RENT-SEEKING AND HONG KONG'S
TEXTILE QUOTA SYSTEM

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D URING the past two decades, Hong Kong has been a highly successful
exporter of certain clothing categories even though the British Colony
has been obliged to accept "voluntary" restraints on sales to major
western countries. As is well known, since the Second World War, a series of
bilateral and multilateral arrangements have influenced international trade in
textiles. Numerous studies have investigated this trade and international agree-
ments have been concluded under GATT auspices.[1] However, less attention
has been given to internal effects in exporter countries engendered by their
responses to the restraints. In Hong Kong, textile and clothing production is
of such importance that the colony is virtually a one industry town.[2] Consider-
able importance therefore attaches to how such exports are administered. This
issue is of special importance since the Hong Kong government has recently
revised its quota system in response to criticism of the way it was regulating
exports. Unfortunately, the modification has broaden the scope for wasteful
rent-seeking. This paper will summarize the principal features of Hong Kong's
textile quota system and provide a framework to analyze the recent revision's
harmful effects.

I

Effective quantitative restrictions (QRs) on the supply of goods in market-
oriented economies are the source of surplus returns or rents which frequently
are seen as prizes by the producers. The contrived scarcity of QRs creates
such powerful incentives that firms compete for these prizes and wastefully
divert resources away from the production of goods and services. The stifling
effects of rent-seeking have been recognized by others and have, for example,
been used to explain the economic backwardness in traditional China. As Fair-
bank says, "the tradition in China has been not to build a better mousetrap
but to get the official mouse monopoly" [3, p. 37]. More recently, Krueger has
formulated a trade model to analyze the adverse consequences of rent-seeking
activity in the context of QRs applied to imports, a policy which is particularly
popular among developing countries [7]. The concern here is to explore how

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[1] For example, [11] and [1]; a more recent contribution with a broader perspective is [9].
[2] According to the first census of industry in the colony, taken in 1973 [4, Vol. 1] [4, Vol. 2,
Part 2], the combination of textile and clothing manufacture accounted for 42 per cent of
total manufacturing employment and 44 per cent of comparable value added.

rent-seeking activity is likely to emerge in a different milieu, in a Chinese society where exports are restrained.

Under the terms of the Multi-Fibre Arrangement, Hong Kong has entered into bilateral agreements with major western countries which place quantitative limits on her textile exports.[3] The terms of these agreements require the government of Hong Kong to administer appropriate controls and the responsibility for administration is carried out by the Trade, Industry and Customs Department (TICD). While individual agreements differ in such matters as textile categories and provision of flexibility across categories and over time, the TICD has established general administrative principles to apply in all cases. These principles may be classified under three headings: (1) distribution of quotas between individual firms, (2) utilization requirements for quotas, and (3) regulations on the transfer of quotas from one firm to another.[4]

When a bilateral agreement is first signed, a past performance rule is adopted to determine the initial quota quantity for existing firms. If the restraint agreement establishes an export limit for a textile category equal to or less than Hong Kong's past performance then each firm obtains a quota amount corresponding to its proportion in total shipments. In the event the restraint limit is more generous than past shipment performance then firms obtain quotas equivalent to their past exports and the excess is placed in a "free quota pool". The pool is open to all firms, but applications for free quota require evidence of an order from overseas. Amounts applied for are either approved in full, when the sum of applications is less than that of the free quota pool, or each firm secures an amount equal to its application reduced by the ratio of pool size to sum of total applications. The latter case is the more important.

The quota given to a firm on past performance basis is a quota allocation and the firm is a quota holder. Recipients of free quota can obtain a quota allocation in the following year if they make full use of their free quota. Moreover, in order to encourage full use, future access to the pool can be denied any firm which does not fully utilize the free quota it is given.

Quotas are usually issued on a year by year basis and holders are required to use their current yearly quota allotments to receive future allocations. A simple sliding scale is applied to relate the quota utilization rate for one year

3 With respect to value of textile and clothing exports, the agreements with the United States and (combined) EEC member states are easily the most important. In 1976 the three main markets for Hong Kong's clothing exports, and their respective shares of total clothing exports, were the United States (32 per cent), West Germany (19 per cent) and the United Kingdom (13 per cent). Of lesser importance are the agreements with Austria, Finland, Norway, and Sweden. In 1976 both Australia and Canada took over direct administrative control of textile and clothing imports.

4 The following paragraphs draw on two documents issued by the Department of Commerce and Industry, the former title of TICD: [5] and [6]. Note that for present purposes certain features of the quota system are not considered. For example, as Dam has noted, the export authorization system, which is part of the broad textile export control mechanism, make it possible for Hong Kong to alert importing countries of the volume of non-restrained textiles to be shipped during the next three to six months [2, pp. 309–10].

to the subsequent year's allocation. A utilization rate of 95 per cent or more (taken to be full utilization) entitles a quota holder to receive another full allocation including an extra amount determined by an appropriate growth factor provided for in the underlying bilateral agreement. Rates of between 50 per cent and 95 per cent allow a firm to receive a quota for the new year equal to the amount of textiles actually exported in the previous year. A firm which does not use even 50 per cent of his quota fails to obtain any quota for the coming year. When a holder's quota is reduced as a result of this utilization requirement there is a corresponding rise in the size of the free quota pool. It is important to note that under the quota system before September 1976 the significance of this possible augmentation to the pool was diminished, potentially to zero, as holders who fully utilized their quota were able to obtain a proportionate share of the surrendered quota up to a maximum of 5 per cent of their full allocation. This "bonus" arrangement has been discontinued.

The utilization requirement overlaps with quota transferability in that a quota holder is allowed to transfer part of his quota to other firms and include their performance in determining his overall quota utilization.[5] Under the former textile control system, a quota holder could possibly transfer all of his quota to other firms and, assuming the latter made full use of the transferred quota, the holder would continue to receive a full allocation. One of the major modifications of the revised system was the introduction of disincentives against persistent transfers. The procedure now is to examine the transfer record of a quota holder for a two year period and calculate the percent of quota transferred in relation to total allocation over the period. If this percentage is 50 per cent or more, then the quota allocation in the third year is lowered by 25 per cent of the amount transferred. Any quota forfeited under this regulation reverts to the free quota pool.

Without going into further detail it is evident that there is a strong interrelationship among quota allocation, utilization, and transfer. An initial holder cannot keep his quota unless he exports textiles, either directly or by finding another firm to do so on his behalf when the quota is transferred. Also, at least one-half must be used by the holder himself to avoid a penalty for non-fulfillment of quota. However, in normal times, attention is restricted to the issues of allocation and transferability. Usually, the overall restraint limit is effective and cost conditions are such that a firm is more than willing to use all of its quota.

Since the distribution of quota is free the fortunate receipients are the beneficiaries of the scarcity premium created by the textile restraint. Only

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[5] The following discussion pertains to one of two broad types of quota transfers recognized in the Hong Kong system. The distinction between temporary transfers (which also include what are called swing transfers, involving an exchange of quota in one textile category for that in another category, as provided for in the bilateral agreement) and permanent transfers revolves around the party entitled to receive future allocations of quota. Under a temporary transfer the transferer retains the right to obtain future quota while under a permanent transfer the transferee secures this right. Permanent transfers are less important for present purposes and are ignored, assumed to be zero, in what follows.

fragmentary information is available on how much this rent surplus amounts to but it appears to be sizeable. One source has conjectured that anywhere from 15 per cent to 25 per cent of (restrained) textile export value in 1976 was rent. This would be between H.K.$1.8–3.0 billion or 3.9 per cent to 6.4 per cent of Hong Kong's annual gross domestic product.[6] Even more conservative estimates suggest a very large rent surplus meaning that some firms are obtaining considerable windfall profits.[7]

The fact that rent is very large is also attested to by the large volume of criticism which the quota system has been subjected to. The criticism reflects the antagonism between quota holders and firms which must pay the quota holders so they can have a quota. This conflict of interest is at the heart of the issue of quota transferability. But it must be emphasized that the controversy is a mixing of two completely separate matters: the criteria of quota distribution to firms, and the regulations governing quota use. Attention has been directed to the latter but there has been a failure to recognize the implications of the quota's commercial value arising from bilateral restraint agreements. Redressing this imbalance is important and alternative ways of allocating quotas to firms must be examined.

There are many ways of distributing quotas but analytically they can be grouped in two categories. Using Krueger's terminology, the two categories are of methods which do and do not lead to rent-seeking activity. Such behavior deploys scarce resources to compete for rent or quotas, therefore diverting such resources from meeting other needs. Two methods expected to lead to such actions are the allocation of quota based on proportions of firms' capacities or on a pro rata basis according to applications by firms. Krueger has argued that both methods are wasteful, leading to excess capital investment in the first case and to too many small and inefficiently operated firms in the second. The second method is of particular interest here and will be examined shortly.

By contrast, costly rent-seeking would not accompany a quota distribution method which openly auctions quotas to the highest bidders. Meade has char-

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[6] The conjecture was made in [10, p. 11]. The TICD has estimated that 70 per cent of Hong Kong's total textile and clothing exports were subject to restraint in 1976. Official sources place overall textile and clothing exports at H.K.$17,339 million and gross domestic product at H.K.$47,114 million in 1976. It should be noted that the amount of the rent varies over product categories (and markets) and over time. As far as can be determined no comprehensive effort has been mounted to collect the relevant data. The volatility of quota prices is illustrated by the reported jump in quota premium for jeans from H.K.$15 to H.K.$80–$100 per dozen between late January to the end of March 1977. In relation to the f.o.b. price of jeans (exclusive of quota) the percent range for quota premium was 5 per cent to 38 per cent. For cotton T-shirts the corresponding percent was reported to be even higher, 50 per cent. The information was reported in the October 1976 and May 1977 issues of *Textile Asia*.

[7] The above estimate of the average quota premium percentage is very similar to the results of an interview survey of several U.S. importers conducted in 1974. According to Murray and Walter "on average, the quota price increased the cost of textile products to U.S. importers by roughly 15 per cent" [7, p. 410]. Note, however, the survey presumably encompassed several sources of supply although the exporting areas were not identified.

acterized this technique as "ensuring an equitable and efficient distribution of the import licenses among the competing importers" [8, p. 286]. The same assessment would apply to export quotas.

The introduction of "equity" in this discussion warrants a brief clarification. Essentially, the surplus which arises from export restraint is not attributable to the actions of any one firm. It is a return which reflects the comparative superiority of the combination of all domestic resources, over world levels, when devoted to producing the marginal unit of textiles, or the unit up to the restraint limit. As with any economic rent, it is neither earned nor necessary for any individual firm to induce production. Ignoring administrative costs, in order to justify distribution of quota to individual firms, it is necessary to take the position that textile firm owners are in some sense more deserving than other individuals. Failing this designation, quotas could just as well be given to textile or other workers or even charitable organizations. If it is assumed, as Meade implicitely does, that the government is the most appropriate agency to assess distributive justice, then the government is in the best position to parcel out the surplus which results when quotas are auctioned.

Assigning quotas directly to textile firms may, of course, be defended on grounds of administrative convenience. However, it is important in this regard to bear in mind several unique facets of the Hong Kong system. The costs of issuing quotas and verifying that textile exports do not exceed appropriate limits are the issue at this point. These costs need to be distinguished from others which arise from TICD's utilization and transfer regulations, costs which very likely outweigh those attributable to issuing quota and policing export limits. In short, the administrative convenience argument justifying direct issue of quota to textile firms is probably largely misplaced.

II

Hong Kong's quota system, as explained, combines two methods of granting quotas. It is important to distinguish between them because, as will be shown, they are expected to generate vastly different consequences. This distinction is also related to the contrast between the old and new quota systems, before and after the revision of September 1976. Accordingly the presentation will proceed by considering two stylized cases to place matters in sharper perspective. In case one, quotas are distributed on a past performance basis and firms have complete freedom to transfer quotas. This case bears a close resemblence to the former system. In case two, all quotas are initially placed in a free quota pool open to all firms and proportionate allocations are made on the basis of applications backed by orders. Furthermore, firms cannot transfer quotas. This case is suggestive of Hong Kong's present system but the quota pool and transferability features are exaggerated consonant with the shift of emphasis in the revision.
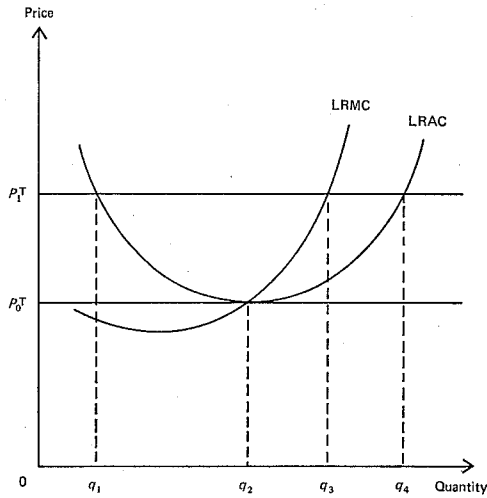
It is helpful at this point to refer to two diagrams to facilitate the analysis. Figure 1 presents the industry demand and supply situation while Figure 2 gives

Fig. 1. Industry
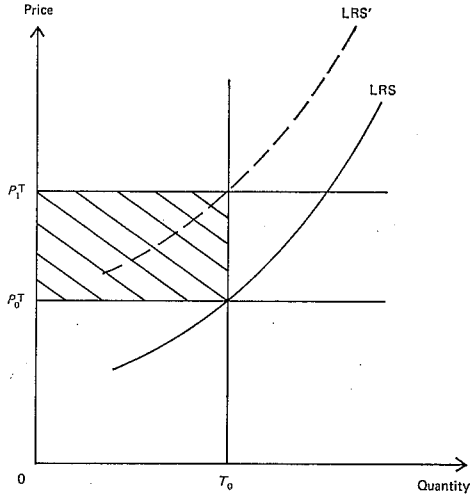
Note: LRS=long-run supply.

Fig. 2. Firm

Note: LRMC=long-run marginal cost,
LRAC=long-run average cost.

the cost curves for an individual firm. A perfectly competitive model is adopted depicting long-run relationships. The justifications for the shapes of the supply and cost curves are familiar and the horizontal industry demand curve at price P_1^T is based on a world price-taker specification for a small trading economy.[8]

[8] The emphasis on long-run relationships arises from the free and relatively easy entry conditions prevailing in the industry. To produce garments, for example, an entrepreneur can quickly obtain sewing machines, either locally or through import, and find factory space to set up business.

It is assumed that all output is exported and the textile restraint establishes an aggregate limit of T_0 textiles. Under the conditions shown, this gives rise to an aggregate rent indicated by the shaded box in Figure 1. The value of each unit of quota is therefore the difference between P_1^T and P_0^T.

To illustrate the behavior of a firm in the first case, consider an arbitrary allocation of q_1 quota to the firm shown in Figure 2. Since marginal cost at output rate q_1 is lower than P_0^T the firm would use not only all of its own allocation but would also purchase an additional quota since gross price, P_1^T, exceeds the sum of marginal cost and quota cost. It would plan to purchase a $q_2 - q_1$ extra quota and produce q_2 since at this production rate gross price exactly equals the sum of marginal cost and quota cost. Similarly, if the firm initially had more than q_2 quota it would be profitable to sell some quotas to others and again it would produce at output rate q_2. In this setting, the precise pattern of quota distribution is irrelevant to the distribution of output among firms. All would produce at the optimal scale.

The quota distribution pattern does, of course, determine the distribution of rent surplus among firms. But under the conditions assumed there is no basis for sustained rent-seeking activity. Each firm's quota position is effectively set when the overall textile restraint is first imposed. It is fixed once and for all so that any efforts to subsequently obtain an allocation would be both a private as well as social waste.[9]

Turning now to the second case, a considerably different result is attained. An interesting feature of this difference is that in the second case key dimensions of the final result are not unique, in contrast to the above. With a pro rata allocation method where quota cannot be transferred each firm must directly use its own holdings. It cannot augment or sell from its position by access to the quota market which perforce does not exist legally. The immediate consequence is that the rate of output of each firm now depends on the amount of its quota. Further, since a pro rata scheme makes possible a variety of specific quota distribution patterns, there is a corresponding degree of variation in the pattern of production among producing units.

At the firm level it is possible to reveal the basis for these variations by

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[9] With rent-seeking activity the relevant concern is with the present efforts of firms to try and get a quota. Past activities are irrelevant. This includes the actions of firms to boost exports in the expectation that a restraint will be imposed in the future. The reason for this is that an increase in exports leads to a larger effective quantitative restaint limit which is usually related to past aggregate performance. The basis for such expectations was readily apparent from widely reported statements by industry and labor spokesmen as well as public servants in the main importing countries. One illustration, cited in UNCTAD [11, p. 60], was the appeal by United States Congressmen in 1962 recommending an extension of import restrictions to non-cotton textiles which were not restrained at that time. But it wasn't until October 1971 that man-made fiber and woolen textiles from Hong Kong became subject to quantitative limits. It is, therefore, not surprising that Hong Kong's exports to the United States of man-made fiber clothing grew so rapidly during the late 1960s and early 1970s. Between 1968 and 1971 the quantum export index for this category went from 100 to 275. During the same period the quantity measure of cotton clothing exports was virtually steady, moving from 100 to only 111.

examining Figure 2. Ideally, the firm would like to produce at output rate q_3 since this is where profit is maximized. However, it would be willing to operate at any rate between q_1 and q_4, the points where average cost equals price. On the other hand, a very small quota, less than q_1, is not viable. Such a small assignment would be surrendered to the quota pool. Likewise, a very large quota position, in excess of q_4, would return a loss if it were fully used. If it is possible for the firm to forfeit only its unused quota, then whenever the initial grant exceeds q_3 the excess would be released voluntarily and the firm would continue with a quota of q_3.

The key to a successful quota position is the firm's ability to secure overseas orders for textiles. As its application for a quota must be supported by orders, the more the orders the better the prospect of a larger quota. Widespread recognition of the rent premium attached to a quota induces firms to accept more orders than they can fill because total applications are expected to exceed quota available and each firm's application will be scaled down to be consistent with the overall industry restraint limit. Since orders taken by firms will not usually be the same, the distribution of quotas will not be uniform for every firm. The range of possibilities is virtually unlimited; to make it possible to work toward a specific result, further assumptions are needed.

One fairly simple possibility leading to interesting results is to assume the following: (1) all firms are identical and (2) there is free entry into the industry. A special facet of the first assumption is that all firms are presumed to be equally able to attract orders and in fact each obtains the same quantity of potential business.

When aggregate output of T_0 is efficiently produced before the introduction of restraints then the relevant cost environment for existing and potential firms is that of Figure 2. The price level becomes $P_1{}^T$, however, which encourages firms to accept orders in excess of q_3 owing to the reduction factor relating quantity of quota actually available to total applications for quota. With free entry the total quantity of applications will be much larger than T_0 and the pro rata allocation will result initially in such small allotments to every firm (below q_1) that none will be taken. Some applicants would accordingly withdraw and a further round (or rounds) of pro rata calculations would be carried out until the quota assignments to each firm reach q_1. Every firm then would just be willing to accept and use this quota quantity.

There are several immediate and interesting implications which follow from this outcome. First, the industry features overcapacity, a consequence of excess entry. The given industry output is produced by a larger number of firms than socially desirable. Each firm operates at a sub-optimal scale, on the declining portion of its average cost curve. Second, every firm earns only normal profit. In effect each firm may be viewed as facing a trade-off between (initial) rent premium anticipated from quota and higher unit cost with reduced production. The press of potential entrants forces each firm to accept high cost operation when total industry production and price are given. As Krueger has noted, in such a case firms compete for rent through entry into the industry.

A third and somewhat surprising consequence of this rent-seeking activity is that the quest for rent consumes rent. This is analogous to the analysis of ordinary long-run perfectly competitive industry wherein the effect of entry in response to supernormal profits by existing firms means the eventual elimination of all excess profits. But for the case at hand a comparable allocative efficiency result is lacking. Industry inefficiency may appear in Figure 1 as an upward shift in the industry supply curve to position LRS'. This curve represents the sum of contributions by firms to industry production at the higher average cost of each firm, which also equals product price. The industry supply curve shifts up and eliminates the rent surplus box. The surplus, which under an alternative textile quota system, would have been retained as a type of return to the industry (and economy) disappears in this rent-seeking case.

This second case is an extreme version of the present quota system. However, it is directly relevant to the present debate over the quota system in that one of the main objectives of the 1976 revision was to enlarge the free quota pool. With new regulations on quota transferability the above discussion leads to the conclusion that it is not in Hong Kong's interest to modify the regulations in this direction. Given that textile restraints adversely affect Hong Kong's income, at least it has been able to secure the right of administering export controls and has been given the potential to capture the rent surplus. The recent revision places Hong Kong in an awkward position in which it squanders the rent surplus. It is also possible to suggest that Hong Kong should surrender its privileged right of administering textile exports to the importing countries. At least in this situation and with a smaller government establishment the burden on local taxpayers could be reduced.

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