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Policy Issues on Promoting Backward Linkages from the Garment Industry in Sri Lanka

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Abstract

This paper examines the slow growth of local supplies to the garment industry in Sri Lanka. We have shown that the overall investment environment in Sri Lanka and international demand patterns constrain the formation of competitive local producers of fabric and garment accessories. We have also shown that building and maintaining sources of competitive advantage among producers of garment inputs are crucial to their development and viability in a highly integrated global economic environment. From the Sri Lankan garment industry experience and from the available evidence from other countries, we have argued, in general, that the emphasis on backward linkages as an important criterion in formulating policies in an open economy for export-oriented industrialization is somewhat misplaced. Changes in the global environment and international demand patterns have made backward linkage effects less powerful than they were for import-substitution industrialization strategy in a closed economy. Although local suppliers are useful and valuable, they cannot function unless conditions exist which allow them to be competitive.

Policy Issues on Promoting Backward Linkages from the Garment Industry in Sri Lanka

Saman Kelegama and Fritz Foley[1]

1. Introduction

At the time of broad-based economic liberalization in Sri Lanka in 1977, the garment industry played only a minor role in the country's economy. Since then, the industry has recorded remarkable growth (an average growth of 38 per cent in nominal dollar terms between 1977 and 1995) and assumed a leading role in the economy. By 1986, garments accounted for the largest share of all commodity exports (27 per cent), and by 1992 was the largest net foreign exchange earner of the nation (US$ 0.4 billion), and in 1995 garment exports exceeded US$ 1.5 billion -- nearly half of the value of all commodity exports.

Despite this remarkable growth record there are very few local suppliers of fabrics and accessories needed as inputs for garment manufacturing, and on average over 65 per cent of material inputs (i.e., excluding labour) needed in the industry are imported. As a result, the domestic value added of this industry is low. In fact, the garment industry has the lowest ratio of value added to value of production of all 3 digit ISIC industries in Sri Lanka. It is generally hoped that Sri Lanka could boast of the existence of strong local suppliers in order to generate more foreign exchange and employment. In the government's industrial policy statements of 1989 and 1995, the formation of backward linkages from the garment industry was viewed as a vast opportunity for generating employment and fuelling industrialization. This paper will explore the reasons for the continuing high import dependence and policy implications for the promotion of backward linkages.

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There are complex and conflicting economic factors which govern the emergence of local suppliers for a given industry. Some political economy considerations touch on this subject (*a la* Mellor, 1976), but we will focus our comments on technical economic factors. The ideas of backward linkages, which originated in the 1950s, suggest that if there is sufficient demand, supply will be created, and the formation of backward linkages will fuel industrialization. Arguments concerning the importance of local suppliers to the end-product's competitiveness point out that having local suppliers can increase efficiency, flexibility, and innovation. These arguments highlight the reasons why some economists and policy-makers are of the view that local suppliers should exist.

In this paper, we examine the experience of the Sri Lankan garment industry and argue that the global economic environment has changed sufficiently for the factors which formerly governed the formation of local suppliers to no longer apply as they did earlier. Although local suppliers are valuable and useful, recent widespread economic liberalization has led to other economic arguments which help to explain why backward linkages are not so readily formed. A strong local demand for garment inputs is no longer sufficient to establish local suppliers. Building and sustaining sources of competitive advantage in firms have become critical. It is our opinion that, while the open economy of Sri Lanka has contributed to the success in garment manufacturing, Sri Lanka lacks the conditions necessary to support competitive local suppliers of fabric and some garment accessories. We argue that policy itself cannot create linkages in an open economy, and that the overall investment environment and external demand are very important factors when it comes to whether linkages are forged or not. Moreover, the formation of linkages in an open economy is time dependent.

The rest of the paper is organized as follows. Section 2 gives a background of the garment industry in Sri Lanka with special reference to its import dependence, and places the experience of Sri Lanka in the international context. Section 3 reviews some of the existing literature on backward linkages while focussing on specific aspects of the garment industry. Section 4 examines the factors constraining backward linkages from the garment industry in Sri Lanka, and discusses some factors which govern their formation in an open economy. Section 5 analyzes the international experience with backward linkage promotion and policy options. The final section has concluding remarks.

2. The Current Status of the Garment Industry

Sri Lanka's economic liberalization policies of 1977 created an environment conducive to export-led industrialization -- a departure from the pre-1977 policy regime (see, for instance, Cuthbertson and Athukorala, 1991). Various elements of the reform package such as the exchange rate devaluation, replacement of quantitative restrictions by tariffs, cash subsidies, tax reductions, import duty rebates, promotion of foreign direct investment, etc., paved the way for expansion of exports such as garments. Garment manufacturing is a cumbersome process which cannot be fully automated, and the low wages in Sri Lanka made it an attractive place for the industry. The new trade policies allowed entrepreneurs to take advantage of a large supply of domestic cheap labour and easily accessible high-quality raw materials and intermediate goods produced abroad.

The garment exports of Sri Lanka are largely governed by the Multi-Fibre Arrangement, (MFA) which is a system of voluntary export restraints based on allocated quotas. By constraining the supply of garments of well-established garment exporting countries, mainly to the markets in the USA and the EU, the MFA helps small developing countries such as Sri Lanka gain a foothold in these markets. With the incentive of quotas, established garment manufacturers chose to expand and many opportunistic investors who had no experience in the industry entered the market place in the late 1970s.[2] When garment manufacturers from East Asian NICs had filled the export quotas of their own countries in the early-1980s, they pursued investment projects in Sri Lanka as a means of 'quota-hopping'. This fuelled the growth of garment exports from Sri Lanka (see Figure 1). As most investors recover the costs of their capital expenditures quickly by meeting quota requirements and can readily switch their focus to another country, the garment industry is particularly "footloose" in nature.

Although quota restraints will be phased out over the next ten years according to the Uruguay Round declaration, there will be few immediate consequences for Sri Lanka since the most restricted clothing products will be phased out last (49 per cent will be phased out in the year 2005).[3] In recent years, Sri Lanka has gradually increased her share in the non-quota market -- 85 per cent of total garment exports to EU and 25 per cent of total garment exports to the USA in 1995 -- a positive indication that the garment industry is

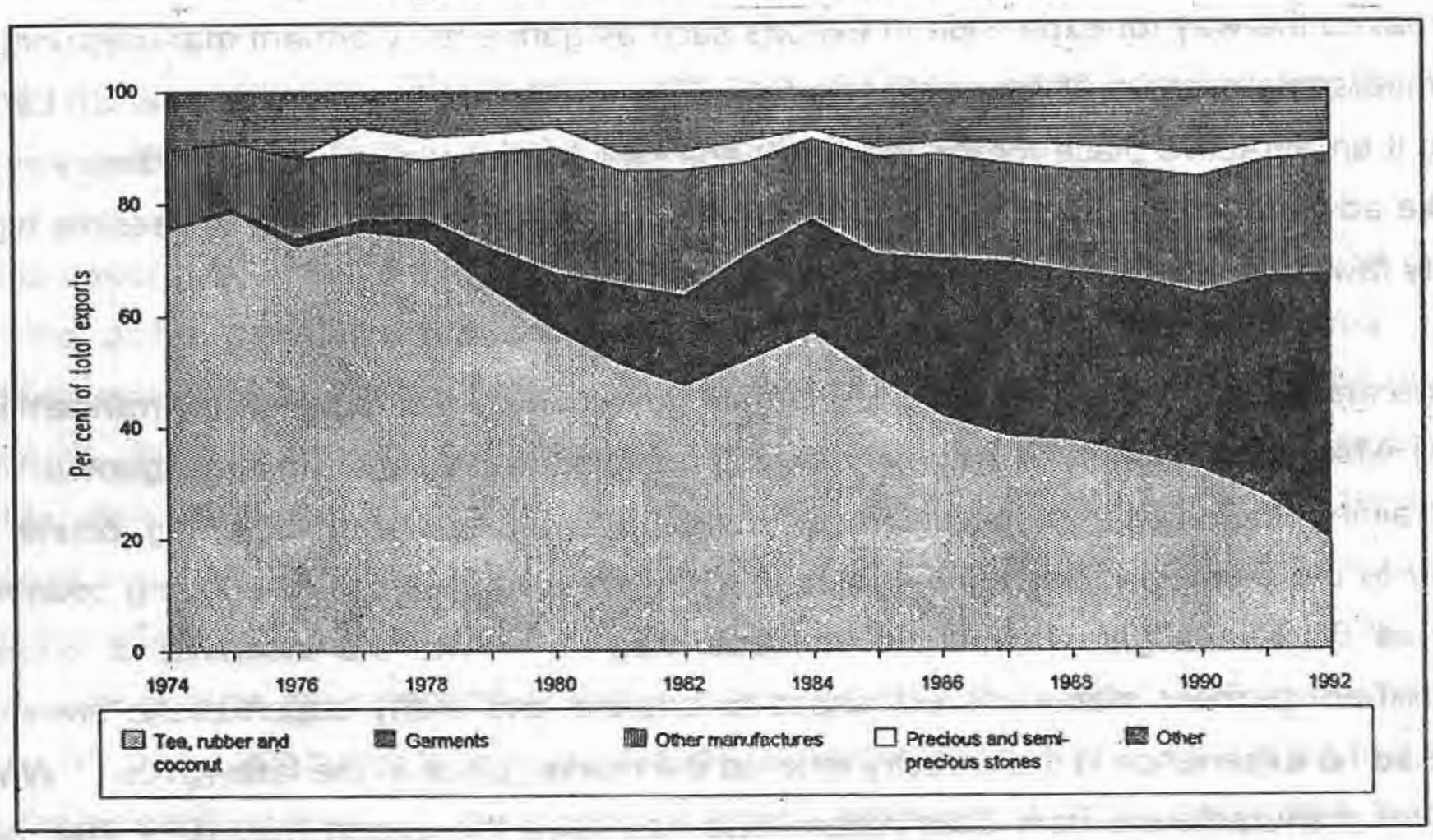
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2 Quotas played an important role in the 200 Garment Factory Programme launched in late-1991, which encouraged investors to build garment manufacturing plants in rural areas of Sri Lanka and employ recipients of welfare payments.

3 For a discussion on the impact of the MFA phase out, see Majmudar (1995).

preparing for survival in a quota-free world (SLAEA, 1995: 26-33). Although garment exports represent a large fraction of exports from Sri Lanka, the country holds a share of only 1 per cent of world trade, and Sri Lankan firms produce around 2.5 per cent of all garment exports to the USA (Kelegama and Unamboowe, 1994: 11).

Figure 1: The Growth of Garment Exports



Source: Plotted using data from CBSLAR (various issues).

Sri Lanka produces mainly standardized low and medium priced garments destined for sale in the USA or the EU.[4] The most successful manufacturers are large and have strong ties with buying offices such as Marks and Spencer, C & A, Liz Clairbone, etc. Without marketing links, a firm must sell garments for an export price which is only a small fraction of the final price. On average, the export price of garments from Sri Lanka is one-sixth to one-fourth of the final price, but garments from Hong Kong usually fetch between one-fourth and one-third of the final price. Some manufacturers suggest this difference is due to the fact that Hong Kong exporters are more able to control their suppliers and have more direct contact with their buyers. The nature of market channels is important to the

4 Approximately 60 per cent of exports are sent to the USA and 34 per cent to the EU. 40 per cent of garments produced are budget garments, 50 per cent are for the middle market, and 10 per cent are for the high end, more fashion conscious market.

subject under consideration as producers tend to rely heavily on foreign buyers' instructions and specifications (Section 4.2).

Within the manufacturing sector, the garment industry accounts for roughly 40 per cent of gross output and employment. More than 230,000 employees work in the garment industry, and there are approximately 750 garment factories, half of which have been granted special status by the Board of Investment (BOI) of Sri Lanka (JTN, 1995: 5). 'BOI status' qualifies an industry for duty free importation of inputs, off-shore borrowing facilities, tax holidays or low corporate tax rates, exemption from business turnover tax and various levies, etc.[5] Most of the factories make use of basic sewing machines, and very few have invested in sophisticated technology for cutting and packaging. 85 per cent of factories are owned by Sri Lankans, but these are the smaller ones since the remaining factories, which are joint ventures or wholly owned by foreigners, account for almost half of all garment export earnings (JTN, 1995: 127 and Mandelbaum, 1993: 72).

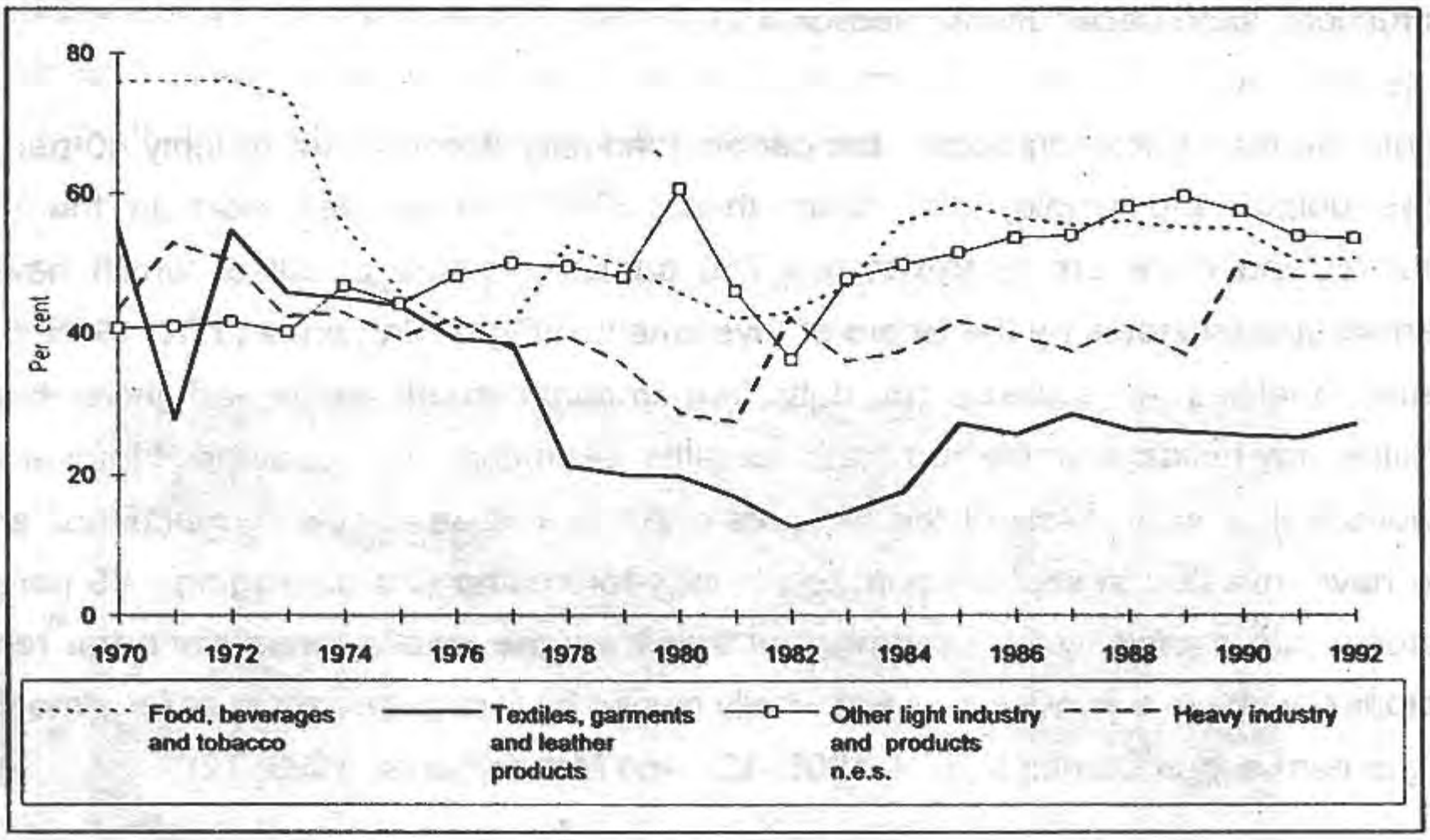
As stated, despite the rapid growth of the garment industry, local suppliers of inputs to this industry have not developed significantly. In fact, the garment industry has the lowest ratio of value-added to value of output of all industry categories of Sri Lanka (see Figure 2). The value of imported inputs in recent years has varied between 63-70 per cent of the value of garment gross output, a percentage so high that the garment industries have been referred to as 'glorified tailor shops' by some commentators. Although there are some variations among garment manufacturers, most import a very high percentage of the fabric, buttons, zippers, studs, eyelets, buckles and the interlining that they use (see Table 1). 80-90 per cent of fabrics and 70-90 per cent of other accessories required for the garment export industry are imported.[6] Many inputs are produced in Sri Lanka, but garment manufacturers prefer using foreign sources due to a number of factors centred around price-and quality-wise competitiveness. Since fabrics amount to 65-70 per cent of the value of finished garments, those concerned about the lack of backward linkages frequently focus on the dearth of internationally competitive fabric manufacturers (see, for example, Thurairajah, 1995).

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5 A firm has to satisfy certain investment and export baselines stipulated by the BOI to qualify for 'BOI status'.

6 Fabrics account for roughly 65-70 per cent and other accessories for roughly 5-10 per cent of the value of the finished garments (Kelegama, 1993). Other accessories are: thread, buttons, labels, zippers, studs, eyelets, cords, padding, elastic, buckles, interlining, shoulder pads, pins, clips, polybags, cartons, and hangers.

Figure 2: Value Added in the Garment Industry



Source: Plotted using data from CBSLAR (various issues).

Table 1
Percentage of Inputs Sourced Locally of a Selected Sample of Garment Industries

Item \ Firm	Polytex	Aitken Spence Garments	Kundanmals	Hidaramani	Smart Shirts
Fabric	0	5	5	5	0
Thread	100	100	100	100	85
Buttons	0	0	10	0	0
Labels	0	80	90	60	20
Zips	0	0	0	0	0
Studs	0	0	0	0	0
Eyelets	0	0	0	0	0
Padding	N.A.	70	100	80	60
Elastic	20	N.A.	100	80	60
Buckles	N.A.	N.A.	0	0	0
Interlining	0	0	10	0	0
Shoulder Pads	20	90	0	60	30
Pins	100	0	100	0	80
Clips	100	100	100	100	80
Polybags	100	90	100	90	80
Cartons	100	100	100	100	80
Hangers	95	95	80	60	90

Note: N.A. = Not Applicable/Available.
Source: Based on the Interviews conducted for the study.

There are signs that the import dependence of the garment industry has been decreasing. According to the Sri Lanka Customs data, over the last decade, the value of imported inputs has increased at a slower rate than the value of garment gross output -- the share of imported inputs to garment output was above 80 per cent during 1986-1988, and it is now below 70 per cent (Table 2).[7] The most dramatic aspect of the decrease in the share of imported inputs is that it has occurred during a time of rapid growth in garment exports. The decrease is largely due to new entrants and improved performance in fabric finishing and due to the manufacturing locally of thread, labels, padding, shoulder pads, cartons, polybags, and hangers.

Table 2
Garment Gross Output and Imported Inputs, 1986-1995
(All values are in millions of rupees in nominal terms)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Value of Garment Gross Output	9,254	12,383	13,581	16,893	24,933	31,627	49,176	62,349	68,945	84,829
Value of Imported Fabric	6,251	7,854	8,544	9,522	13,675	20,059	27,349	33,570	40,527	45,662
Value of Imported Non-Fabric Accessories	1,831	2,424	2,767	3,266	1,296	3,646	4,550	5,754	7,517	10,072
Share of Imported Inputs in Gross Output (%)	87	83	83	76	60	75	65	63	70	66

Source: Sri Lanka Customs.

Notes: (a) Due to shortcomings in the collection of Customs data, the figures presented in this Table are not precise, but the overall trend has been confirmed in interviews and other analyses.
(b) Garment Output does not include bed linen and other textile products.
(c) Some small categories of fabric are absent from the calculations of fabric imports.

Local suppliers have had the most success supplying products which are relatively simple to produce, expensive to import, and not related to fashion trends. For example, padding and corrugated cartons are quite simple to produce and high freight costs make them expensive to import. There are indications that the growth in local supplies will continue.[8] However, the extent of backward linkages remains undoubtedly low.

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7 Some of the data used for this analysis are questionable, but the overall trend has been confirmed in interviews and other surveys conducted by the Sri Lanka Export Development Board.

8 Fourteen projects in the fabric industry and seven in various accessory industries have been approved by the BOI in recent years.

Other Asian countries have had similar experiences in the garment industry. As nations have pursued economic development by pursuing outward-oriented policies, garment manufacturing firms have grown rapidly. Although in more developed countries such as Taiwan and South Korea fabric manufacturers and accessory producers have come into existence, in many developing countries they have not. Garment exporters in Bangladesh, The Philippines, and Vietnam are highly dependent on imports, especially imports of fabric (Jackson, 1992: 23 and JTN, 1995: 75-86). Although Thailand, Malaysia, and Indonesia have developed stronger capabilities among suppliers of garment inputs, most of the fabric and accessories made in those countries are basic and of low quality. Fine fabric and complex accessories such as zippers are imported (Hill, 1992 and JTN, 1995: 89-104).

Policy-makers in Sri Lanka and in many of these countries have issued statements that imply that the large import dependence of garment industries signals a potential opportunity to create local supply, and that efforts to improve capabilities among suppliers of fabric and accessories should be encouraged (Ministry of Industries, 1989: 3, Ministry of Industrial Development, 1995:2, and JTN, 1995: 78, 86, 96). A closer examination of the factors governing the formation of backward linkages is required to determine if such thinking is well founded.

3. Some Documented Factors Governing the Formation of Backward Linkages: With Special Reference to the Garment Industry

Two major arguments from the existing literature, correctly or incorrectly, point out reasons supporting the formation of backward linkages from the garment industry in Sri Lanka. The first of these is the theory of backward linkages, which originated during the import substitution industrialization era in the 1950s and which advocates direct policy intervention to promote them. The other is the theory of competitive advantage of nations, in the 1990s, which discusses local suppliers in terms of the value of backward linkages in reducing the lead time (effective delivery) and enhancing innovation for end-product firms. Here the emphasis is on the value, and not on policy. Arguments that are not favourable for direct policy intervention to the formation of backward linkages from the garment industry in Sri Lanka have received little attention.

The backward linkage effect can be defined as being the effect by which every non-primary economic activity will induce domestic entrepreneurs to attempt to supply the

inputs needed in that activity. So long as an economic activity demands a quantity of a particular input large enough to allow a firm supplying the input to reach some minimum economic size, the theory predicts that the firm would form. Minimum economic scale is the size at which the domestic firm will be able to secure normal profits and to compete with existing foreign suppliers (Hirschman, 1958: 102). Thus, the early theory of backward linkages stresses the importance of the size of local demand in determining whether local suppliers will form.

A corollary to this thinking is that it is possible to begin industrialization by building industries which meet final demands and require certain inputs. This process would create incentives for entrepreneurs to establish firms that transformed primary or semi-manufactured goods into the necessary inputs. According to the theory, by setting up 'last' industries first, less developed countries would maximize the impact of backward linkages and achieve rapid industrialization and overall economic growth.

There are very few studies of the minimum efficient scale of a fabric or garment accessory firm, and there is some debate as to whether such a measure actually exists in many industries. There are however indications that for some basic products, the demand in Sri Lanka is sufficient to meet the scale requirements of at least one firm. A study of fabric manufacturing estimates that a competitive cotton weaving firm must produce at least 19 million metres (Jenkins, 1993). This amount is roughly 10 per cent of the existing demand in Sri Lanka. Product specialization is particularly important to total factor productivity in textile manufacturing (Pack, 1987), and there is sufficient demand for certain fabric items to support textile firms. Well over 50 million square metres of cotton sheeting are imported as is a similar quantity of cotton shirting. For other types of basic accessories, such as thread, labels, padding, elastics, polybags, cartons, or hangars, local demand from the garment export and other industries also exceeds the minimum output required for a firm to be efficient.

The early thinking on backward linkages influenced many academics and policy-makers in Sri Lanka. For instance, when writing about import dependence during the import substitution era in Sri Lanka, Athukorala (1981) noted: 'A priori, one can expect the [import] dependence to reduce when these new products are gradually domesticated creating a market for backward linkage investment...' (ibid: 138). During the import-

substitution industrialization period in Sri Lanka such thinking was valid and was consistent with the prevalent ideological bias in development economics.

Such thinking was treated as valid for the export-oriented industrialization period also by policy-makers in Sri Lanka. Guided by the theory of backward linkages, during the early stages of export-oriented industrialization in Sri Lanka, more importance was assigned to net export earnings than to gross export earnings, and high value added exports received more incentives than low value added exports.[9] The Board of Investment also gave priority to firms exporting high value added products in its investment approval strategy (see, for instance, BOI, 1995).

The belief in the potential benefits from backward linkage effects continues even today. In a 1995 policy statement from the Ministry of Industrial Development, one of the major strategies for the garment sector reads as follows: '...the main emphasis in this sector will be on backward integration... Integration of garment and fabric manufacture will be achieved by encouraging new investments into large-scale processing, weaving, and knitting through provision of incentives and by restructuring the fabric manufacturing industry' (Ministry of Industrial Development, 1995: 19-20).

The second major argument in favour of backward linkages deals with the importance of competitive local suppliers to the end-product's competitiveness. Theorists suggest that there is a mutually advantageous symbiotic relationship between firms making garments and firms supplying inputs for garment manufacturing. Not only would the garment export firms be better-off with local sources of supplies, but suppliers would also benefit from locating near their customers. In his theory concerning the competitive advantage of nations, Porter (1990) claims that one of the broad determinants of national advantage is the presence in the nation of related and supporting industries (ibid: 80). Local suppliers are able to deliver the most cost-effective inputs in an efficient, early, and rapid way. The information flow and technological interchange between suppliers and producers also speed the rate of innovation. Since there is a close correlation between the well-being of garment manufacturers and the well-being of their suppliers, if the competitiveness of either one can be improved, the other will benefit.

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9 For example, human hair exports were given more incentives than soft toy exports by the Sri Lanka Export Development Board during the early 1980s.

The advantages which could be gained by the Sri Lankan garment export industry would be due to reduced lead time and increased control over managing the delivery of inputs. In recent years, buyers have pressured producers to reduce lead time, which is the time between the placing of an order and when a delivery is made. The number of annual buying seasons has increased from 2 - 4 to 6 - 8, and production runs have become shorter with an increase in variety and style. As a result, the speed of delivery is important in determining the competitiveness of a garment exporter. The ideal international lead time is around 60 days, but in Sri Lanka, the figure for most garment exporting firms is between 90 and 150 days (Kelegama and Unamboowe, 1994:22).[10]

With a network of local suppliers, garment manufacturers could reduce lead time and avoid delays. Moreover, a manufacturer could obtain inputs in instalments. The manufacturer need not wait for the entire order to be produced by the supplier and arrive in Sri Lanka. He can obtain inputs in instalments and begin work quickly.[11]

When importing, the garment manufacturer is unable to inspect inputs until they arrive in Sri Lanka. If the inputs do not meet their requirements, garment exporters must reject the consignment and suffer financial loss. This problem could be avoided if local suppliers existed and the garment exporter frequently checked samples of inputs. A relationship with strong local suppliers would also allow garment manufacturers to know when an input will be provided to them. With tighter control over inventories and supplies, garment exporters would be more able to employ "Just-In-Time" production techniques and streamline their own operations.

If Sri Lanka had both garment exporters and a strong group of fabric and accessory suppliers, information could easily be shared between these groups. There would be greater opportunities for learning to take place. Suppliers to the garment export industry could learn more about the demands of the end-consumer, and garment exporters could ensure the manufacture of inputs which would meet international standards. Enhanced communication could allow for faster response to changes in industry trends or buyer purchasing requirements.

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10 In Hong Kong and China the lead time is between 45-60 days (India Today: 121, 30 June 1996).

11 For example, if 300,000 buttons are ordered from Hong Kong, the manufacturer has to wait for the entire order to be produced and to arrive in Sri Lanka before starting the trimming work. If the buttons were produced locally, the garment manufacturer could get 50,000 buttons initially and start production.

If garment manufacturers in Sri Lanka were able to enjoy increased competitiveness (*inter alia*, in terms of efficient delivery) as a result of having strong local suppliers, some buyers would view them as a more reliable source of production and would be more likely to form long-term, profitable relationships with them.[12] Also, Sri Lankan firms could move up-market and produce for retailers who are closer to the cutting edge of fashion. The margins of garment manufacturers serving this market tend to be higher, but lead times must be short. Increased competitiveness is crucial to surviving without quotas in the coming years.

While these two arguments lead one to believe that local suppliers should be promoted, the economic realities of integrated world markets lessen the importance of local sources of inputs and leave little room for direct policy intervention to achieve this objective. As explained earlier, the theory of backward linkages of the 1950s emphasizes the importance of the size of local demand in determining whether or not a supplier firm is viable. However, as a result of the growth in international trade, the size of local demand is not as important as it was during the 1950s and the 1960s. '... backward linkages implicitly assume that demand creates its own supply. Such an assumption for developing countries at this point in history is...naive' (Reidel, 1976: 322). Since inputs can easily be obtained from any one of a number of international suppliers so long as transport costs do not become prohibitive, local input suppliers no longer have captive domestic markets. Garment exporters in Sri Lanka believe that they can readily obtain the inputs from international sources. Of the garment exporting firms interviewed for this study, only one firm said that it would pay a small premium for local inputs (see Table 3).

Table 3
The Premium for Local Supplies of a Selected Sample of Garment Exporters

Firm	How much of a premium (percentage) will you pay for reliable local suppliers?
Polytex	0
Aitken Spence Garments	0
Kundanmals	5-10
Hirdaramani	0
Smart Shirts	0

Source: Based on the Interviews conducted for the study.

12 Some buyers are only concerned about the trade regime which assures the availability of high quality inputs (discussed in Section 4.2).

Porter (1990) also points out that, while local suppliers can prove useful and valuable, they are not necessary for the end-producer. 'By the same token, a nation need not be competitive in all supplier industries for its companies to gain competitive advantage. Companies can readily source from abroad materials, components, or technologies without a major effect on innovation or performance of the industry's products' (ibid: 81).

The reasons for the lack or slow formation of backward linkages in a liberalized global trading environment have received little attention. Reidel (1976), for instance, argues that backward linkages in Taiwan during the early stages of export-oriented industrialization might rationally have been avoided on the basis of neo-classical-factor-proportions arguments (ibid: 321). In other words, he argues that on factor proportion grounds the emphasis on backward linkages is inconsistent with employment expansion objectives. However, the factors governing the formation of backward linkages in an open economy have not been developed in a comprehensive manner. In examining the case of the Sri Lankan garment export industry, we will delineate several factors which constrain the formation of local suppliers and thus enhance the understanding of the role of backward linkages in today's global economic environment.

4. The Factors Constraining the Formation of Backward Linkages

International competitiveness has become crucial to the formation and viability of local suppliers. Many suppliers have been unable to develop and maintain competitiveness because of factors related to the overall investment climate and international demand patterns. The required investment climate for the formation of backward linkages in Sri Lanka was distorted by: (a) legacy of the import substitution strategy, (b) the incentive regime and the economies of scale factor, and (c) the high cost of capital. The nature of production decisions and purchasing agreements are factors from the international demand side that constrain the formation of backward linkages.

4.1 Overall Investment Climate

4.1.1 The Legacy of the Import Substitution Strategy

During the 1960-1977 period, import substitution policies were seen as the main tool not only for promoting industrialization but also for overcoming foreign exchange shortages (see, for instance, Athukorala and Jayasuriya, 1994). During this period only a few

producers of accessories existed, but many fabric manufacturers came into existence. There were two label manufacturers and only a few producers of other accessories. The textiles industry, however, was promoted as an import-substitution industry by the State. Importation of fabric was banned, and the government was responsible for the import and distribution of raw materials used in manufacturing fabric. Four large-scale factories were established by the government with foreign investment or foreign aid, mostly coming from the former Socialist bloc.

Despite market-oriented policy reforms since 1977, many of the old import-substitution industries continued to receive protection in the form of high tariffs. Strong lobbies, particularly from firms which benefitted from the pre-1977 regime, exerted pressure for continued protection. This happened because many small firms found it difficult to survive in a liberalized regime and had to close down immediately after the 1977 reforms.[13] For example, the two label manufacturers mentioned earlier had to close-down soon after 1977, when they realized that their shuttle looms could not produce quality labels for sale at international prices. The state gave into these pressures as it did not want to see further employment losses from tariff reduction-induced restructuring. The import duties on fabric and accessories remained high and even by 1989 fabrics and most accessories received a tariff protection of 60 per cent (see Table 4, also see Kelegama, 1993:62-63).

Table 4
Import Duties on Cotton Fibre, Yarn & Fabric (selected years)

	Import Duty % (or surcharge)		
Year	Cotton Fiber	Cotton Yarn	Cotton Fabric
1984 (November)	0	5	45
1987 (December)	5	25 (or Rs. 25/Kg.)	60 (or Rs. 15/sq. m.)
1989 (March)	10	25 (or Rs. 25/Kg.)	60 (or Rs. 15/sq. m.)
1991 (November)	10	20	35
1993 (April)	0	25	100
1993 (November)	10	25	50 (or Rs. 10/sq. m.)
1995 (February)	3	10	35

Source: Sri Lanka Customs.

13 The number of registered handlooms reduced from 115,000 to 30,000 by 1989 (Edwards, 1996: 7).

In addition, there was little certainty that the shift to an outward-oriented regime would be permanent, since the main opposition party maintained a commitment to economic development through import-substitution industries until the mid-1980s. As a result, input industries did not develop the skills and capabilities to produce internationally competitive fabric and accessories and continued to focus predominantly on the local market where quality requirements were not binding. Larger textile firms managed to survive under private sector management contracts during the 1980s, but continued to focus on the domestic market and remained internationally uncompetitive (Pehlivan, 1993: 13-16) .

After 1989, the four major textile firms were privatized. Except for two of them, the two others have not, however undergone major restructuring after privatization. Two of them still sell less than 5 per cent of their output to the garment export industry. It is far easier to focus on the small domestic market, especially where tariffs ease competitive pressures. Even where competitive pressures call for change and innovation, labour legislation and corporate law prevent firms from being as flexible as they need to be to respond (World Bank, 1995). As a result, there is still a great deal of inefficient capital in use.[14] Although clothing exporters demand 45-60 inch width fabric, the majority of looms in Sri Lanka are only 36 inches wide, and firms find that replacing them is excessively costly (Edwards, 1996: 9). Thus, while aspects of the historical environment allowed Sri Lanka to develop an inefficient fabric manufacturing sector, other countries in the region, such as Taiwan and Hong Kong, were establishing outward-looking, internationally competitive firms.

The question now arises whether the new incentive regime could not offset the anomalies created by the legacy of the import-substitution industrialization era and the partial nature of liberalization of tariffs. In order to address this question we turn to the new incentive framework and the economies of scale considerations.

4.1.2 The Incentive Regime and the Economies of Scale Factor

Initially, there were major anomalies in the regulatory framework that governed the incentives for input suppliers. Input suppliers were not granted the special incentive package by the BOI ('BOI status') until the early 1990s, and it was only in 1992 that large new suppliers of inputs were granted 'BOI status' on satisfying BOI stipulations. The existing small or large local suppliers and small new local suppliers were not granted BOI

14 One firm is using its original spinning and weaving machinery which is more than thirty years old.

status but an incentive package that fell far short of the BOI package was offered to them in 1992.[15] From the very beginning of liberalization there was a tendency to treat local input producers as indirect exporters rather than direct exporters. Accordingly, it was thought that they do not deserve 'BOI status'. As a result, many did not receive the encouragement to develop capabilities that could enable them to become internationally competitive.

As stated in Section 4.1.1, these local suppliers received some protection for serving the domestic market, but they faced higher costs in serving the international market. These comprised the higher costs of handling operations at the Customs, the higher costs of obtaining duty and Business Turnover Tax (BTT) rebates, and the higher corporate tax rates.[16] Thus, non-BOI firms, which included firms which were good candidates to be local suppliers, faced higher costs (Section 4.1.3) and this limited their ability to survive and reinvest. As a result, they continued to focus on supplying local markets and did not develop strong international marketing skills and efficient international distribution operations.

Although the size of the garment manufacturing industry in Sri Lanka is large enough to support efficient suppliers of some inputs (Section 3), local demand for other inputs is too small to support even a single firm. For example, the demand in Sri Lanka is not large enough to support local suppliers of cotton twill, denim, flannel, and polyester/cotton twill.

These economies of scale constraints are exacerbated by the fact that a wide variety of garments are produced in Sri Lanka. The quota is spread over a large number of product lines; thus, there is very little focus (see, for instance, SLAEA, 1995: 27-31). Furthermore, the inputs that garment exporters demand change not only according to seasons but also as the demands of buying offices change to meet new fashions. This kind of variation in world demand makes local suppliers hesitate to expand. Local suppliers find it difficult to develop the scope of supplies required to meet the demands of garment exporters, nor

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15 The incentive package offered to indirect exporters is known as the Temporary Importation for Export Processing Scheme (TIEPS). This package allows indirect export producers to import raw materials duty free and have them placed in a bonded store (see Kelegama, 1993:38-42).

16 The costs of handling operations at the Customs are 25 or 30 per cent higher than those of a BOI firm. Corporate tax rates are 40 or 45 per cent for non-BOI companies, but BOI companies get concessional rates of 15 per cent for twenty years. In order to receive duty rebates on goods that they will export, non-BOI firms must apply to the relevant government ministry/ministries. Applying for and receiving duty and BTT rebates is not always an efficient process. Some duty rebate cases go on for more than three years, and BTT rebate cases can take even longer.

have they the flexibility to change their output quickly. For example, buttons come in such a variety of shapes and sizes that entrepreneurs have been unable to meet the wide demands of local garment exporters, and would require huge amounts of capital to do so.[17]

In addition to economy of scale considerations, it is important to take into account the positive externalities related to large international suppliers of a certain input. Such suppliers hold greater power in negotiating for its raw material. Estimates suggest that Hong Kong producers of cartons and polybags pay 15 per cent less for their raw material than Sri Lankan ones partly because they are part of a larger industry linked to an international network of buying offices.

Firms in larger, more advanced industries have greater access to imported inputs as well. If a supplier in Sri Lanka wants to import a few spare parts for a machine or a particular colour dye, the supplier must often import a larger quantity than he needs because there are a number of formalities an importer must go through. If only a small quantity is imported, these formalities and the transport costs add significantly to the cost of an input. As a result, many firms import much more of certain inputs than they actually need and end up with large inventories.[18] There are significant costs related to holding and maintaining these inventories, especially in a country with a high cost of capital (Section 4.1.3).

Suppliers of garment inputs in Sri Lanka have not been able to maintain detailed information on industry trends and on customers and competitors. This kind of information is essential to compete successfully in international markets, but it is prohibitively expensive to collect and update, especially for small firms which are not part of large industrial groups. Countries with a larger industrial base of firms supplying garment manufacturers have sufficient demand to import large quantities and avoid problems related to the availability of inputs and information.

The failure to develop the capabilities required to be export-oriented further constrains the formation of backward linkages since it leaves suppliers focused on local demand, and

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17 Even in Hong Kong and Taiwan, which have large garment manufacturing sectors and which export accessories to producers all over the world, there are only a few manufacturers of buttons.

18 One large fabric manufacturing firm, for example, holds spares worth more than US$1.2 million.

local demand does not mirror international demand. Local demand conditions can play an important role in teaching local producers about the requirements of their output. 'It might seem that the globalization of competition would diminish the importance of home demand. In fact, the composition and character of the home market usually has a disproportionate effect on how companies perceive, interpret, and respond to buyer needs. Nations gain competitive advantage in industries where the home demand gives their companies a clearer or earlier picture of emerging buyer needs, and where demanding buyers pressure companies to innovate faster and achieve more sophisticated competitive advantages than their foreign rivals' (Porter, 1990: 79). However, Sri Lanka is not a fashion trend-setting country.[19] A large fabric firm that was privatized in 1990 and purchased by foreigners makes extensive use of branch offices to keep abreast of international demand, but many Sri Lankan firms do not have strong lines of communication with the outside world and do not learn of new trends until six to twelve months after they have started. Many producers seem to be out of touch with the specifications that fabrics and accessories must meet to compete in international markets.

While the economic history of Sri Lanka, the incentive regime, and economies of scale considerations explain why older textile firms and many accessory producers have not built the capabilities to act as major suppliers to the garment export industry, less is known as to why new outward-looking large industries have not come into existence with the assistance of the BOI package introduced in 1992. To understand this, we turn to other explanations.

4.1.3 High Cost of Capital

In Sri Lanka, there is an abundance of unskilled persons who work for an hourly wage of US$ 0.39, which is quite low compared to that of industrialized nations and many other developing countries (see Table 5). The capital base was low at the time of independence in 1948, and it has matured little since then (Kelegama, 1992: 33). Domestic savings rates have also remained low at around 14 per cent of GDP. Moreover, there have been large government budget deficits averaging 10 per cent of GDP during the 1980s due to macroeconomic mismanagement and internal shocks, such as the ethnic war. As a result, the cost of capital is high in Sri Lanka relative to many other developing countries (IPS,

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19 The traditional dress is sarongs for men and saris for women. Where the adoption of western dress has been taking place, men wear pants and buttoned shirts, and women wear dresses, blouses and skirts.

1995). Therefore, for most domestic entrepreneurs, Sri Lanka offers an abundance of cheap labour relative to capital, and domestic firms have cost advantages in producing labour-intensive goods and cost disadvantages in producing capital-intensive goods.

Table 5
Wage Comparison - 1995 data (All figures are in US Dollars)

	Hourly Wage For Unskilled Personnel (US$)
Japan	18.50
Italy	18.23
USA-South East	9.42
Brazil	2.56
Korea	2.46
Thailand	1.16
India	0.57
Pakistan	0.44
Indonesia	0.43
Sri Lanka	0.39
Vietnam	0.37
China	0.36
Bangladesh	0.23

Source: International Textile Manufacturers Federation (1995) and Thurairajah (1995).

These facts are particularly important to the question of backward linkages from the garment industry because the manufacturing of garments is labour-intensive, but the manufacturing of fabric and many accessory products is capital-intensive (see Table 6). A garment factory employing 400 workers and 200 machines can be set up for less than US$ 1 million and the capital is quite mobile. However, setting up a weaving firm capable of producing about 20 million metres of fabric, which is the minimum efficient scale for a firm, would require nearly US$ 20 million in capital (Edwards, 1996: 42). 50 per cent of manufacturing expenses of a typical weaving or knitting firm are due to interest and depreciation taken together.[20] This cost structure puts Sri Lanka at a severe disadvantage in the manufacturing of fabric. The capital requirements for manufacturing interlining, labels, thread, buttons, and zippers are also high.[21] The cost structure for weaving and knitting mills when disaggregated shows that 50 per cent of manufacturing costs of typical

20 Manufacturing expenses include all production-related expenses except the cost of inputs.

21 For example, a firm that could produce 100,000 labels a day requires a capital investment of US$ 500,000.

weaving or knitting are due to interest payments and depreciation (see Table 7). This cost structure puts Sri Lanka at a severe disadvantage in manufacturing fabrics.

Table 6
Comparison of Start-up Capital: Fabrics, Accessories & Garments

Project	Capital Expenditure (US$ million)
Fabric Manufacturing	
A new knitting plant to produce 85,000 metres of knit fabric a day	20
Restructuring of the Veytex Mills--investments in spinning equipment, air jet looms for weaving, and finishing equipment. Veytex employs approximately 2,400 and has a weaving and finishing production capacity of 13 and 8 million metres	15
A weaving mill capable of producing 20 Mn metres of fabric a year	15
A composite knitting mill capable of producing 10 million metres of fabric annually	12
Pugoda restructuring	7
Fabric Finishing	
A finishing plant for woven fabric doing dying and venting capable of processing 50,000 metres of fabric a day	6.5
A finishing and dying plant capable of processing 10 million metres a year	4
Accessories	
A corrugated carton plant	4.5
An elastic plant	3
A polybag plant	2
A label manufacturing with three machines capable of producing 300,000 labels a day	1.2
A label manufacturing firm	0.8 for a machine
A label manufacturing firm with one machine capable of producing 100,000 labels a day for a company which will employ 8-10 people	0.5
A hanger plant	0.02
Garment Manufacturing	
Large technically advanced garment factory using state of the art automated cutting machines, leveraging complex information systems, employing 1,000 and having about $30 million in sales	6
Typical 200 Garment Factory Program factory employing 200 sewing machines and 400 employees	0.8

Source: Based on the Interviews conducted for the study.

Table 7
Fabric Manufacturing Costs at a Disaggregate Level, 1995

Manufacturing Costs: Weaving	As a percentage of manufacturing costs						
Cost element	Brazil	India	Italy	Japan	Korea	Thailand	USA
Labour	16	7	35	40	16	8	30
Power	7	12	9	15	10	13	7
Auxiliary material	12	12	8	10	16	13	9
Depreciation	31	38	30	27	35	36	39
Interest	34	31	18	8	23	30	15
Total	100	100	100	100	100	100	100
Manufacturing Costs: Knitting	**As a percentage of manufacturing costs**						
Cost element	Brazil	India	Italy	Japan	Korea	Thailand	USA
Labour	16	4	53	53	20	10	40
Power	9	20	7	15	11	14	6
Auxiliary material	9	12	6	7	11	12	9
Depreciation	30	31	20	19	35	32	32
Interest	36	33	14	6	23	32	13
Total	100	100	100	100	100	100	100

Note: Manufacturing costs do not included the cost of inputs which will be processed.
Source: International Textile Manufacturing Federation, (1995), pp. 12-13.

In addition to the constraints related to the high cost of capital, labour-related factors inhibit the success of capital-intensive industries. In order to spread the cost of capital over a high sales volume, productivity must be high, and the factory must operate many hours a day and many days a year. Sri Lanka faces challenges in this respect since productivity is low and there are many holidays. Further, capital-intensive industries require more capabilities than labour-intensive industries at the management level. Managers must be particularly adept at managing cash flow and raising capital. Production processes in capital-intensive industries are often highly complex and require strong logistical problem-solving skills to oversee. These types of capabilities are not prevalent among most Sri Lankan managers and the training institutions fall short of what is needed to prepare workers to handle capital-intensive industries in the future.[22]

To make up for these deficiencies, many firms run their own training programmes and provide support from corporate sources located elsewhere.[23] However, the cost of internal

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22 Although 800-900 people receive training at the Textile Training and Service Centre, most graduates seek jobs with firms serving the domestic market. They are often not prepared to work in the export-oriented sector.

23 Coats Tootal, a thread manufacturing firm, makes use of a corporate service centre to address technological concerns and machinery servicing questions.

training is high due to externalities. Employing expatriate expertise is a frequent occurrence. Even some of the more capital-intensive garment factories used expatriate resources during initial operations. But expatriate support can become costly in the long run unless the locals are trained to takeover in the medium term.

These considerations regarding the demands of capital-intensive industries point out more challenges for domestic entrepreneurs than for foreign investors. However, most foreign investors who could afford to bring in large capital are deterred from coming to Sri Lanka because of various other factors that raises the cost of capital.[24] First, Sri Lanka does not produce the raw materials used in the production of fabric and some accessories. Second, parts of the physical infrastructure which are highly valued by producers of garment inputs are in need of further investment, and they are often operated inefficiently.

For industries where local raw materials are available at low prices, export-oriented firms have been able to make use of local suppliers.[25] However, Sri Lanka does not produce the raw materials required for the production of many supplies to the garment export industry. Many garment input manufacturers argue that the lack of local raw materials causes them to face cost disadvantages relative to other international suppliers. Cotton and the raw materials required to make synthetic fibres are not produced locally.[26] These raw materials are used in the production of fabric, thread, padding, and interlining. One of the largest fabric manufacturers in the country currently imports yarn and fibre but claims that the transportation and other costs of doing so, coupled with the margins which must be paid to foreign firms, make the costs of fabric production high. Other accessory producers claim that without readily available sources of plastics and metals, there are higher costs related to the production of buttons, zippers, and buckles as well. While there is some truth in these claims because transportation costs are incurred when importing raw materials, the lack of local raw materials does not have a substantial impact on producers of garment inputs since raw materials can be easily purchased on international markets and brought to Sri Lanka free of duty by firms with BOI status.

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24 In 1990, a Sri Lankan delegation to Japan attempted to attract investment in the area of fabrics. The initial response from the Japanese was very positive but after studying the investment environment in Sri Lanka the Japanese decided otherwise.

25 Backward linkages exist for activated carbon products, rubber based products, coir fiber products, etc.

26 (a) The supply of locally produced cotton is not sufficient to serve the fabric industry. Although a report on backward linkages from the garment industry recommended a scheme to grow 5000 acres of irrigated cotton, there was no cost benefit analysis of such a scheme (Hague *et al.* 1988: 31). No entrepreneurs have tried to implement this recommendation. (b) In the production of synthetic fibres, raw materials account for approximately 50 per cent of the cost of the finished fabric (UNIDO, 1992).

Because of the nature of industries that supply garment manufacturers in Sri Lanka, a weak infrastructure, especially, limits the development of backward linkages (see Table 8). The production of fabric and accessories is capital intensive, and therefore it is highly dependent on the use of power to run the machinery. There is no reliable source of inexpensive power, and the cost of power produced by the existing capacity is high (Siyambalapitiya, 1996:17). Furthermore, 84 per cent of the power generating capacity is from hydro-electric sources, and in times of severe drought, power cuts occur.[27] Since the local supply of power is insufficient, firms are forced to face disruptions in production, or purchase generators, which add to their capital expenditures and increase the cost of manufacturing.[28] In most countries where there is a reliable source of electricity, power costs are about 8 per cent of fabric manufacturing costs, but for firms in Sri Lanka, the share of power costs is 12 per cent, not including the capital costs of purchasing adequate power producing facilities (International Textile Manufacturers Federation, 1995: 12-13). In addition to concerns about the quantity of power available, fabric manufacturers have concerns about the quality of power as well. While many electronic equipment can operate with 5-10 per cent voltage swings, the swings in Sri Lanka are larger and can damage electronic equipment. The cost and quality of power are a deterrent to the development of capital-intensive supplier industries.

To operate efficiently, a firm supplying garment inputs needs to keep in close contact with its own raw material suppliers abroad, the garment exporters it is supplying, and international buying offices. Staying in touch is of the utmost importance, but in Sri Lanka existing telephone facilities are not able to serve as an efficient means of communication.[29] Many firms have had to rely on cellular phones which are more readily available, but at a higher cost. Moreover, the nature of contracts demands that inputs be delivered on time without unexpected delays. However, the roads and port are not conducive to rapid transport of goods and personnel. The problems at the port, as mentioned earlier, are often related to delays. In sum, firms that supply the garment industry place a great deal of value on the infrastructure required for power,

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27 In early-1996, these cuts were as long as eight hours a day, and they were at least two hours a day for more than three months before that.

28 Kabool, a fabric firm employing about 4,000 people, is investing US$ 60 million on a power plant for its production facilities. It had been paying 40 per cent more for power than it does in its home- country, South Korea.

29 There are 200,800 phone lines currently in the country, and some 222,000 names on the waiting list to receive phones. This list does not include the names of several hundred thousand more who would like to have phones but view registering on the waiting list as futile.

communications, and transport, but in Sri Lanka there is much room for improvement in these areas.

Table 8
Infrastructure Development in Sri Lanka Compared to Some Other Countries

Country	Power Generation Capacity MW per 1 Mn Persons	Telephones per 1000 Persons	Road Density Km per 1 Mn Persons
Sri Lanka	75	7	536
India	86	6	893
Malaysia	279	89	1540
Thailand	167	24	513
Pakistan	77	8	229
Bangladesh	22	2	59
U.S.A.	3040	534	14172
U.K.	1281	445	6254
Japan	1570	439	6306

Source: World Bank, 1994

It is clear from the above discussion that the demands of capital-intensive industries unlike in labour-intensive industries are quite complex and are difficult to meet in a developing country such as Sri Lanka. Resource allocation considerations derived from neo-classical principles of comparative advantage dictate against forming backward linkages to capital-intensive industries in labour-abundant countries. Instead of paying high rates for capital, firms will achieve greater efficiency by producing labour-intensive products and trading them for capital-intensive ones (Reidel, 1976: 320).

Another way of explaining the importance of factor endowments as a reason for the lack of backward linkages is that it is precisely because Sri Lanka lacks the conditions demanded by capital-intensive industries that the garment export industry has been able to flourish. If there was a larger pool of capital and well developed fabric and accessory product industries, the cost of labour would be higher, and entrepreneurs would no longer be able to leverage low-wage labour in the process of garment manufacturing. Garment producers would then be compelled to create higher value-added products or move to another location where labour costs are low. The relative abundance of resource conditions leading to the success of the garment export industry are the same as those constraining the fabric and accessory product industries.

4.2 International Demand: The Nature of Production Decisions and Purchasing Agreements

Industry structure also has strong implications for the competitiveness of firms. The nature of the relationship between input provider and final producer can in itself be a factor that influences the potential for linkages and their chance of success or failure. In the garment industry, representatives of multinational enterprises (MNEs) frequently make choices about where production will take place, and they play a role in selecting which suppliers will provide the necessary inputs. Given their ties to international production networks, the multinational enterprises which run buying offices and frequently have financial stakes and management roles in garment factories, are particularly well positioned to select optimal suppliers from around the world (Athukorala, 1995: 543).

The nature of production decisions and purchasing agreements can constrain the formation of backward linkages in cases when the MNE representatives have incentives to choose foreign suppliers over home-based ones. Some of these incentives are strong and will be difficult to overcome, but others are weak. In some cases, however, the decision to use a certain supplier is open to change. If firms located in Sri Lanka were to exhibit the capability to produce quality inputs at affordable prices, buying offices would be willing to consider them.

When a buyer and a garment exporter enters a deal, it can be on a No Foreign Exchange (NFE) or Freight On Board (FOB) basis. In an NFE deal, the buyer provides inputs and the garment manufacturer makes no payment for these inputs. These kinds of deals are primarily undertaken by manufacturers who are severely capital-constrained or risk-averse, and buying offices often view these deals as risky ventures since there are significant costs they must incur a few months before receiving any finished product. FOB deals call for garment exporters to purchase the necessary inputs. These deals can be conditional ones, in which the buying office specifies or nominates suppliers of certain inputs, or unconditional ones, in which the garment manufacturer is free to select suppliers and manage all relations with them. Table 9 shows the nature of purchasing agreements in a selected sample of garment exporting firms in Sri Lanka. In Sri Lanka, roughly 15 per cent of deals are NFE deals, 55 per cent are conditional FOB deals, and 30 per cent are unconditional FOB deals.[30] Even if a deal is a conditional FOB deal or an NFE deal,

30 Based on the survey and interviews conducted for this study.

garment manufacturers often have some flexibility in sourcing inputs. The manufacturer may be able to choose from a list of specified suppliers of an input or an input may not be specified at all.[31]

Table 9
The Nature of Purchasing Agreements of a Selected Sample of Garment Exporters

Firm Name	% of NFE Deals	% of FOB Deals (conditional and unconditional)	
Polytex	25	75 0	conditional unconditional
Aitken Spence Garments	5	95 0	conditional unconditional
Kundanmals	25	25 50	conditional unconditional
Hirdaramani	0	50 50	conditional unconditional
Smart Shirts	10	20 70	conditional unconditional

Source: Based on the Interviews conducted for the study.

Buyers for retailers targeting the middle and high-end markets are nominating suppliers with greater frequency in more and more areas of inputs. The nature of relationships between retail houses, buying agents, and manufacturers, and the contract dates that are a part of it, cause a great deal of pressure to ensure reliable sources of supplies (see, for instance, Keesing, 1983). Ten or twelve years ago, these buyers merely laid down quality standards for inputs, but later they became more specific as the marketplace demanded greater quality control. Buyers started by specifying fabric, then moved to buttons, zips, and interlining, and now also specify thread, labels, shoulder pads, and in some cases hangers.

In some circumstances, buyers and garment manufacturers have strong reasons for choosing a supplier from outside Sri Lanka. One set of such circumstances occurs when mass production of a product takes place at various sites. For example, a large buyer may need 500,000 shirts and choose to have part of the order produced in Sri Lanka and part in other locations in East Asia. To make sure that there are no significant differences from

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31 For example, a garment manufacturer producing for a major retailer may enter a conditional FOB deal in which the source of fabric, zippers, and buttons is specified, but the source of thread, cotton, and hangers is left to the discretion of the manufacturer.

one shirt to the other, the buyer will specify common suppliers for all production sites. Firms outside Sri Lanka are selected as being the best equipped to be common suppliers. While this type of production scheme certainly constrains the formation of backward linkages, the impact is not significantly pervasive.[32] It is difficult to orchestrate production at a number of sites, and most buyers would prefer to give a particular order to a single manufacturer which has sufficient capacity to handle it. Also, while it is particularly important to use the same fabric, the same buttons, and the same labels for uniformity in the case of the shirts, for example, there is room to use local suppliers for less visible inputs such as shoulder pads, elastic, or corrugated cartons.

MNE representatives have another reason to look overseas if they have special relations with particular suppliers. If a garment exporting firm or a buying office is owned by a conglomerate, it might be willing to pay a premium to another member of the conglomerate.[33] Other MNEs are large enough to be able to negotiate special arrangements with regional suppliers. For example, Mast Industries, a garment manufacturing and marketing firm which has eight factories throughout the region, negotiates for lower input prices by buying in bulk for all its factories. Large regional suppliers win this business because firms in the fabric and ancilliary product industries in Sri Lanka do not have the size or levels of efficiency to compete and guarantee certainty of supplies.

Despite these constraints, there is evidence that local suppliers would be chosen if they were internationally competitive. As discussed in Section 3, garment exporters would be able to reduce lead time and improve the efficiency of their operations if they were able to use reliable local suppliers. Buyers and garment manufacturers agree that their preferences would change if there was a significant number of competitive local suppliers. "If there was sufficient local investment and capacity, local firms would get the nomination in many areas" said one garment exporter. Thus, the nature of production decisions and purchasing agreements do not completely prevent the development of local suppliers. In other words, although the abovementioned factors might hinder the formation of backward linkages, they do not rule it out if local suppliers are competitive.

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32 On average less than 20 per cent of deals in Sri Lanka involve garments which are mass produced at several sites.

33 For example, Polytex Garments Ltd. is owned by a Hong Kong based company which also owns fabric manufacturing plants in Malaysia and China. Polytex gets its fabric from the Malaysia plant and will continue to do so unless the cost of doing so becomes prohibitive.

Taken together, all of these factors shed significant light on the slow formation of domestic input linkages to the Sri Lankan garment industry. Other countries have also experienced a slow growth of backward linkages and have formulated a variety of policies to promote backward integration. Only a few of these have proved effective. It is worth examining briefly some of these policies adopted in other countries and their relevance to Sri Lanka.

5. Policy Implications and the International Experience

The experience of Sri Lanka illustrates how important the conditions which enable suppliers of inputs to build and maintain competitiveness are to the formation of backward linkages. An investment environment which encourages innovation helps older firms to keep up with industry changes. With incentives to produce for international markets and better training in the field of marketing and access to the proper channels of information, local suppliers can overcome the constraints imposed by the size of the local demand. Prudent fiscal management and inducing technical skills facilitate the growth of capital-intensive industries, and well planned operation and maintenance of infrastructure keep down the cost of capital.

Policy-makers face the challenge of creating these conditions in Sri Lanka. Only through a significant transformation could an investment environment suitable for competitive local suppliers of most inputs be achieved in Sri Lanka. Such large-scale change will take time to accomplish. While it is tempting to turn away from the economic problems mentioned in Section 4, it is imperative to sort them out before moving on. Labour and corporate law should offer firms more flexibility so that they are more able to innovate. Interest rates are far too high and a concerted effort must be made to improve macroeconomic management. Although the on-going war adds to government expenditures, greater fiscal restraint should be practised in other areas (IPS, 1995). Worker training should be improved and productivity increased. Improvements in infrastructure are required, especially in power, communications, and cargo handling at the port. These types of changes have been discussed in Sri Lanka for some time, and until policy-makers formulate and implement measures to create these changes, most other efforts to promote the formation of backward linkages from the garment industry will be less effective.

In the current investment climate, there is potential to develop the competitiveness of local suppliers, which are not severely constrained by the factors mentioned in Section 4. Label manufacturers and fabric finishers are among this group. Even those label manufacturers who are using the same inputs and equipment as their counterparts in Hong Kong have underutilized capacity and certain policies might be of assistance to them. As the investment climate changes, such policies will prove helpful to local firms supplying other inputs, such as fabric. What kind of policies could be adopted ?

Interventionist policies which offer garment manufacturers incentives to use locally produced inputs have rarely been effective. For example, offering tax incentives to firms which buy large quantities of local supplies will not generate linkages if local suppliers are inefficient. Moreover, if local suppliers are uncompetitive, forcing backward linkages through local content requirements can lead to the high-cost production of low-quality finished products. Local content regulations have been tried in Taiwan and proved to be of little value (Meyanathan, 1994: 12). All policies which extend benefits to end-producers for more local input use can be implemented only if the use of local inputs could be properly monitored. However, monitoring the use of local inputs can be a costly exercise for the government (see, for instance, Kelegama, 1993). It also opens up avenues for manipulations and rent seeking.

The evidence provided in the paper suggests that garment exporters, in the absence of international demand constraints, will only patronize local suppliers if cost, quality and delivery requirements are met. Thus policies which build capabilities to increase competitiveness among local suppliers might prove effective in promoting the further development of backward linkages. These policies should address the three areas in which suppliers frequently exhibit weakness. First, local suppliers often do not make use of efficient technology and do not have sufficient capital to upgrade their equipment. Second, they lack required skills at the management and work-force levels. Finally, they need significant assistance in the field of marketing.

In order to overcome these weaknesses, a number of policies have proved to be effective. Attracting foreign direct investment in supplier industries is one such policy. A foreign owner or partner has access to credit at international rates, and usually has a great deal of industrial experience. This experience can be utilized to ensure that efficient technology is employed and that the work-force is well trained. Foreign investors usually have the

overseas contacts and financial resources to handle the challenges of international marketing. The upturn in the quality and quantity of fabric produced in Thailand since 1987 was largely due to investments from Japanese entrepreneurs (JTN, 1995: 90). At present, the initial signs of backward linkages through foreign direct investment can be seen in Sri Lanka.[34]

Other policies attempt to stimulate the benefits of foreign direct investment by encouraging deep, long-term relationships between small input-providers and large final-producers. In the Indonesian 'Foster-Father-Business Linkage' programme, larger enterprises work closely with smaller ones and raise their capability in management, process technology, financing, and marketing. In areas where partnerships have not been forced, there were signs of success in the initial stages (Meyanathan, 1994: 106-107). In Singapore, the 'Local Industry Upgrading Plan' teams local suppliers up with multinational enterprises and enables these suppliers to actively seek management and technical advice (Meyanathan, 1994: 77).

In addition to encouraging partnerships with multinational or large enterprises, other schemes can help address the constraints suppliers often face. Professional schools can serve as institutions which build a qualified workforce and stay informed of industry trends in technology and other areas. In Sri Lanka, the government has recognized the need to upgrade and expand the programmes at the Textile Training and Service Centre and the Clothing Industry Training Institute in order to produce capable employees and managers. Informal channels of training are also highly effective. For example, input suppliers learn a great deal by having an employee from a garment exporting firm or a buying office available to offer advice on product requirements.

Some other policies focus on supporting small-scale producers.[35] In order to help small suppliers in Malaysia who face marketing and management shortcomings, 'umbrella' companies provide assistance to a set of smaller suppliers for a 5 per cent commission (Meyanathan, 1994: 53, Edwards, 1993: 50, Ahamad, 1990).[36] In Sri Lanka, the subcontracting exchange attempts to offer similar types of support. Operations of the

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34 Two joint venture firms of Hayleys (a leading blue chip firm in Sri Lanka) produce inputs to the garment industry.

35 See Lakshman *et al.* (1991) for information on small firms in Sri Lanka.

36 For example, Guthrie Furniture Sdn. Bhd. services seventy-two suppliers and provide assistance in product design, negotiations with customers, and quality management.

subcontracting exchange could be improved if it took further measures to survey the needs of garment exporters, communicate the skills and capabilities of domestic suppliers, and improve exporter/supplier trust (Kelegama, 1993: 57-58). However, many large-scale exporters still find it difficult to manage relations with small firms.

In the NICs, all indications are that while it has been a policy objective of respective governments to encourage exporters to use local inputs, there has been no compulsion to do so, nor has there been any subsidy given to exporters in order to encourage them to use local inputs. Dependence on local inputs has been brought about largely by increasing the competitiveness of local inputs, and "moral suasion" by the government (Spaninger, 1984). Moreover, incentive schemes in NICs were universally based on "gross export earnings" as a performance criterion. The discussion above clearly shows that policy-makers should aim to provide a conducive setting for forging backward linkages through policies relating to the general investment climate and should not expect too much by designing specific policies for the same purpose.

6. Concluding Remarks

In this paper we have examined the reasons for the high import dependence of the garment industry in Sri Lanka. We identified the overall investment climate and the fundamentals of international demand as the key factors that constrain the formation of backward linkages to local suppliers from the garment industry. The overall investment climate in Sri Lanka is still somewhat influenced by the legacy of the import-substitution industrialization policies, and the existing incentives are weak. Moreover, it is characterized by high cost of capital and constraints from economies of scale considerations. Promoting backward linkages is also somewhat hampered by international demand factors.

A clear distinction should be made between import-substitution industrialization and export-oriented industrialization strategies in the context of backward linkages. Policy intervention to forge backward linkages was advocated during the era of import-substitution industrialization. The orthodox view (based on the conventional factor proportion considerations) is that backward linkages should come naturally. Thus it is important to note that the advocacy of promoting backward linkages via intervention was basically a closed economy phenomenon. We have argued that the importance given to

backward linkages in formulating policies in an open economy for export-oriented industrialization is somewhat misplaced. The discussion has shown that changes in the global economic environment have made backward linkage effects less powerful than they were during a closed economy era. The liberalized global economy allows entrepreneurs in the early stages of export-oriented industrialization to utilize large pools of cheap labour without the presence of local suppliers. Needed inputs are imported.

To advocate backward linkages with policy intervention for export-oriented industrialization completely ignores the nature of internationalization of production and trade in garment (and other) export product lines. In other words, international demand factors which may constrain the ability of local exporters to decide on input choice are totally ignored when advocating policy for "footloose industries" where developing countries, such as Sri Lanka, have comparative advantage. In the initial stages of export expansion in a labour surplus economy, there is less room for creating backward linkages via policy intervention and, in the absence of competitive local input suppliers, policy intervention can be ineffective and counterproductive. Some have argued that it is precisely because of the lack of backward linkages that the labour-intensive export industries in developing countries have been so successful (Reidel, 1993: 411).

There is much value and usefulness in having backward linkages, but their development requires certain conditions which allow local suppliers to be competitive. Policy-makers must strive to create the right conditions to promote the formation and growth of local suppliers. Building and maintaining sources of competitive advantage among local suppliers are crucial for their development and long-term viability. In fact, in today's highly integrated world economy, if local suppliers are not internationally competitive, using them is a hindrance As conditions limiting the development of backward linkages improve, the attractiveness of investing in local suppliers will increase. Supply will respond to demand once the proper environment exists. Thus formation of linkages is time dependent in an open economy.

However, even low value added industries fuel the process of economic development. Despite low linkages and low per unit net foreign exchange earnings garment exports have made a significant contribution to employment and total net foreign exchange earnings. In Sri Lanka, the garment industry possesses important capabilities such as those related to managing inventories, supervising production lines, transporting products, and establishing

overseas contacts. In addition, garment manufacturing firms push policy-makers to create the conditions which are conducive to competitiveness. These firms raise the same concerns about laws limiting corporate flexibility, the costs of doing business, and the existing infrastructure which deter foreign firms and local entrepreneurs from investing in firms supplying garment inputs. From time to time some of these concerns have been looked into and addressed by policy-makers, but not fully. It is perhaps due to this that the import dependence of the garment industry has been marginally reduced over the years.

Two questions for further research are worthy of additional consideration. With the phase out of the MFA quota system in the year 2005, garment manufacturers in Sri Lanka will have to compete with firms in countries such as Taiwan and Hong Kong which have local sources of supply. One must consider the importance of local sources of supply in determining competitiveness. If there are strong reasons for the lack of backward linkages from a particular industry, does this ultimately mean that the industry will be unable to develop a long term competitive position in the global economy?

One must also consider whether there are certain industrial structures in which promoting forward linkages is the most successful way of promoting backward linkages. In the labour-intensive industries located in developing countries, the purchasing of inputs is often at least partially controlled by entities further along in the value addition process, such as buying offices in the case of the garment industry. By taking on the responsibilities of these entities, garment firms could have greater control in choosing supplier of inputs. Local garment firms would have greater access to the information required to be confident in selecting a local suppliers and might even make investments to supply inputs from within the firm if it appeared profitable to do so.

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