.00
REST	51.65	59.65	72.05	75.93	78.57	75.56	14.75	1.28
CLOTHING								
WORLD (mill.US\$)	4638	5728	8360	9199	9255	9892	7.91	2.72
USA	34.83	55.30	49.10	47.54	46.94	48.14	11.70	3.15
CANADA	2.86	4.00	3.70	4.17	4.00	4.00	12.53	1.12
JAPAN	3.10	3.75	5.68	6.61	5.69	3.92	17.39	-14.91
EC12	39.28	23.23	28.49	28.72	30.79	30.62	4.21	4.90
BNL	3.77	2.11	2.72	2.48	2.79	2.94	2.99	8.47
GERMANY, W.	18.38	10.16	13.24	12.83	14.26	13.28	3.68	3.64
FRANCE	1.16	0.96	1.26	1.35	1.61	1.71	9.74	10.92
ITALY	0.64	0.39	0.71	0.72	0.73	1.01	9.33	14.31
UNITED KINGDOM	13.75	8.61	9.33	10.12	10.03	10.20	4.29	2.71
EFTA	8.02	6.22	7.18	6.55	6.34	7.12	5.51	2.00
SWITZERLAND	2.97	2.36	2.80	2.32	1.93	1.63	4.98	-8.79
SWEDEN	2.54	1.96	2.04	1.93	2.04	2.04	4.68	4.31
AUS + NZL	1.63	1.64	0.96	1.08	0.91	0.74	3.11	-9.29
REST	10.29	5.85	4.89	5.33	5.34	5.46	0.31	3.28
Note: REST = World - (USA+CAN+JPN+EC12+EFTA+AUS+NZL). It covers primarily LDCs.								

Source: Own calculations based on COMTRADE computations.

Table 6 - EC12 Clothing Imports (SITC 84) by Major Countries and Groupings - Shares and Growth Rates 1980 - 1992

Partner	Shares (%)						Growth rates (%)	
	1980	1985	1987	1989	1990	1992	1980/89	1989/92
WORLD (mILLUS\$)	20484	17735	34550	35226	50627	63649	7.18	18.53
USA	2.12	0.69	0.61	0.80	1.07	1.19	-3.76	35.18
CANADA	0.32	0.05	0.06	0.05	0.04	0.04	-12.60	11.44
JAPAN	0.56	0.42	0.39	0.37	0.33	0.29	2.44	3.96
EC 12	53.31	52.87	49.77	47.19	46.27	44.04	5.74	15.82
BENELUX	6.78	6.86	6.25	6.35	6.39	6.26	6.39	17.97
GERMANY, W.	8.06	7.83	7.29	7.75	7.48	7.08	6.71	15.01
FRANCE	7.24	5.63	4.94	5.05	5.34	5.10	2.98	18.95
ITALY	17.10	18.86	17.26	14.76	14.91	12.59	5.44	12.41
UK	4.95	3.96	3.75	3.68	3.75	3.93	3.70	21.16
EFTA 6	4.42	3.95	3.47	3.20	2.90	2.62	3.39	10.92
SWITZERLAND	1.09	0.96	0.89	0.98	0.93	0.82	5.86	11.60
E. EUROPE	4.93	4.42	3.73	3.61	3.74	5.44	3.53	37.56
DEVELOPING	32.83	36.09	40.75	44.95	44.93	46.49	10.20	21.39
BANGLADESH	0.01	0.08	0.20	0.49	0.59	0.98	74.75	50.01
CHINA	1.39	2.26	3.15	4.07	5.17	7.07	20.76	42.47
HONG KONG	10.12	8.63	7.93	7.93	6.90	5.92	4.31	7.55
INDIA	2.15	1.92	2.12	2.70	2.97	2.61	9.93	17.30
INDONESIA	0.16	0.21	0.39	0.93	1.13	1.85	30.19	49.19
KOREA REP	4.81	4.37	5.02	3.73	2.58	2.00	4.21	-3.66
MACAU	1.31	1.34	1.26	1.20	1.07	0.87	6.18	6.50
MALAYSIA	0.44	0.39	0.57	0.86	0.98	1.19	15.36	32.08
PAKISTAN	0.26	0.59	0.72	0.87	1.03	1.10	22.47	28.03
PHILIPPINES	0.77	0.62	0.73	0.77	0.66	0.66	7.13	12.70
SINGAPORE	0.78	0.28	0.50	0.58	0.52	0.53	3.70	15.35
SRI LANKA	0.21	0.39	0.44	0.46	0.42	0.65	16.84	33.63
TAIWAN	1.90	1.82	1.99	1.56	1.11	1.05	4.84	3.95
THAILAND	0.56	0.79	1.26	1.65	1.56	1.54	20.90	15.77
TURKEY	0.51	3.33	4.82	5.55	5.82	5.85	39.84	20.65
YUGOSLAVIA	2.48	3.64	3.52	4.05	4.16	2.55	13.19	1.58
MAURITIUS	0.39	0.67	0.88	0.97	0.97	0.90	18.68	15.61
MOROCCO	0.65	1.44	1.87	2.38	2.70	2.62	23.87	22.87
TUNISIA	1.81	1.96	1.98	2.18	2.54	2.67	9.37	26.84
BRAZIL	0.27	0.24	0.18	0.17	0.15	0.20	1.65	25.12
MEXICO	0.06	0.02	0.03	0.06	0.05	0.05	8.61	11.61
OTHER DEVG	1.80	1.10	1.20	1.02	1.05	2.75	-1.34	65.16

Source: Own calculations based on COMTRADE computations.

Table 7 - Origin of EC/EFTA Clothing Imports (SITC 84): Shares^a and Growth Rates 1980-1992 for Hong Kong and Selected LDCs

Importer	Shares (%)						Growth rates (%)	
	1980	1985	1987	1989	1990	1992	1980/89	1989/92
EC12								
DEVELOPING ^b	6724.7	6400.7	14078.9	17079.3	22547.9	29588.8	10.44	19.36
HONG KONG	30.8	23.9	19.5	17.7	15.5	12.7	4.31	7.56
CHINA+MACAU	8.2	10.0	10.8	11.5	13.3	17.1	15.46	35.86
MALAYSIA+THAILAND	3.0	3.3	4.5	5.6	5.7	5.9	18.70	21.86
INDONESIA	0.5	0.6	1.0	2.1	2.6	4.0	30.69	49.19
MAURITIUS+SRI LANKA	1.8	2.9	3.3	3.2	3.1	3.4	18.06	21.95
BNL								
DEVELOPING ^b	806.2	647.1	1377.4	1601.6	2126.5	2751.1	7.60	19.28
HONG KONG	23.5	20.0	17.2	15.3	14.9	16.6	2.90	23.01
CHINA+MACAU	5.9	6.6	7.2	8.2	10.7	9.9	11.89	27.65
MALAYSIA+THAILAND	3.1	3.4	4.6	7.1	7.4	5.9	18.32	12.39
INDONESIA	0.8	1.3	2.4	4.7	5.4	6.7	31.53	34.91
MAURITIUS+SRI LANKA	1.7	1.8	1.9	1.9	1.9	1.5	9.34	11.55
GERMANY, W.								
DEVELOPING ^b	3246.5	3196.4	7004.0	7822.4	10709.9	12921.2	10.09	17.72
HONG KONG	29.8	21.1	18.0	16.2	14.1	12.1	3.04	7.32
CHINA+MACAU	7.6	9.1	10.1	12.1	14.9	17.9	16.18	34.76
MALAYSIA+THAILAND	2.5	2.8	3.6	4.1	3.9	4.2	16.59	18.98
INDONESIA	0.2	0.5	0.8	1.5	1.8	2.9	37.86	47.80
MAURITIUS+SRI LANKA	1.2	2.1	2.0	2.0	1.9	2.4	16.96	27.32
FRANCE								
DEVELOPING ^b	753.5	883.0	2168.7	2846.2	3936.4	5442.2	15.63	21.27
HONG KONG	9.0	8.3	6.4	5.3	4.7	4.3	9.31	15.99
CHINA+MACAU	16.9	15.6	14.1	11.1	10.5	14.0	10.68	34.07
MALAYSIA+THAILAND	5.0	3.8	5.5	7.0	6.5	6.3	20.17	19.88
INDONESIA	0.6	0.6	0.7	2.1	2.3	3.9	34.45	51.48
MAURITIUS+SRI LANKA	3.7	6.6	8.1	7.0	5.9	5.2	24.38	12.50
ITALY								
DEVELOPING ^b	246.0	238.3	657.3	840.7	1050.9	1965.1	14.39	33.17
HONG KONG	12.1	10.6	8.8	8.2	6.2	5.2	9.67	14.32
CHINA+MACAU	14.0	26.1	25.2	26.1	27.9	27.6	21.97	38.11
MALAYSIA+THAILAND	5.8	5.1	5.6	8.1	9.6	8.6	18.99	35.67
INDONESIA	1.1	0.2	1.2	2.2	2.3	4.3	22.96	66.86
MAURITIUS+SRI LANKA	4.5	7.3	4.4	4.9	4.8	3.4	15.60	17.31
UNITED KINGDOM								
DEVELOPING ^b	1400.7	1176.2	2275.8	3074.2	3544.8	4534.8	8.71	12.16
HONG KONG	52.7	47.3	39.9	37.6	34.7	30.5	5.09	6.18
CHINA+MACAU	3.9	4.7	5.1	4.3	4.9	7.4	10.43	35.92
MALAYSIA+THAILAND	2.2	3.3	5.0	6.0	6.9	7.0	21.77	19.98
INDONESIA	0.8	0.6	0.9	2.3	3.2	5.5	22.70	52.64
MAURITIUS+SRI LANKA	2.0	2.2	3.3	3.3	4.2	4.3	15.55	23.99
EFTA								
DEVELOPING ^b	888.9	931.8	1985.0	2176.5	2674.9	3108.9	10.32	12.37
HONG KONG	46.2	44.2	34.8	32.5	30.2	21.3	6.24	-2.18
CHINA+MACAU	8.1	9.8	14.7	17.4	19.7	35.3	20.32	42.65
MALAYSIA+THAILAND	5.2	4.7	5.9	8.4	7.9	7.0	16.47	6.05
INDONESIA	0.5	1.1	1.6	2.0	2.2	2.6	30.07	24.01
MAURITIUS+SRI LANKA	0.9	1.1	1.0	1.2	1.5	1.3	14.32	15.84
SWITZERLAND								
DEVELOPING ^b	239.6	312.1	628.6	639.8	749.4	845.3	11.20	9.28
HONG KONG	60.8	50.6	42.3	39.8	37.4	16.6	6.42	-18.12
CHINA+MACAU	4.7	7.0	11.1	14.0	15.1	39.8	25.92	55.24
MALAYSIA+THAILAND	1.9	2.4	4.5	6.9	6.7	6.8	28.59	9.41
INDONESIA	0.1	0.3	0.5	1.3	1.6	1.8	56.27	23.42
MAURITIUS+SRI LANKA	0.4	0.9	1.1	0.8	1.0	0.9	19.32	15.79

^a% of imports from developing countries. - ^bMill. US\$.

Source: Own calculations based on COMTRADE computations.

Table 8 - Quota Utilization Rates (%) for Hong Kong's Main MFA Categories^a to EC Countries and Article 115 Cases^b: 1981-1991

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Category 4											
D	105.8	99.7	95.9	101.0	101.3	104.4	104.3	105.8	100.5	111.1	106.9
UK	100.9	93.0	92.8	90.5	88.7	105.9	103.5	107.0	103.3	108.2	104.2
BNL	103.3	98.8	85.4	94.4	85.4	106.3	98.3	92.7	97.1	101.9	100.3
DK	104.7	88.9	89.7	100.8	102.1	103.2	92.7	88.0	94.6	79.6	104.1
F	109.0	89.6	94.6	99.1	99.2	99.9	104.9	99.0	104.4	108.4	99.1
I	90.2	36.0	37.2	53.7	38.1	99.1	75.2	78.9	61.6	40.9	67.0
IRL	103.4	100.0	96.5	95.9	106.2	85.0	100.7	109.0	107.4	106.3	100.0
GR	95.7	78.9	87.2	35.6	6.8	21.1	33.3	40.5	52.9	55.7	95.4
E						96.4	109.7	103.1	115.0	106.5	109.7
P											26.9
Category 5											
D	100.2	98.9	105.9	101.3	104.2	103.3	106.1	104.6	104.7	112.2	109.1
UK	104.9	97.3	104.6	99.3	90.9	106.3	105.2	104.5	97.0	105.0	100.7
BNL	93.8	102.3	105.0	90.8	93.5	102.5	104.8	102.8	82.9	111.4	109.3
DK	103.6	102.2	97.7	88.8	94.0	105.9	104.4	102.9	77.3	88.5	105.4
F	102.4	85.0	102.0	100.6	101.0	104.1	100.5	104.4	106.4	91.4	102.3
I	103.6	24.2	89.0	48.8	67.4	104.2	97.2	91.2	78.5	72.3	69.6
IRL	104.3	103.7	100.0	100.0	88.5	96.2	87.5	105.0	73.1	82.2	77.0
GR	83.2	102.9	100.0	104.1	85.9	89.0	105.8	106.5	107.2	108.8	107.6
E						82.6	103.8	103.2	103.7	74.1	83.6
P						50.0	50.0	36.4		42.3	45.2
Category 6											
D	101.7	101.9	119.9	102.4	92.0	97.5	99.1	96.9	96.2	100.4	102.6
UK	99.5	94.9	100.9	101.7	97.3	99.1	95.6	100.1	100.1	98.3	98.7
BNL	90.4	102.0	103.1	103.0	86.8	90.5	98.5	94.9	95.5	99.5	102.8
DK	104.0	102.5	104.6	103.1	96.5	102.1	99.4	99.8	97.8	102.6	96.4
F	91.2	86.4	168.4	102.4	99.2	96.3	101.4	96.5	83.3	93.7	77.8
I	42.1	29.8	87.0	88.7	63.6	87.8	61.8	88.3	50.7	64.2	53.2
IRL	98.6	85.0	100.0	100.0	91.6	101.2	89.6	101.9	91.9	84.9	86.2
GR	101.2	97.0	100.0	93.3	68.0	56.6	67.0	50.0	74.0	46.6	72.2
E						38.5	73.8	44.6	73.0	75.9	83.6
P								3.6	0.4	7.4	75.6
Category 7											
D	102.3	84.0	79.3	74.4	77.7	105.8	104.7	106.2	102.5	110.3	109.7
UK	101.5	102.4	98.2	92.6	96.8	106.6	102.0	105.3	103.1	96.7	92.6
BNL	101.7	78.3	79.1	81.5	88.0	105.2	104.6	96.8	101.2	101.0	95.9
DK	100.9	103.5	104.1	65.4	103.4	105.5	102.1	97.6	104.4	102.4	109.4
F	101.8	101.5	85.9	71.6	100.7	100.3	95.2	102.0	90.9	102.2	78.8
I	44.6	10.6	8.1	10.3	8.0	39.5	77.7	39.1	15.2	22.6	46.6
IRL	103.8	96.7	103.7	103.6	103.4	100.0	103.0	78.4	104.1	99.2	82.1
GR	24.0	34.6	25.0	20.0	46.2	44.4	87.1	94.3	91.0	99.0	92.2
E						87.1	105.4	100.0	106.0	107.1	111.9
P								100.0			13.7
Category 8											
D	90.0	91.9	105.7	103.9	88.1	105.5	105.4	105.2	95.9	112.7	112.3
UK	98.7	102.9	103.7	104.0	101.7	103.3	103.7	106.9	99.6	90.2	89.0
BNL	90.1	100.4	104.2	103.7	87.4	102.9	105.8	104.3	104.2	110.5	109.2
DK	74.4	77.2	88.7	95.4	102.7	99.6	105.7	104.4	100.9	101.4	114.3
F	103.1	102.9	102.6	104.9	102.1	102.8	97.9	104.1	106.9	110.3	107.0
I	68.3	21.0	45.2	86.3	80.8	104.3	102.4	85.6	70.2	107.9	103.3
IRL	105.7	96.7	105.5	100.0	103.5	103.4	104.8	104.5	97.2	101.4	114.3
GR	80.0	36.1	42.4	55.9	34.3	72.2	34.1	54.3	43.2	46.0	49.0
E						92.3	103.8	100.0	102.8	110.3	113.3
P						5.0	4.0	35.7			6.3

^aFor a description of MFA categories see Table H2. ^bThe quota utilization rates in **bold face type** indicate that Article 115 was applied in that country in that year. It is, of course, conceivable that more than one Article 115 action was invoked against non-member countries in a given year.

Table 9 - Variables Used in Regressions and in Pearson Correlations

Variables used in Regressions*Dependent variable

LNUSV = US\$/piece of clothing; in constant (1985) prices

Independent variable [expected sign in ()]

(+) LNLQNUM1 = Quota utilization (pieces authorized for export/restraint limit)*100

(-) LNQNPOP = Quota (in pieces) per capita (restraint limit/population)

(+) TREND = Ascending in line with years

(+) TOT115 = Average length (in months) of Article 115 cases enacted in given year in given country.

Variables used in Pearson Correlations

(+) QNUM1 = Quota utilization (pieces) in %

(+) QNUM2 = Quota utilization (pieces) in % upto 80%, then difference between utilization and 80% squared and added to 80% (pressure indicator)

(+) QNUM3 = Assumes value of QNUM1 only if above 80%, otherwise 0.

(+) HKG115 = Article 115 cases against Hong Kong

(+) OTH115 = Article 115 cases against other countries

(+) LAG115 = Article 115 cases (total) lagged one period

(+) MONT115 = Average length (in months) of Article 115 cases

(-) QNPOP = Quota (in pieces) per capita (restraint limit/population)

(+) GNPC = GNP/capita in US\$

* A prefix of LN designates natural log; L means lagged one period.

Table 10 - Pearson Correlation Coefficients between Real Import Unit Values (US\$/p.c.) and Hypothesized Determinants for Imports from Hong Kong by MFA Category and by EC Country: 1983-1989

	MFA-Category					EC Country									
Variables	4	5	6	7	8	BNL	D	DK	E	F	GR	I	IRL	UK	
Quota util. (Q)															
QNUM1	-.158	.095	-.161	-.194	-.435*	.049	.334*	-.091	-.009	.119	.336*	-.073	-.505*	.139	
QNUM2	.075	.154	-.191	-.135	-.221*	.082	.344*	.045	-.090	.198	.444*	.051	-.415*	.086	
QNUM3	-.187	.051	-.187	-.236*	-.468*	.006	.341*	-.119	-.027	.103	.330	-.088	-.522*	.035	
LQNUM1	.000	.162	-.418*	-.110	-.209*	.323*	.270*	.275*	-.288	.210	.417*	.077	-.145	.342*	
LQNUM2	.265	.127	-.224*	-.139	-.210*	.293*	.243	.176	-.162	-.012	.117	.434*	-.139	.316*	
Supply (SU)															
QNPOP	-.216*	-.420*	-.188	-.325*	-.311*	.177	-.089	.224	.151	.050	-.112	-.312*	-.014	.232	
Upgrading (UP)															
TREND	-.246*	.549*	.361*	.171	.549*	.366*	.296*	.346*	.457*	.222	.345*	.065	.394*	.585*	
Art. 115 (115)															
HKG115	-.211*	.128	-.022	-.135	.039	-.020	-	-	-	.001	-	-	.199	-	
OTH115	-.232*	-.051	-.087	-.093	-.091	.031	-	-	-	-.066	-	-	-.360*	-.177	
TOT115	-.231*	.011	-.071	-.115	-.057	.008	-	-	-	-.019	-	-	-.291*	-.177	
LAG115	-.181	.026	-.066	-.084	-.036	.033	-	-	-	-.019	-	-	-.239	-.167	
MONT115	-.200*	-.019	-.042	-.122	-.018	-.015	-	-	-	.083	-	-	-.014	-.306*	
Income (Y)															
GNPC	-.088	-.035	-.085	-.379*	-.102	.342*	.265	.322*	.464*	.195	.309*	.095	.387*	.558*	
No.of obs.	44	46	44	44	44	25	25	25	20	25	25	25	25	25	

Note: See text for explanations. * designates significance of coefficients at 10% level.

Note: See text for explanations. * designates significance of coefficients at 10% level.

Table 11 - Estimates of Factors Determining Import Unit Values (LNUSV) of Specific Hong Kong MFA Products into EC Countries 1983 - 1989

MFA-Categories	Independent Variables							N-Obs.
	LNLNQUM1	LNQNPOP	TREND	MONT115	CONST	$\hat{R}^2$	F-Stat.	
4	0.2876** (35.3)	-0.1029** (36.1)	0.0880** (28.6)		-7.8233**	0.244	5.62**	44
5	0.7630** (25.2)	-0.1237** (42.1)	0.1241** (32.7)		-12.2899**	0.558	19.90**	46
6	-0.2177 (20.2)	-0.0386 (26.4)	0.0977** (53.4)		-5.6403*	0.240	5.52**	44
7	0.0924 (12.1)	-0.1580** (62.9)	0.0792 (25.1)		-5.9291	0.264	6.15**	44
8	0.1240 (8.5)	-0.0703** (33.3)	0.1590** (58.2)		-12.9153**	0.544	18.09**	44
4	0.3154** (31.0)	-0.1049** (29.5)	0.0858** (22.4)	-0.0415* (17.1)	-7.7213**	0.279	5.17**	44
5	0.7923** (24.6)	-0.1267** (40.5)	0.1222** (30.3)	-0.0129 (4.6)	-12.2493**	0.552	14.83**	46
6	-0.2897 (22.6)	-0.0298 (17.1)	0.1015** (46.6)	0.0217 (13.7)	-5.6474*	0.234	4.29**	44
7	0.1619 (15.0)	-0.1798** (50.7)	0.0690 (15.5)	-0.0477 (18.8)	-5.3711	0.291	5.41**	44
8	0.2144 (11.5)	-0.0844** (31.2)	0.1606** (45.9)	-0.0300 (11.4)	-13.4798**	0.556	14.46**	44

Note: Significance of coefficients at 5% (10%) level is designated by ** (*). The number in () under coefficients are beta weights. For further explanations see text.

Table 12 - Estimates of Factors Determining Import Unit Values (LNUSV) of all Hong Kong MFA Products into Individual EC Countries 1983 - 1989

Countries	Independent Variables							
	LNLQNUM1	LNQNPOP	TREND	MONT115	CONST	$\hat{R}^2$	F-Stat.	N-Obs.
BNL	0.9811 (21.9)	-0.8155* (38.6)	0.0970 (39.5)		-12.8890*	0.157	2.49*	25
D	0.1396 (5.3)	-0.3031 (37.8)	0.0974 (56.9)		-7.6296	0.068	1.58	25
E	-0.6630* (14.7)	-0.9153** (39.8)	0.5038** (45.6)		-44.7586**	0.545	8.58**	20
F	0.9485 (16.6)	-0.6035* (40.0)	0.1251* (43.4)		-15.7973*	0.085	1.74	25
GR	0.7213** (55.2)	-0.2350 (19.6)	0.1465** (25.2)		-14.5962**	0.546	10.62**	25
I	0.1828 (25.6)	-0.7088 (51.2)	0.0753 (23.2)		-8.4732	0.0003	1.03	25
IRL	-0.7035 (11.0)	-0.3923** (42.5)	0.1664** (46.5)		-10.9214	0.281	4.12**	25
UK	0.7029 (16.1)	-0.0579 (9.9)	0.1260** (74.0)		-12.5584**	0.270	3.960**	25
BNL	0.9488 (19.0)	-0.7976 (34.0)	0.1016 (37.2)	0.0545 (9.8)	-19.1129**	0.125	1.86	25
F	1.0500 (15.9)	-0.6274* (35.9)	0.1357* (40.6)	-0.0152 (7.7)	-17.2348*	0.048	1.30	25
IRL	-0.7430 (11.2)	-0.4007** (41.9)	0.1637** (44.3)	-0.0072 (2.6)	-10.5045	0.245	2.95**	25
UK	0.6649 (14.2)	-0.0430 (7.0)	0.1139** (62.4)	-0.0392 (16.5)	-11.942*	0.249	2.99**	25

Note: Significance of coefficients at 5% (10%) level is designated by ** (*). The number in () under coefficients are beta weights. For further explanations see text.

Table 13 - Hong Kong Quota Prices (Qprice) and Quota Utilization (Qutil) for Main MFA Categories Imported by Germany and United Kingdom: 1987 - 1990

MFA Categories ^a		1987	1988	1989	1990	Average	Std. Dev.	No.Obs.
Germany								
4a	Qprice: HKGS/doz.	67.50	34.86	12.45	30.36	27.56	24.18	33
b	% of unit value	10.10	7.60	2.70	5.90	6.60		
c	Qutil (%)	104.30	105.90	100.50	111.10	105.40		
5a	Qprice: HKGS/doz.	310.00	297.08	159.70	216.45	230.97	112.03	34
b	% of unit value	22.10	19.00	11.70	13.40	16.60		
c	Qutil (%)	106.10	104.60	104.70	112.20	106.90		
6a	Qprice: HKGS/doz.		45.00	37.00	60.45	49.67	35.82	21
b	% of unit value		4.40	3.80	7.10	5.10		
c	Qutil (%)		96.90	96.20	100.40	97.80		
7a	Qprice: HKGS/doz.		49.10	24.80	42.64	39.00	23.28	31
b	% of unit value		6.80	3.30	4.60	4.90		
c	Qutil (%)		106.20	102.50	110.30	106.30		
8a	Qprice: HKGS/doz.		69.50	30.90	74.09	58.67	38.26	31
b	% of unit value		11.90	5.10	10.10	9.0		
c	Qutil (%)		105.20	95.90	112.70	104.60		
United Kingdom								
4a	Qprice: HKGS/doz.	32.00	36.88	23.60	24.50	28.82	14.22	34
b	% of unit value	5.90	9.10	5.00	5.00	6.30		
c	Qutil (%)	103.50	107.00	103.30	108.20	105.50		
5a	Qprice: HKGS/doz.	160.00	179.92	84.30	93.27	123.18	72.00	34
b	% of unit value	19.80	17.60	8.70	9.30	13.90		
c	Qutil (%)	105.20	104.50	97.00	105.00	103.00		
6a	Qprice: HKGS/doz.	30.00	22.00	69.44	37.82	49.68	26.24	22
b	% of unit value	4.60	2.80	8.70	4.70	5.20		
c	Qutil (%)	95.60	100.10	100.10	98.30	98.50		
7a	Qprice: HKGS/doz.	75.00	51.44	60.90	43.36	52.39	19.79	31
b	% of unit value	12.80	7.60	8.40	5.40	8.60		
c	Qutil (%)	102.00	105.30	103.10	96.70	101.80		
8a	Qprice: HKGS/doz.		135.90	65.10	22.64	72.87	55.71	31
b	% of unit value		22.20	11.50	3.70	12.5		
c	Qutil (%)		106.90	99.60	90.20	98.90		
^a Description of MFA categories: 4 = T-shirts, etc.; 5 = pullovers; 6 = trousers; 7 = blouses; 8 = shirts, woven (men/boys).								

Source: Own calculations based on data from Federation of Hong Kong Garment Manufacturers (for a and c); unit values based on Eurostat foreign trade.

Table 14 -Overview of Hong Kong/Overseas Chinese Participation in T+C Industries in Selected Asian Countries^a

Taiwan	One of the first locations for offshore investment. Investment induced with establishment of 3 EPZs (1966-1971) and changes in policies during 60's and 70's. In period 1952-1979 37 textile and 103 clothing companies attracted from HKG (25% of all manufacturing investment from HKG) FDI in T+C complex from other sources amounted to 57 companies in textile and 75 in clothing industry. 22% of clothing exports in 1978 from EPZ. HKG influenced exports 1990: 15% (≈ US\$ 600 mill.).
Mauritius	Created EPZs in 1970. As ACP member enjoys unlimited access to EC. First Hong Kong firm in 1971 others came in mid 70's also with operations elsewhere (e.g. Malaysia). By 1990 Hong Kong accounted for over 25% of the 187 T+C investors and dominated the industry although originally HKG/F/UK activities prevailed. If costs were initially important now it is market access (e.g. via ACP). Exports/employee 100% higher for HKG controlled vis-à-vis JVs. Chinese connection important initially. Joint ventures plus 100% HKG Co's etc. account for roughly 40% of exports in 1990 (≈ US\$ 500 mill.).
Sri Lanka	Opened for investment via EPZs (2) in 1978 and 1986. 8 of 18 companies operating in 1980 and 17 of 52 operating in 1988 were from HKG. Cost and quotas reasons for investing. 80% of output in zones garments, almost all of which exported. Estimated HKG share of exports 1990: 35% (≈ US\$ 200 mill.).
Malaysia	Beginning in early 70's established numerous EPZs but also bonded warehouses, which attracted FDI. Over 80% of T+C exports in 1978 from EPZs. Of 39 T+C companies in EPZs and bonded warehouses in 1982 11 were textile and 28 clothing. At least one third of companies HKG influenced in 1982 and increased investment from HKG since then. Estimated HKG share of clothing exports 1990: 30% (≈ US\$ 400 mill.).
Thailand	Investment in 70's made from Hong Kong to get around quota restrictions for EC + US markets. While numerous large firms from Hong Kong produce in Thailand, other Thai owned firms work closely with Hong Kong. Recent trend has been to export to non quota markets, which now account for large shares. Estimated HKG share of clothing exports 1990: 35% (≈ US\$ 1150 mill.).
China	With opening up of China in late 70's existing HKG ties were turned into business links through extended family, JVs and FDI in and out of Special Economic Zones (SEZs). In early 90's HKG share of clothing exports estimated to be 65% (≈ US\$ 6300 mill.).
Indonesia	With liberalization policies in 80's Indonesia became attractive as investment location. From almost nothing in 1985 foreign investment rose to over 10% of total investments in T+C complex. While Japan was main source, HKG accounted for about 15% in recent years (1988/1989) and on average over period 1967-1989. In 1988/1989 Korea and Taiwan very active. Estimated HKG share of clothing exports 1990: 25% (≈ 400 mill.).

^aAbbreviations used: EPZs = export processing zones; HKG = Hong Kong

Source: Please refer to separate bibliography for publications from which this table has been distilled.

Table 15 - Structure of EC12 MFA Imports (in Volume Terms) for Selected Countries by Product Groupings^a and Major MFA Groups^b: 1990

Product groupings/ major MFA groups	EC12 imports from						
	Hong Kong	EC12	China	India	Indonesia	Turkey	Non-ICs ^c
Structure of country imports^d							
Yarns/tops							
I	0.3	6.5	0.9	15.1	2.0	23.5	10.9
II	0.3	4.9	2.6	4.7	11.1	3.7	3.8
Other	0.2	16.3	0.2	0.9	4.6	5.2	5.0
Total	0.7	27.7	3.8	20.7	17.7	32.5	19.8
Fabrics							
I	13.1	11.0	15.4	31.4	27.5	10.8	17.0
II	0.8	1.0	0.2	0.0	0.0	0.5	0.3
Other	1.0	12.7	8.2	2.4	18.5	6.4	7.9
Total	14.9	24.7	23.8	33.8	46.0	17.6	25.3
Made-up articles							
I	-	-	-	-	-	-	-
II	0.4	2.2	4.3	6.5	1.3	4.6	4.2
Other	1.2	31.4	18.0	13.4	0.7	5.1	8.6
Total	1.6	33.5	22.3	19.9	1.9	9.7	12.8
Clothing							
I	42.6	6.0	9.3	14.4	14.3	15.4	17.1
II	36.5	6.9	35.0	10.2	19.2	23.6	22.7
Other	3.7	1.2	5.9	1.1	0.9	1.3	2.4
Total	82.7	14.1	50.2	25.7	34.3	40.2	42.2
Total ^e	142	4249	251	187	96	257	2311
Structure of product groupings^f							
Yarns/Tops	0.1	63.6	0.5	2.1	0.9	4.5	24.7
Fabrics	1.2	58.4	3.3	3.5	2.5	2.5	32.5
Made-up articles	0.1	76.5	3.0	2.0	0.1	1.3	15.9
Clothing	7.2	36.9	7.8	3.0	2.0	6.4	60.2
Total	2.0	59.6	3.5	2.6	1.3	3.6	32.4
For comparison:							
Total in US\$g	2956	51470	2647	1872	948	3254	28787

^a Product groupings follow the aggregation noted in GATT [1984, p. 188] but reclassified from CCCN to HS system. See also footnote in text. - ^b Group I includes the very highly restricted MFA categories; Group II includes the highly restricted categories; Other covers remaining restricted/unrestricted categories. - ^c All non-OECD countries + Turkey. - ^d % of country total imports. Shares may not add to totals or 100 due to rounding - ^e 1,000 tons. - ^f % of total EC12 imports for specific product groupings. - ^g Mill. US\$.

Source: Own calculation based on EUROSTAT, 1993 CD-ROM.

Table 16 - Some Background for Hong Kong/EU on an EU MFA Phase-Out Based on Structure of EU's NON-IC MFA Imports^a

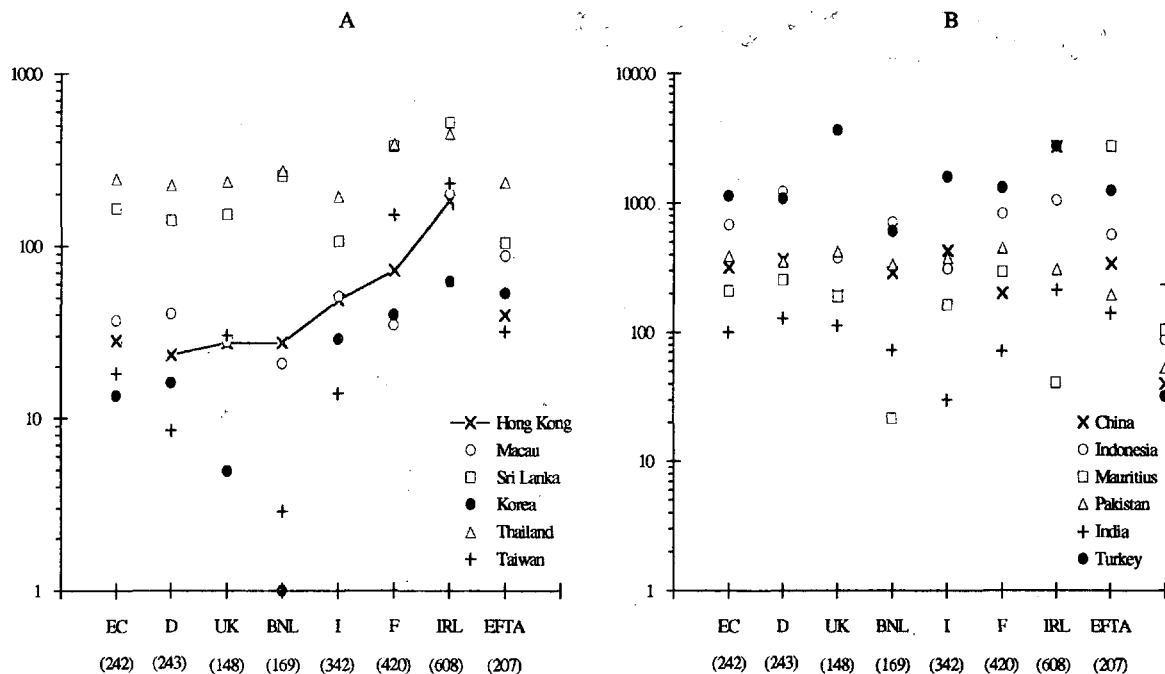
MFA Category ^e	Country Shares 1990 ^b				Growth Rates 88-92 ^c				Product Shares 1990 ^d			
	Volume ^f		Value ^g		Volume ^f		Value ^g		Volume ^f		Value ^g	
	EU	HKG	EU	HKG	EU	HKG	EU	HKG	EU	HKG	EU	HKG
1(Y)	6.5	0.3	2.5	0.1	3.7	10.0	4.7	4.1	48.1	0.1	50.5	0.1
2(F)	7.5	10.7	6.5	2.2	2.2	-12.3	5.2	-14.6	46.7	2.2	59.1	1.2
3(F)	3.5	2.4	3.8	0.8	3.9	-36.9	7.0	-32.3	57.1	1.3	71.3	0.8
4(C)	2.0	7.8	4.7	9.7	18.1	0.3	18.6	5.3	40.0	5.3	52.1	6.2
5(C)	1.7	7.3	5.8	11.7	7.6	2.5	10.1	11.1	51.6	7.5	64.5	7.4
6(C)	1.4	11.7	3.2	8.8	11.0	-2.7	15.5	-0.6	37.7	10.7	49.3	7.7
7(C)	0.5	4.9	2.3	9.7	11.4	0.9	14.6	6.2	33.2	10.6	45.2	10.8
8(C)	0.4	10.8	1.3	12.0	12.5	0.9	16.1	3.3	18.2	15.3	26.6	13.9
20(M)	0.7	0.2	0.7	0.1	5.9	-17.2	7.6	-2.9	61.7	0.2	46.2	0.4
Σ/Ø ^h	24.2	56.1	30.8	54.9	5.3	-3.9	9.7	2.6	59.6	2.0	58.8	3.4

Note: above average growth rates/product shares are bold-faced.

^a Following Uruguay Round stipulations 51% of the volume of MFA imports must come under MFN jurisdiction within 10 years, ergo 49% remain protected during this period. Using EU's Non-IC MFA import structure to represent imports to be liberalized, the above highly-protected categories, covering the 4 product groupings, accounted for over 47% of EU's Non-IC MFA imports which could be protected during 10 year phase-out period. See text for further explanations. - ^b % shares in respective country totals. - ^c Average annual growth rates. - ^d % shares in total imports of respective categories. - ^e The letters in () represent the product groupings: Y = Yarns/tops; F = fabrics; M = made-up articles; C = clothing. The categories are: 1 = cotton yarn; 2 = woven cotton fabrics; 3 = woven syn. fabrics; 4 = T-shirts, etc. knitted; 5 = pullovers etc. knitted; 6 = trousers, etc., woven; 7 = women's shirts, etc.; 8 = men's shirts, woven; 20 = bed linen, woven. - ^f Tons. - ^g US\$. - ^h Ø = averages for growth rates and product shares.

Source: Own calculations based on EUROSTAT CD-ROM.

Diagram 1 - Relative Changes^a in Value (US\$) of Clothing (SITC84) Imports from Selected LDCs: 1980 - 1990

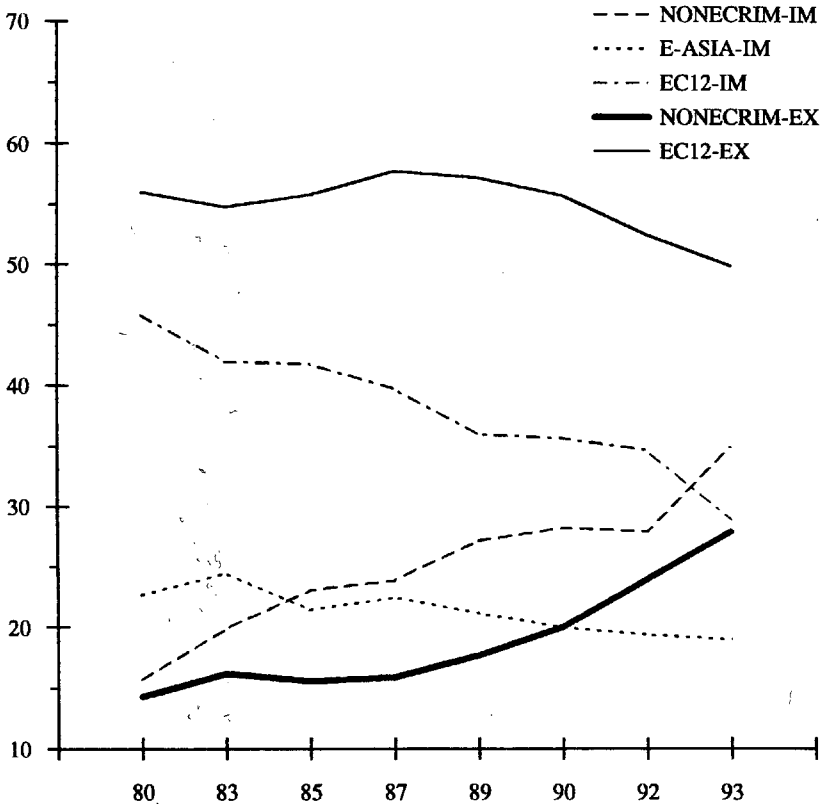


Note: The figures in () below area/country logos represent % change of all clothing imports from major (21) LDC suppliers.

^aCalculated as % ratio of change in imports from specific LDC by given country over change of all EC imports from 21 LDCs (see Table 5).

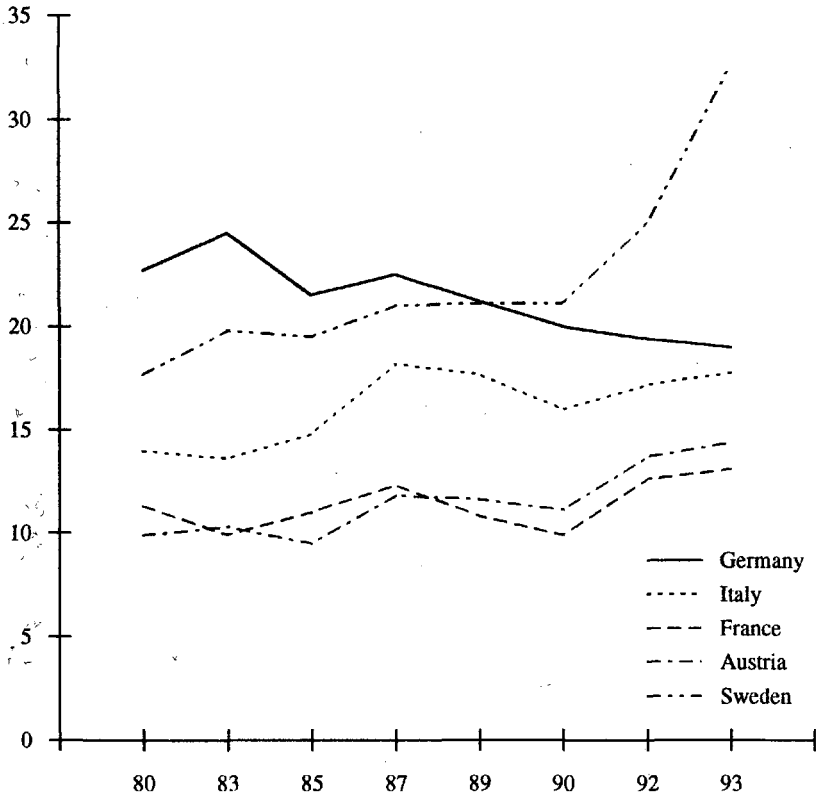
Source: Own calculations based on special UNCTAD computations; see text for explanations.

Diagram 2 - Structure^a of Germany's Textile Exports(EX) and Clothing Imports(IM) by Selected Regions^b: 1980-93



^a % of total textile exports or clothing imports. - ^b NONECRIM = former COMECON + Yugoslavia and Egypt + Israel + Morocco + Tunisia + Turkey; E-ASIA = China + Hong Kong + Korea + Macao + Taiwan.

Source: Own calculations based on special UNCTAD computations.

Diagram 3 - Clothing Imports from East Asia^a for Selected EU and EFTA Countries^b: 1980-93

^aEast Asia = China, Hong Kong, Korea, Macau and Taiwan. - ^bPercent of respective total clothing imports.

Source: Own calculations based on COMTRADE data.

Bibliography

- Aggarwal, Vinod K. (1985), *Liberal Protectionism - The International Politics of Organized Textile Trade*. Berkeley.
- Anderson, Kym (1992), "The Changing Role of Fibres, Textiles and Clothing as Economic Growth". In: Anderson, Kym (Ed.), *New Silk Roads: East Asia and World Textile Markets*, pp. 2-14, Cambridge.
- Aw, B.Y., M.J. Roberts (1986), "Estimating Quality Change in Quota Constrained Markets: the Case of US Footwear". *Journal of International Economics*, Vol. 21, pp. 45-60.
- Cable, Vincent (1990), "Adjusting to Textile and Clothing quotas: A Summary of Some Commonwealth Countries' Experiences as a Pointer to the Future". In: Hamilton, Carl B. (Ed.), *Textiles Trade and the Developing Countries - Eliminating the Multi-Fibre Arrangement in the 1990s*. The World Bank, pp. 103-135, Washington, D.C.
- Chou, K.R. (1966), *The Hong Kong Economy, A Miracle of Growth*. Academic Publications, Hong Kong.
- Daines, William Kay (1994), "Towards a Competitive World Market". *Textile Asia*, Vol. XXV, pp. 117-119, August.
- EC Official Journal (various issues).
- Erzan, Refik, Junichi Goto, Paula Holmes (1990), "Effects of the Multi-Fibre Arrangement on Developing Countries' Trade: An Empirical Investigation". In: Hamilton, Carl B. (Ed.), *Textiles Trade and the Developing Countries - Eliminating the Multi-Fibre Arrangement in the 1990s*. The World Bank, pp. 63-102, Washington, D.C.
- Eurostat (1993), *External Trade, Common Nomenclature*, CD-ROM, 30. April, Brussels.
- Faini, Riccardo, Alaberto Heimler (1992), *Protectionism, Product Differentiation and Quality Choice*. Paper presented at the OECD Conference on "Trade Policy, Productivity and Foreign Investment: The Textile and Clothing Industry in Europe", Paris, September 18-19.
- Faini, Riccardo, Jaime de Melo, Wendy Takacs (1992), *A Primer on the MFA Maze*. Paper presented at the OECD Conference on "Trade Policy, Productivity and Foreign Investment: The Textile and Clothing Industry in Europe", Paris, September 18-19.
- GATT [General Agreement on Tariffs and Trade](1984), *Textiles and Clothing in the World Economy*. Background study prepared by the GATT secretariat, Geneva, July.
- GATT [General Agreement on Tariffs and Trade](1993a), *International Trade 1993*, Geneva.
- GATT [General Agreement on Tariffs and Trade](1993b), *Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations*. Geneva, December 15.
- Hamilton, Carl B. (1988), "Restrictiveness and International Transmission of the "New" Protectionism". In: Baldwin, Robert F., Carl B. Hamilton and André Sapir (Eds.), *Issues in US-EC Trade Relations*, University of Chicago Press, pp. 199-224.
- Hamilton, Carl B. [Ed.](1990), *Textiles Trade and the Developing Countries - Eliminating the Multi-Fibre Arrangement in the 1990s*. The World Bank, Washington, D.C.

- Hamilton, Carl B., (1991), "European Community External Protection and 1992 Voluntary export Restraints Applied to Pacific Asia". *European Economic Review*, Vol. 35, No. 2/3, pp. 378-387, North-Holland, April.
- Hong Kong Government, Dept. of Industry (1994), *Techno-Economic and Market Research Study of Hong Kong's Textiles and Clothing Industries 1991-1992*. Hong Kong.
- Khanna, Sri Ram (1991), *1990s: Globalisation of the Textile & Clothing Industries*. University of Delhi, India.
- Langhammer, Rolf J. (1994), *Nach dem Ende der Uruguay-Runde: Das GATT am Ende?* Kiel Institute of World Economics, Discussion Papers, No. 228.
- Mackie, J.A.C. (1992), "Overseas Chinese Entrepreneurship". In: Hill, Hall (Ed.), *Asian-Pacific Economic Literature*, Vol. 6, No. 1, pp. 41-64, Canberra, May.
- Messerlin, Patrick A. (1989), "The EC Antidumping Regulations: A First Economic Appraisal, 1980-85". *Weltwirtschaftliches Archiv*, Vol. 125, No. 3, pp. 563-387, Kiel.
- Myrdal, Gunnar (1968), *Asian Drama - An Inquiry into the Poverty of Nations*. London.
- Pelkmans, Jacques (1993), *Opening Up the Euro-Market for Textiles*. Centre for European Policy Studies, CEPS Paper No. 54, Brussels.
- Riedel, James (1974), *The Industrialization of Hong Kong*. Kiel Institute of World Economics, Kieler Studien No. 124, Tübingen.
- Schöppenthau, Philip von (1993), "Multifaserabkommen - quo vadis?" In: *Aussenwirtschaft*, Vol. 48, No. 3, pp. 309-336.
- Spinanger, Dean (1989), *Is the EC Foreshadowing a Fortress Europe in 1992? Examining Implications of 1992 and Current EC Trade Restrictions for PACRIM Countries*. PRICES Papers No. 1, July.
- Spinanger, Dean, Joachim Zietz (1986), "Managing Trade but Mangling the Consumer: Reflections of the EEC's and West Germany's Experience with the MFA". *Außenwirtschaft*, Vol. 41, No. 4, pp. 511-531, December.
- Spinanger, Dean, Laura Piatti (1994), *Germany's Textile Complex under the MFA - Making it under Protection and Going International*. Kiel Institute of World Economics, Working Papers, No. 651.
- Statistisches Bundesamt (various issues), *Preise und Preisindizes für die Lebenshaltung*, Fachserie 17, Reihe 7. Wiesbaden.
- Sutherland, Peter D. (1994), "Global Trade - The Next Challenge". In: *Aussenwirtschaft*, Vol. 49, No. 1, pp. 7-16.
- Szezeapanik, Edward (1958), *The Economic Growth of Hong Kong*. Oxford.
- Trela, Irene, John Whalley (1990), "Unraveling the Threads of the MFA". In: Hamilton, Carl B. (Ed.), *Textiles Trade and the Developing Countries - Eliminating the Multi-Fibre Arrangement in the 1990s*. The World Bank, pp. 11-46, Washington, D.C.
- UNCTAD (1993), *Handbook of International Trade and Development Statistics*. New York.

US Department of Commerce, International Trade Administration (1989), *Summary of Agreements*. September, Washington, D.C.

Wu, Yuan-li, Chun-hsi Wu [Eds.](1980), *Economic Development in Southeast Asia. The Chinese Dimension*. Stanford.

For Table 14 and discussion of Hong Kong MFA spillover investment the following sources have been used:

General and Hong Kong

Chadha, K.K. (1992), "The Textile Industry in Hong Kong". The Economist Intelligence Unit, *Textile Outlook International. Business and Market Analysis for the Textile & Apparel Industries*. No. 42, London, pp. 81-99.

Chadha, K.K. (1992), "The Clothing Industry in Hong Kong". The Economist Intelligence Unit, *Textile Outlook International. Business and Market Analysis for the Textile & Apparel Industries*. No. 43, London, pp. 56-78.

Currie, Jean (1985), *Export Processing Zones in the 1980s. Customs Free Manufacturing*. The Economist Intelligence Unit, Special Report No. 190, London.

Finnerty, Anne (1991), *Textiles and Clothing in South East Asia. Competitive Threat or Investment Opportunity?* The Economist Intelligence Unit, Special Report No. 2082, London.

Gaetan, Manuel (1992), *The Future of the Hong Kong Apparel Industry: Its Risks and Opportunities*. Mimeo.

Internationale Textil-, Bekleidungs- und Lederarbeitervereinigung (1980), *Die Internationale Arbeitsteilung und der Internationale Handel in Textil-, Bekleidungs-, Schuh- und Ledergeräten (einschließlich Lohnveredelung). Zweiter Teil: Zonen mit begünstigten Handelsbedingungen*. Diskussionsdokument, Dritter Weltkongreß.

Kreye, Otto, Jürgen Heinrichs, Folker Fröbel (1987), *Export Processing Zones in Developing Countries: Results of a New Survey*. International Labour Office, Working Paper No. 43, Geneva.

Lau, Ho-Fuk, Chi-Fai Chan (1992), *Structural Adaptation: The Response of Hong Kong Garment Manufacturers*. The Chinese University of Hong Kong.

Maex, Rudy (1985), *Employment and Multinationals in Asian Export Processing Zones*. International Labour Office, Working Paper No. 26, Geneva.

Rabbani, F.A. (Ed.)(1981), *Economic and Social Impacts of Export Processing Zones in Asia*. Asian Productivity Organization.

Rubin, Steven M. (1988), *Tax-Free Exporting Zones. A User's Manual*. The Economist Intelligence Unit, Special Report No. 1135, London.

- Spinanger, Dean (1984), "Objectives and Impact of Economic Activity Zones - Some Evidence from Asia." *Weltwirtschaftliches Archiv*, Vol. 120, No. 1, pp. 64-89.
- Steele, Peter (1990), *Hong Kong Clothing. Waiting for China*. The Economist Intelligence Unit, Special Report No. 2028, London, March.
- Yip, L. (1991), "Prospects for the Hong Kong Textile and Clothing Industries in the 1990s". Textile Institute, Journal of Textil Industries, Vol. 82, No. 2, pp. 161-177.

China

- Chan, Carson (1992), *Hong Kong's Industrial Investment in the Pearl River Delta*. 1991 Survey Among Members of the Federation of Hong Kong Industries. Industry & Research Division, Hong Kong.
- Cheng, Elizabeth, Michael Taylor (1991), "Delta Force". *Far Eastern Economic Review*, Vol. 16, May, pp. 64-68.
- The Economist (1992), "A Driving Force". The Economist, July 18th, pp. 21-24.
- Glasse, James (1992), "China Report". The Economist Intelligence Unit, *Textile Outlook International. Business and Market Analysis for the Textile & Apparel Industries*. No. 41, London, pp. 54-69.
- Hong Kong Trade Development Council (1991), *Survey on Hong Kong Domestic Exports. Re-exports and Triangular Trade*. Research Department, Hong Kong, November.
- Jones, Randall, Robert King, Michael Klein (1992), *The Chinese Economic Area: Economic Integration without a Free Trade Agreement*. OECD, Economics Department Working Papers, No. 124, OCDE/GD(92)142, Paris.

Indonesia

- Hill, Hal (1991), "The Emperor's Clothes Can Now be Made in Indonesia". *Bulletin of Indonesian Economic Studies*. Vol. 27, pp. 89-127.
- Hill, Hal, Suphat Suphachalasai (1991), "The Myth of Export Pessimism (even) under the MFA: Evidence from Indonesia and Thailand". *Weltwirtschaftliches Archiv*, pp. 310-329.

Malaysia

- Government of Malaysia, UNDP, World Bank (1984), *Evaluation of the Effect of Transfer Pricing on the Contribution of FTZs and LMWs to the Malaysian Economy*. IMG Consultants Pty. Ltd., Report No. 3, Sydney.

Mauritius

Fowdar, Narud (1992), "Textiles and Clothing in Mauritius". The Economist Intelligence Unit, *Textile Outlook International. Business and Market Analysis for the Textile & Apparel Industries*. No. 38, London, pp. 68-86.

Fowdar, Narud (1992), "Foreign Investment in the Mauritian Textiles and Clothing Industry". The Economist Intelligence Unit, *Textile Outlook International. Business and Market Analysis for the Textile & Apparel Industries*. No. 44, London, pp. 80-108.

Hein, Catherine (1988), *Multinational Enterprises and Employment in the Mauritian Export Processing Zone*. International Labour Office, Working Paper No. 52, Geneva.

Hein, Philippe (1989), "Structural Transformation in an Island Country: the Mauritius Export Processing Zone (1981 to 1988)". UNCTAD Review, Vol. 1, No. 2, pp. 41-58.

Sri Lanka

Ramanayake, Dennis (1982), *The Katunayake Investment Promotion Zone: A Case Study*. Asian Employment Programme, ILO-ARTEP, Working Papers, Bangkok, September.

Taiwan

Investment Commission, Ministry of Economic Affairs (1979), *Statistics on Overseas Chinese & Foreign Investment, Technical Cooperation and Outward Investment. The Republic of China*. December.

Thailand

Hill, Hal, Suphat Suphachalasai (1991), "The Myth of Export Pessimism (even) under the MFA: Evidence from Indonesia and Thailand". *Weltwirtschaftliches Archiv*, pp. 310-329.