

IMPORT SUBSTITUTION, STRUCTURAL TRANSFORMATION, AND IMPORT DEPENDENCE— A CASE STUDY OF SRI LANKA

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I. INTRODUCTION

OVER the past two decades, import substitution, both in domestic agriculture and industry, has been the basic tenet of the development policy of Sri Lanka. As in most of the newly independent countries, in Sri Lanka, the policy orientation toward import substitution was closely related with the desire to restructure the lopsided “import-export economy” inherited from the colonial past, in order to reduce its overwhelming reliance on the foreign trade sector and the resultant vulnerability to externally generated disturbances—a desire which arose primarily from the disillusion with the traditional international division of labor.¹ All in all, it was envisaged that the new policy orientation would introduce structural dynamism into the economy which would ensure a reasonable rate of growth despite the deminishing prospects for traditional export industries.

This paper is concerned with a quantitative assessment of the contribution of import substitution attempts in Sri Lanka toward the accomplishment of envisaged objectives of diversification and self-reliance. Section II of the paper constitutes an overview of the colonial background of the economy, post-independent development policy and import substitution attempts to place the ensuing discussion in proper perspective. In Section III, resultant structural changes in the production pattern of the economy are scrutinized using sectoral gross domestic product data supplemented by “linkage” and “contribution of import substitution to sectoral growth” indices calculated using input-output tables for 1965 and 1970. In Section IV, an attempt is made to quantify the level and the changing pattern of import dependence in domestic production associated with these observed changes, employing “import dependence” indices derived within an input-output framework. Section V comprises a summary of the major findings of the study.

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¹ Hirschman [22], is the classic on evolution of import substitution policies in LDCs and underlying motives. See also Ahmad [1] [2], Bruton [5], Baer [3], for useful surveys.

II. THE COLONIAL BACKGROUND, POST-INDEPENDENCE DEVELOPMENT POLICY, AND IMPORT SUBSTITUTION ATTEMPTS

A. *The Colonial Background*

The economic structure of Sri Lanka inherited from the colonial past, at independence in 1948, was typical of a "dualistic export economy."² Here the term "export economy" emphasizes the heavy orientation of production activities of the economy toward export production as exemplified by the high export-gross national product ratio³ and the resultant strong functional dependence of all the important macro magnitudes of the monetized sector upon the fortune of export trade. On the other hand the existence of a static domestic sector, mainly based on agriculture at low subsistence level, alongside of the dynamic export sector, with very little spillover effects from the latter to the former, had infused "economic dualism" into the economic structure.

A striking feature of the economy, which enhanced the predominance of the foreign trade sector, was the virtual absence of an independent industrial sector apart from certain industrial activities evolved around the export trade such as processing of plantation crops and provision of engineering and mechanical requirements involved in this process. Virtual laissez-faire economic policy of the colonial government which ensured free availability of all import requirements and the natural preference of local investors for "safe investment" in the plantation agriculture which was still exhibiting opportunities for further expansion, are considered as satisfactory explanation of this situation [39, p. 136]. The disruption of import trade with the outbreak of the Second World War resulted in a minor deviation in this established pattern; both the government and the private sector responded to the new situation by setting up factories to provide a wide range of consumer and intermediate goods⁴ [26, pp. 44-50]. However, the resumption of industrial imports after the cessation of the war put a sudden end to the "war generated industrial import substitution boom" without leaving any significant lasting effect on the structure of the classical export economy.

Beginning with the 1920s, the colonial government showed some active interest

² The transformation of the feudal agrarian economy of Sri Lanka which had prevailed in the island for more than 2,000 years, into a dualistic export economy commenced with the introduction of coffee as a plantation crop in the 1830s, followed later by expansion and growth of tea, rubber, and coconut estates since the latter part of the nineteenth century. For a succinct treatment of these economic transformation, see Snodgrass [41, Chaps. 1, 2, and 3] or Silva [39, Chap. 2].

³ In 1948, the earliest year for which official national account data are available, direct contribution of export activities to GDP was 40.36 per cent [39, p. 259]. This proportion is, however, an underestimate of the role of the export sector in the overall economy, as a considerable part of the service industries is directly or indirectly sustained by export activity.

⁴ According to available rudimentary data, total output from industry increased by 105 per cent between 1937 and 1942 and by 16 per cent from 1942 to 1947 [27, p. 2].

in colonizing the dry zone for domestic food production, mainly rice, through renovation of ancient irrigation work. However, the objectives of the entire colonization scheme were heavily biased toward social welfare—to give relief to large families in low income brackets and to relieve the growing population pressure in the relatively crowded wet zone. The more important economic objective of implementing necessary measures to enhance the quality of traditional agricultural practices was overshadowed in the process [15, pp. 276–77]. Therefore, the anticipated structural changes—reducing the overwhelming dependence of the economy on food imports and the opening up of a new avenue of resource flow between the rural sector and the modern sector in terms of selling the surplus production leading to a gradual erosion of dualism—were not forthcoming to a significant degree.

B. *Post-Independence Economic Policy up to 1956*

Political independence in 1948 did not coincide with drastic policy changes aimed at significant changes in the colonial economic structure. The need for restructuring attempts aimed at reducing the vulnerability of the economy due to its heavy dependence on foreign trade received due recognition in government policy documents [33, Chap. 2]. However, this was merely lip service to the then widespread belief among development circles that elimination of colonial economic nexus was a prerequisite for economic development of newly independent countries; in practice the emphasis was on the maintenance of the status quo [39, p. xiv]. On the one hand the political leadership of the day, itself based as it was on the plantation and related commercial interests felt no need to make changes in an economic system with which its own interest was identified [39, p. 131]. On the other hand, considerable economic prosperity enjoyed by the economy as a result of wartime export prosperity, the Korean War boom (1950–52) and the tea boom (1954–55), had brought about a false sense of security about the viability of the existing system. The country's foreign exchange balances were in good shape, the purchasing power of export earnings was at a steady level and government budgetary operations were remarkably sound.⁵

On the agricultural front, the focus of government attention was mainly on the continuation of the dry zone agricultural colonization scheme at a rapid rate, while the more important issue of improving productivity in domestic agriculture received little attention. During the early independent period up to 1952, the new government had a modest program of import substitution industrialization including plans for the revamping wartime factories and establishing new factories for the production of items such as cement, steel, paper, caustic soda, vegetable oil, textile, and sugar. In 1952, when most of these new investment proposals were still at the planning stage, the government industrial policy was subjected

⁵ In 1948, holdings of foreign exchange of the country were sufficient to finance imports of almost one full year, and after a significant run down during the post-Korean War recession, reserve position had recovered to a satisfactory level of "nine month's import equivalent" by 1955. Purchasing power of country's export earnings (at 1948 import price) had increased by 55 per cent from 1949 to 1955 [6, various issues].

to a drastic revision as a result of the recommendations of the World Bank mission which visited the country in 1952 [23]. The mission, drawing upon numerous inefficiencies of existing industrial undertakings, and on some other considerations such as the smallness of the domestic market and the shortage of capital and technical skills required to embark upon a massive industrialization plan, recommended that for the time being, Sri Lanka's attempts toward industrial growth should be centered on the development of numerous small or medium-sized industries through private enterprise [23, p. 27]. The influence of these recommendations was discernible in government development policy during the ensuing period; the six-year investment programme (1954-59) which was based mainly on World Bank proposals allocated only 5 per cent of its total investment outlay to industry [12].

In spite of the expressed desire to promote a nascent industrial sector based on private ownership, only a few policy measures were implemented toward that direction and the industrial promotion policy relied primarily on short-term tax concessions which were first offered in 1949 and later extended and liberalized by successive budgets [27, p. 37]. Periodic attempts were made to encourage private foreign investment in import-substituting industries culminating in a statement of foreign investment policy [27, p. 48]. However, in the context of the wide open economy of the fifties which ensured an abundant supply of high-quality imported industrial products, these policies were to be expected to exert only a little appeal to new investors.

C. *Emphasis on Planned Import Substitution*

With the change in political leadership of the country in 1956, a significant shift in priorities of economic policy took place. In the new development policy which was embodied in the *Ten-Year Plan* [12] published in 1959, import substitution industrialization received a much higher priority than it had received up to then. The "population explosion" of the postwar years in the face of declining prosperity of the traditional export economy had brought to the forefront the urgency to diversify the economy by establishing a dynamic industrial sector with a potential to create sufficient employment opportunities. In the plan, 20 per cent of the total ten-year investment budget was allocated to industrial development [11, p. 42]. The priority given to industrial development did not imply downgrading the importance of domestic agriculture. Rather the plan envisaged the link between the domestic agriculture and the industrialization in the context of Ceylon's long-term development goals. In view of the fact that the country's requirements of capital and intermediate goods for industrialization needed to be imported, the plan contemplated turning Ceylon's existing export sector into an equivalent of a capital good sector by the domestic production of consumer requirements, mainly food [15, p. 275].

Though the *Ten-Year Plan* never became a full operational document, the new import-substituting industrialization policy partly found its expression in a sharp increase in government industrial investment. The period since 1957 witnessed the inauguration of the construction work of government owned steel, tyre, hard-

ware, sugar, salt, cotton yarn, brick and tile, chlorine and ilmenite factories [26, p. 52]. Starting with the 1957/58 budget, the government policy tended to reflect a tendency toward using import duties as a tool of promoting import substitution by way of imposing protective tariffs for some infant industries and lowering import duties on capital equipments and industrial raw materials [41, p. 216].

D. Foreign Exchange Crisis and the Culmination of Import Substitution Attempts

Since 1957, the balance of payments position of Sri Lanka tended to record a persistent and continuously large deficit because of unfavorable market prospects for the three main export items—tea, rubber, and coconut products—and ever increasing pressure of domestic excess demand on the import bill as a result of expansionary fiscal and monetary policies [6, 1960, p. 20]. However, the government still had not contemplated stringent direct import control and foreign exchange licencing policies, because the economy still could fall back on accumulated reserves and perhaps because policy makers at the time “continued to think of balance of payments defense as a cyclical problem which could be counted upon not to persist for more than three or four years” [41, p. 217].

The acceleration of reserve depletion had reached a critical level by 1960; at the end of that year available reserves were sufficient to cover only three months imports [6, 1960, p. 12]. Prospects for exports continued to be rather dim and a sufficient level of capital inflow was not forthcoming to cover up reserve losses and export downfalls. Under these circumstances, the government found no other alternative but to curtail imports to a level consistent with the available import capacity. In January 1961, for the first time, a system of import control with individual licencing and allocation of quotas to importers was introduced with regard to several semi-essential consumer items. The coverage of the import control list was further widened during the later part of 1961 and 1962. In 1963, the Foreign Exchange Budget Committee was set up to function as the supreme authority of allocating scarce foreign exchange among alternative uses on a basis of national priorities, and of matching import expenditure with export earnings. At the initial stage, the Foreign Exchange Budget was only a partial one as certain imports such as foodstuffs, petroleum and other fuels, fertilizers, medical drugs, and all imports of government departments and public corporations were still to be imported freely. However, its influence on determining the import pattern of the country increased rapidly with the intensification of import controls by extending individual licencing and quotas in 1963 and 1964. By the end of 1964, the Open General Licence System (OGLS) of foreign exchange allocation had completely ceased to exist and all imports other than those of food commissioner's⁶ were subjected to individual licencing.

The import control regime, despite its numerous alleged detrimental consequences on the resource allocation of the economy [32], provided a strong

⁶ Rice, flour, sugar, lentils, *dhall*, maldive fish, and red onions.

stimulus for the beginning of basic structural changes in the traditional export economy [14, pp. 4–5]. This could be seen on two fronts. First, the abrupt choking off of imports of a wider range of manufactured consumer goods created, for the first time, a well protected and attractive market for the domestic manufacturer of similar goods which accomplished the task of “channeling of the proven abilities of the local entrepreneurial class out of the old familiar lines—estate agriculture, real estate, and trade—and into manufacturing” [41, p. 224]. Thus, the first half of the 1960s witnessed the establishment of a sizeable number of import-substituting consumer good industries.⁷ Second, exigencies of the circumstances resulted in concerted attempts on the part of the government to promote private sector industries and to establish state industries. Government industrial policy provided the nascent industrial sector with sufficient backing by the enactment of tax concessions including a five-year tax holiday for approved projects⁸ and in some cases streamlining import controls and import taxes according to the availability of supplies from these industries. Industrial growth in the private sector was supplemented by expansion of public sector industrial ventures. Here the main emphasis was on capital and intermediate good industries such as iron and steel, tyres, cotton yarn, and tile [7, p. 30], the purpose being to conserve foreign exchange by providing a “domestic base” for the new industrial development.

In a context where industrialization comes about as a by-product of “across-the-board” import controls aimed at remedying balance of payment imbalances, industries tend to concentrate on those very items which were controlled or banned as non-essential or semi-essential [22, p. 345]. These industries involve a high import content and only a minimum conversion process of these imports. In the early stage of import-substituting industrialization in Sri Lanka, there was obviously a lack of careful planning and clearly defined priorities in order to alleviate these structural shortcomings; the government does not seem to have been much concerned with anything but import substitution opportunities in gross terms [29, pp. 8–17]. However, a more rational approach began to emerge, both in regard to the approval of new industries and foreign exchange allocation for raw material imports, since the middle of 1960s as the foreign exchange crisis tended to impinge more heavily on the performance of the nascent industrial sector. In general, two basic criteria have begun to dominate industrial licencing policy—domestic raw material content and future export prospects [36,

⁷ The number of firms reporting to the Ministry of Industries were 315, 387, and 433 in 1961, 1962, and 1963, respectively. The total number of employees engaged in registered industries increased from 20,004 in 1961 to 26,304 in 1962—a 30 per cent increase [27, p. 187].

⁸ So far no systematic empirical investigation has been undertaken into the role of tax concessions in promoting private (foreign or local) investment in the context of the economy of Sri Lanka. For a straightforward description of this topic, see Karunatilaka [27, pp. 167–82]. On the basis of a priori reasoning, the author concludes that tax concessions were not capable of bringing forward anticipated results because of political uncertainty, uncertainty with regard to the government industrial licensing policy, and some ambiguities of the tax policy itself.

p. 207]—while in the public sector industrial investment, increasing emphasis has been placed on development of basic and heavy industries with potential for promoting backward and forward linkages [10, p. 60].

Compared with the industrial sector, the domestic agricultural sector did not receive sufficient protection against imports in the early 1960s. Agricultural imports were mainly comprised of essential foodstuffs for mass consumption. Therefore, the government was reluctant to drastically curtail these imports because of the adverse political and social repercussions involved. In addition to the continuation of the dry zone colonization scheme, attempts toward extension of intensive and scientific cultivation methods in lands already under cultivation received added impetus with the onset of the balance of payment crisis. However, this did not act as a sufficient incentive for an increase in production in the presence of continuous import flows and the "rice subsidy scheme."⁹

The government policy on import substitution in domestic agriculture underwent drastic changes from the middle of the 1960s. Again, balance of payments considerations were the underlying impetus for the new policy revision. In a situation where market prospects for export products of the country were rather bleak, and the newly established industrial sector was under constant strain owing to foreign exchange shortage, the new government which came into power in 1965 envisaged import substitution in agriculture as the best possible way out of the prevailing crisis. By that time essential food items comprised nearly 40 per cent of the total import bill [6, 1965, p. 135] and most, though not all, of them were, from a technical point of view, capable of being produced locally [15, p. 275].

Various policy measures taken to activize the domestic agriculture included, *inter alia*, (1) giving absolute priority to food production under the direct purview of the prime minister, (2) taking steps to develop fairly extensive supporting services aimed at raising productivity on lands already under cultivation, (3) using the price mechanism to provide incentives in a manner unparalleled in the past by way of totally banning or drastically curtailing subsidiary food imports, increasing government guaranteed price on rice and bringing other subsidiary food crops under the guaranteed price scheme and curtailing the subsidized rice ration leading to a sharp rise in open market price of rice.¹⁰ These development attempts continued well into the 1970s despite changes in political leadership of the country. The rice subsidy was never restored to the pre-1966 level despite political pressure to do so, and further deteriorations in the balance of payments resulted in further curtailments of subsidiary foodstuff imports giving rise to a more favorable market situation for import substitution. Added to this were the

⁹ The rice subsidy scheme, under which a weekly allocation of rice at a price well below the world market price is available to almost all families, was first introduced during the Second World War period to insulate the consumers from the high cost of foodstuffs, and was continued into the independent era mainly because of political reasons.

¹⁰ For an interesting and revealing discussion on import-substituting attempts in the food production front, their achievements and contributory factors underlying these achievements, see Corea [13].

significant upward adjustments in guaranteed prices for rice and subsidiary food crops announced by the government from time to time.

The change in political leadership in July 1977 has ushered in an era of policy reforms in favor of an "outward-looking" growth strategy. Significant policy measures, including the abolition of the dual exchange rate which had prevailed since 1968 and its replacement by a single unified exchange rate closer to the scarcity value of foreign exchange, liberalization of import and exchange control restrictions prevailed since the early 1960s, setting up of a free trade zone to promote foreign investment under a more "open door" policy on foreign capital, were announced in the 1978 budget.¹¹ However, a close follow-up of economic performance of the new government over the past two and half years would reveal that the new policy does not intend to be a drastic departure from the previous import substitution attempts. Rather, the aim of the new policy is to eliminate some of the gross distortions the earlier restrictive regime had brought about in the domestic industries, such as monopolistic profit, high cost structure, low quality in production and undue domestic market bias, in an attempt to rationalize their operations. Instead of import quotas and other quantitative controls which dominated the scene over the past two decades, higher import tariffs determined from time to time according to market scarcities would perform the task of promoting import substitution both in agriculture and industry.

III. STRUCTURAL TRANSFORMATION

A. *Production Structure*

Table I summarizes percentage composition and annual percentage growth rates of sectoral value added in order to highlight the changing pattern of domestic production of the Sri Lankan economy during the period, 1950 to 1978. The national accounts compiled by the Central Bank of Ceylon and published in its annual report extend only back to 1959.¹² Recently, a central bank economist has extended this series back to 1950 using the same data sources and the same methods of compilation [37]. In Table I, both of these series have been combined in order to obtain a broader coverage.

The production structure of the economy has remained more or less intact during the period up to the early 1960s, while the period since then has witnessed significant changes with regard to the relative shares of given sub-sectors (see Table I). The share of the primary (i.e., agriculture, forestry, and mining and quarrying) sector which was 47 per cent in 1950-52 and remained around the same level till 1962-64 has decreased to 35 per cent in 1977-78. The share of industry which stood around 10 per cent in the 1950s has increased to 17 per cent by 1977-78. The share of service sectors also has indicated a continuous, though relatively mild, upward trend throughout the last two decades. When the

¹¹ For a short descriptive study of these new policy changes, see Warnapala [44].

¹² For a critical review of the present state of national account estimates in Sri Lanka, see Shourie [38].

composition of the agricultural sector is compared over time, one is impressed by the increasing importance of the domestic agricultural sector. Importance of export agriculture including related processing activities, has been more than halved over the period under review while the share of domestic agriculture has surpassed that of export agriculture by 1974-76, a significant departure from the classical export economy pattern. When we consider the industrial sector, the main cause of its increasing share has been the expansion of manufacturing activities coupled with a mild increase in the share of the construction sector.

The above observed significant alterations in the production structure can be ascribed to vastly differing sectoral growth rates. During the period since the "tea prosperity" in the mid-fifties, export agriculture has been in virtual stagnation. The average annual growth rate of this sector was only 1.5 per cent over this period compared with 3 per cent in the period 1950-55.¹³ This has undoubtedly been a contributory factor for the diminishing share of this sector. However, this alone does not provide a sufficient explanation for the overall observed structural changes. The time path of GDP has closely followed the time path of export agriculture up to the mid-sixties. Since then growth patterns of the two series have tended to exhibit some independent variations. For instance, during the periods 1965-67 and 1974-76, in spite of near zero or negative growth in export agriculture, the GDP growth rate has remained above 3 per cent. It is within this continuously increasing aggregate that other sectors have indicated variations in their relative shares. It is, therefore, apparent that relative growth performance of these other sectors, which is closely related with changes in development policy discussed in Section I of the paper, should receive relatively more weight in explaining the emerging pattern of domestic production. Within the primary sector, domestic agriculture has been the only dynamic component with a respectable growth rate; throughout the last two decades its annual growth rate has averaged over 6.5 per cent. In fact, the reason for the still predominant position of agriculture in the economy in the face of a sharply declining share of export agriculture has been this satisfactory expansion of domestic agriculture which is "no longer a peripheral part of the economy" [14, p. 297]. Within the industrial category, all the component sectors have indicated above average growth rates while the growth in manufacturing where import-substituting activities were in a high gear, is most prominent. The secondary position of industry in general or manufacturing in particular vis-à-vis agriculture, despite the relatively higher growth rate exhibited, was mainly due to its "low starting base." During the fifties the service sector has closely followed the ups and downs of the export agriculture. This is an inbuilt feature of the traditional export economy. However, in recent years, "the expansion of domestic agriculture and import substituting activity in industry were particularly helpful for the progress of banking business and trade and for their expansion beyond foreign trade and plantation sectors which were their traditional areas of concentration" [20, p. 91]. Even though the export sector has been stagnating, the service sector

¹³ Continuous decline in prices of tea and rubber during this period and the inelastic supply in the coconut industry despite relatively favorable prices for coconut products were the underlying causes of this stagnation. See Gunasekara [20, pp. 86-87].

TABLE
GROSS DOMESTIC PRODUCT OF SRI LANKA, 1950-78:

		1950-52	1953-55	1956-58
1. Percentage share in gross domestic product of:				
1.1	Agriculture, forestry, fishing, & hunting ^a	(1) 47.0	46.2	45.0
	of which:			
	1.1.1 Export agriculture (including export processing)	(2) 30.4	29.2	28.3
	1.1.2 Domestic agriculture	(3) 13.7	14.6	14.0
1.2	Industry ^b	(4) 11.0	10.5	11.6
	of which:			
	1.2.1 Manufacturing (excluding export processing)	(5) 4.6	5.4	5.5
	1.2.2 Construction	(6) 4.0	4.4	5.2
1.3	Services	(7) 42.0	42.6	43.5
2. Annual average growth rate of:				
2.1	Agriculture, forestry, fishing, & hunting	(8) 3.9	3.8	0.1
	of which:			
	2.1.1 Export agriculture (including export processing)	(9) 2.6	3.0	0.7
	2.1.2 Domestic agriculture	(10) 9.5	10.8	-2.0
2.2	Industry	(11) 5.2	1.5	4.0
	of which:			
	2.2.1 Manufacturing (excluding export processing)	(12) -4.0	1.3	4.0
	2.2.2 Construction	(13) 22.0	1.6	5.0
2.3	Services	(14) 9.2	3.8	1.4
3.	Total gross domestic product	(15) 6.2	3.4	1.1

Sources: For 1950 to 1958, from Saundranayagam [37]. For 1959 to 1979, from Central Bank of Ceylon [6, various issues] supplemented by national account files of the bank.

Notes: 1. Two modifications have been made in the original method of classification followed in the above sources in compiling the table to suit our purpose: (1) reclassification of value added in manufacturing into (i) export processing and (ii) other manufacturing and inclusion of the former category under export agriculture. While there may be a strong rational underlying the practice of including processing of tea, rubber, and coconut products for exports under manufacturing, this practice has its limitations in highlighting ongoing changes in the production structure, especially its

has indicated above 4 per cent overall growth rate throughout the period.

To sum up, sectoral value added data for the past three decades indicates that basic structural changes, which denote an appreciable deviation from the traditional export economy pattern, have been taking place in the Sri Lankan economy. As far as its direct contribution to value added is concerned, the export sector has been losing its overwhelming predominance. The domestic agricultural sector is no longer an isolated and peripheral part of the economy. This sector together with the dynamic industrial sector has significantly contributed toward the growth performance of the economy during the recent past.

I
SECTORAL COMPOSITION AND GROWTH RATES

(At 1959 factor cost)						
1959-61	1962-64	1965-67	1968-70	1971-73	1974-76	1977-78
45.6	46.5	42.4	40.4	38.2	36.2	34.8
26.8	26.7	24.4	21.0	18.8	16.7	14.4
15.2	16.6	14.9	16.3	16.5	17.4	18.1
10.3	10.4	11.3	14.5	16.1	16.6	17.2
5.1	5.9	6.8	8.3	9.3	8.7	9.6
4.5	0.4	3.8	5.5	5.2	4.7	4.4
44.1	43.1	46.1	45.1	45.8	47.2	48.2
4.8	3.8	1.4	3.3	0.0	4.2	5.5
2.1	3.3	-0.3	0.4	-1.5	-1.5	1.5
10.5	4.7	3.8	7.5	2.0	4.3	8.4
-0.7	6.5	8.5	15.5	5.5	4.9	8.0
-0.7	10.7	9.5	13.7	3.9	3.5	6.1
-0.2	1.8	8.0	18.3	-3.6	1.3	10.7
3.5	5.0	2.1	5.4	3.2	4.6	6.7
3.8	4.6	3.7	5.8	2.3	3.3	6.4

export dependence (see Shourie [38]); (2) reclassification of value added in agriculture into two groups, export agriculture (including export processing) and domestic agriculture. This is necessary in order to highlight the activation of domestic agriculture in recent years. Additional data for this reclassification were obtained from national account files of Central Bank of Ceylon.

2. All dates are inclusive.

^a The difference between 1.1 and 1.1.1 plus 1.1.2 is the share of forestry, fishing, and hunting.

^b The difference between 1.2 and 1.2.1 plus 1.2.2 is the cumulative share of mining & quarrying and electricity, gas, water, & sanitary services.

B. Labor Deployment

The relationship between the change in output structure and the pattern of sectoral distribution of employment will be examined in this section. Table II brings together population census data on the distribution of gainfully employed persons for 1953, 1963, and 1971 and GDP data for the same years. The presence of a relatively large "catch-all" category—"activities not adequately described"—poses a major problem in interpreting the data. The following analysis is, therefore, based on the rather limited assumption that this category

TABLE II
SECTORAL DISTRIBUTION OF GROSS DOMESTIC PRODUCT
AND LABOR DEPLOYMENT

	(% of total)							
	Distribution of Gross Domestic Product			Distribution of Employment			Allocation of Increase in Employment	
	1953	1963	1971	1953	1963	1971	1953-63	1963-71
1. Agriculture, forestry, fishing, & hunting	46.3	47.1	38.5	52.9	52.6	50.4	48.5	32.2
of which:								
1.1 Export								
agriculture	29.5	26.3	19.1	28.6	24.6	20.1	-33.8	-14.2
1.2 Domestic								
agriculture	13.3	15.7	16.8	22.9	26.6	28.7	81.2	44.9
2. Industry	10.2	10.6	16.1	12.1	12.4	13.4	15.7	21.2
of which:								
2.1 Manufacturing	5.6	6.1	9.8	9.7	9.2	9.6	1.5	12.9
2.2 Construction	4.7	3.9	5.6	1.9	2.7	3.1	14.1	6.4
3. Services	43.7	42.2	45.5	28.4	29.5	28.0	47.0	16.9
4. Activities not adequately described	—	—	—	6.6	5.5	8.2	-11.0	28.8

Sources: For employment data, from Department of Census and Statistics, "The Population in Sri Lanka" (Colombo: Government Press, 1974) based on census reports of 1953, 1963, and 1971. For GDP data, see Table I.

is distributed among industries in the same proportion as the classified employed persons.

Although labor absorption in the primary and the industrial sectors has changed in the same direction with change in their output shares, the magnitude of these changes appears to be minor compared with that of output changes. On the other hand, the growth of employment in the service sector was somewhat erratic. However within the primary sector, distribution of employment has occurred in a manner considerably similar to both the direction as well as the magnitude of change in the output structure. As can be seen in the last two columns of the table, 81 per cent of increase in total employment between 1953 and 1963 and 45 per cent of the increase between 1963 and 1971 were absorbed by the domestic agricultural sector resulting in an increase in its employment share from 23 per cent in 1953 to 27 per cent in 1963 and 29 per cent in 1971. On the contrary, the contribution of the export agricultural sector to the total employment was on the decline throughout the period; employment share of this sector decreased from 29 per cent in 1953 to 25 per cent in 1963 and again to 20 per cent in 1971. It is, therefore, evident from the given data that despite the still predominant position of the primary sector with regard to the employment generation, within this sector "the center of gravity" has shifted significantly from the traditional export sector to the import-substituting agricultural sector.

Within the industrial sector, the most noteworthy feature has been the virtual stability of the employment share of the manufacturing sector despite the con-

tinuous increase in its output share. The output share of this sector increased from 5.6 per cent in 1953 to 6.1 per cent in 1963 and again to 9.8 per cent in 1971. However, its employment share remained around 9 per cent throughout the period. This situation compares well with employment generation experience of import-substitution-industrialization attempts in other less-developed countries. In many of these countries, as has been revealed by recent empirical investigations, remarkably high rate of growth of industrial investment and output has accompanied by a relatively slower rate of labor absorption [3, pp. 107–8] [5, pp. 131–32] [30, Chap. 3] [42, pp. 93–94].¹⁴

C. Linkages and Import Substitution

It would be interesting to investigate whether the emergence of new import-substituting industries and renovation of domestic agriculture have resulted in significant alterations in sectoral interdependencies of the economy. In the following section, an attempt is made to shed some light on this aspect using sectoral linkage indexes and measures of percentage contribution of import substitution to sectoral growth given in Table III. The choice of the time period 1965–70 for the purpose of the analysis is totally dictated by the availability of input-output tables for these two years.¹⁵ However, this period is not totally inappropriate; the year 1965 belongs to the “easy phase” of import substitution in semi-essential industrial consumer good production and it was during the period 1965–70 that most of the capital and intermediate goods industries which commenced construction work during the early sixties in an attempt to provide a “domestic base” to the industrialization process came into production [4, p. 197].

In Table III, backward and forward linkages have been estimated using Rasmussen formula.¹⁶

Let r_{ij} , be an element of $(I-A^d)^{-1}$, where A^d is the domestic input-output coefficient matrix. Then index of forward linkage U_i and index of backward linkage U_j can be defined as follows:

$$U_i = \frac{1}{n} \sum_{j=1}^n r_{ij} \left/ \frac{1}{n^2} \sum_{i=1}^n \sum_{j=1}^n r_{ij} \right., \quad (i=1, \dots, n) \quad (2.1)$$

$$U_j = \frac{1}{n} \sum_{i=1}^n r_{ij} \left/ \frac{1}{n^2} \sum_{j=1}^n \sum_{i=1}^n r_{ij} \right., \quad (j=1, \dots, n) \quad (2.2)$$

¹⁴ See Baer [3, p. 107] or Tyler [42, pp. 93–94] for a lucid presentation of various arguments about underlying causes of the low degree of labor absorption in ISI process.

¹⁵ Perspective Planning Division of the Ministry of Planning and Economic Affairs has published an updated version of 1965 I-O table for 1972. However, we are not in a position to use this table in our calculations because of unavailability of an inter-industry import matrix M for the same year to separate domestic I-O coefficient A^d for linkage index calculations.

¹⁶ The superiority of Rasmussen method over other measures of sectoral linkages lies in the fact that it takes into account both direct and indirect repercussions of output variation in a given sector. For a discussion on the concept of linkages and its measurement with empirical applications to Asian countries, see Panchamukhi [34].

TABLE III
SECTORAL LINKAGES AND CONTRIBUTION OF IS TO SECTORAL GROWTH

Sector Code	Sector	Forward Linkage		Backward Linkage		Contribution of IS to Sectoral Growth ($\frac{CIS}{\Delta X} \times 100$) 1965-70
		(U_i)		(U_j)		
		1965	1970	1965	1970	
1.	Tea	0.758	0.700	0.821	0.883	0.000
2.	Rubber	0.801	0.822	0.783	0.796	-0.730
3.	Coconut	2.173	2.166	0.798	0.735	16.943
4.	Paddy	1.638	1.456	0.805	0.791	39.192
5.	Livestock	1.245	1.007	0.920	0.907	4.370
6.	Fish	0.766	0.832	0.766	0.736	-0.164
7.	Logging & firewood	0.933	0.851	0.767	0.725	4.037
8.	Other agriculture	0.972	0.885	0.777	0.809	-3.213
9.	Mining & quarrying	1.011	0.966	0.794	0.854	30.203
10.	Milling	0.889	0.837	1.519	1.448	34.140
11.	Dairy products	0.891	0.800	1.617	0.964	74.295
12.	Bread	0.758	0.801	0.975	0.861	0.000
13.	Other bakery products confect.	0.758	0.800	1.162	1.113	0.652
14.	Carbonated beverages	0.758	0.801	1.034	0.881	0.000
15.	Desic. coconut	1.505	1.540	1.464	1.439	26.250
16.	Other processed food	0.948	0.764	1.395	1.023	81.161
17.	Dist., rect., & blend of spirits	1.052	1.050	1.137	1.073	-7.086
18.	Tobacco products	0.758	0.699	0.829	0.813	0.070
19.	Textiles	0.888	0.751	0.903	0.848	35.539
20.	Wood products	1.259	1.134	1.307	1.203	18.495
21.	Paper, paper products, etc.	1.040	0.906	0.952	0.892	45.615
22.	Leather & leather products	0.849	0.845	1.034	1.210	18.785
23.	Rubber products	0.799	0.813	0.933	1.041	48.203
24.	Chemical & chemical products	0.904	0.995	0.870	1.026	61.359
25.	Oils & fats	1.051	1.064	1.906	2.048	31.055
26.	Coconut fiber & yarn	0.771	0.711	0.994	0.925	16.610
27.	Petroleum & coal products	0.903	2.448	0.883	2.014	119.504
28.	Structural clay products	0.795	0.798	0.886	0.914	34.008
29.	Ceramic, glass, & pottery	0.887	0.718	0.922	0.909	61.998
30.	Cement & cement products	0.861	0.877	0.945	1.179	32.030
31.	Basic metals	0.877	0.852	0.786	0.854	98.331
32.	Light engineering	1.573	1.595	1.073	0.945	-9.473
33.	Transport equipment	0.758	0.767	1.234	0.975	51.418
34.	Machinery & equipment	0.758	0.699	0.778	0.841	96.098
35.	Other manufacturers, n.e.s.	0.758	0.704	0.913	0.996	0.000
36.	Construction	0.792	0.770	1.081	1.044	0.539
37.	Electricity	1.021	1.031	0.787	0.822	11.288
38.	Road passenger transport	0.763	0.701	0.862	0.972	0.000
39.	Rail transport	0.793	0.759	0.936	0.961	-1.687
40.	Trade & transport	2.430	3.253	0.804	0.772	1.367
41.	Services	0.851	0.879	0.842	0.845	0.834

Sources: [9] [35; Statistical Appendix 1, Table A16].

Note: The original I-O table for 1965 is a "single-cell" matrix. It was netted for imports using the intermediate import matrix M prepared by the ministry for the same year at a later stage, in order to obtain the domestic I-O coefficient matrix A^d for the purpose of linkage index calculation. Both I-O tables are based on the same sectoral classification, and therefore strictly comparable.

An element of the domestic inverse, r_{ij} , denotes output of sector i needed to sustain one unit of final demand of sector j . The summation of all elements in each column j of that matrix, $\sum_i^n r_{ij}$, therefore, indicates total inputs required from other sectors to sustain one unit of final demand in sector j , or its backward relationship with the rest of the economy. Similarly, a row sum, $\sum_{j=1}^n r_{ij}$, indicates forward relationship of a given sector i ; that is, output in sector i required to support a unit increase in final demand of all sectors taken together. The above two indexes relate the average linkage of a given sector (i.e., $\frac{1}{n} \sum_{j=1}^n r_{ij}$ and $\frac{1}{n} \sum_{i=1}^n r_{ij}$) to overall national average of sectoral relationship (i.e., $\frac{1}{n^2} \sum_{j=1}^n \sum_{i=1}^n r_{ij}$) in an attempt to provide a measure of relative significance of each sector within the economy. The greater the value of U_i and U_j , the greater the stimulus to output in other sectors emanating from a given sector. If $U_i > 1$, it implies that the rest of the economy needs to increase output by more than that of j 's to meet a unit increase in final demand for sector j . Similarly, $U_i > 1$ indicates that a unit increase in final demand in the system as a whole requires sector i to increase output proportionately more than other sectors. If $U_j < 1$ or $U_i < 1$, the opposite is true.

The contribution of import substitution to sectoral growth (column 5 of Table III) has been measured using Morley and Smith version of Chenery measure of import substitution:¹⁷

$$CIS_i = \left(\frac{X_i^t}{Z_i^t} - \frac{X_i^0}{Z_i^0} \right) Z_i^t, \quad (i=1, \dots, n) \quad (2.3)$$

where in matrix notation

CIS = the contribution of import substitution (IS) for sectoral growth,

Z = total supply vector,

$Z = X + M^*$,

$M^* = (I - A)^{-1}M$

= a vector of redefined imports which can be interpreted "as the amount of domestic output necessary to eliminate imports altogether for a given level of final demand,"

M = import vector,

X = the vector of gross domestic output,

A = matrix of technical coefficients, a_{ij} , superscripts 0 and t denote the period 0 to t , and n refers to the number of sectors.

¹⁷ In development literature, the most widely used measure of IS is the one proposed by Chenery in his seminal paper; "Patterns of Industrial Growth," *American Economic Review*, Vol. 50, No. 4 (September 1960). However, this measure takes into account only final demand imports in defining total supply and, therefore, tends to substantially underestimate IS especially when import substitution process tends to expand into intermediate commodity production. To overcome this problem Morley and Smith [31] suggest using an I-O table to define imports and aggregate supply accordingly to include the intermediate effect of IS on intermediate demand (see Ahmad [2, Chap. 2], for a summary discussion on measurement of IS).

According to equation 2.3, *CIS* is simply the difference between the actual imports in the end period and what imports would have been had the import ratio remained at the base level. The percentage contribution of IS to output variation of a given sector can be obtained by expressing the numerical answer given by the equation as a percentage of output variation [i.e., $(CIS/\Delta X) \times 100$].

The picture that emerges from a comparison of linkages indexes and IS contribution percentage is a clear indication of the weak sectoral interdependence of import substitution industrialization in Sri Lanka. If we consider the IS contribution percentage as a direct measure of the degree of import substitution in a given sector, in both years we can visualize a clear tendency for sectors highly favored by IS to indicate relatively low linkages. When we consider IS activities in domestic agriculture and in industry as two separate groups, the former group appears to be more favorable with regard to sectoral linkages. For instance, each of the sectors, paddy, livestock, fish milling, and dairy products, has recorded at least one "above unity" linkage index.

The pattern of sectoral interrelationship has not undergone drastic changes during the period 1965-70. However, a comparison of linkage indexes between the two years indicates a slight improvement especially with regard to the pattern of backward linkages. Practically, almost all of the new industries have at least slightly strengthened their backward linkages while rubber products, cement, chemical and chemical products, and petroleum and coal products have recorded above unity values. The heavy emphasis of industrial licencing policy on the local input content of new industries since 1964 and the drastic curtailments of raw material imports during this period due to the aggravating balance of payments situation forcing industrialists to shift over to local substitutes or to close down heavily import dependent ventures, can be put forward as possible explanations of this favorable trend. The general pattern of the changing composition of industrial production as revealed by industrial statistics presented by the central bank in its annual report, leads one to surmise that this trend might have further improved during the ensuing period. According to these data the share of intermediate goods in total industrial production of Sri Lanka has increased from 34 per cent in 1966 to 48 per cent in 1977.

IV. IMPORT DEPENDENCE

A. *Measurement of Import Dependence*

The ensuing investigation into the level and the changing pattern of import dependence will be based on sectoral import dependence indices calculated within the framework of Leontief open static input-output model. The use of Leontief model in this type of analysis has the main advantage of taking into account indirect sectoral repercussions of import dependence which characterizes the existing production structure in addition to direct import requirements of each production sector. This helps to obtain a more meaningful picture of import dependence of the economy while allowing for a sufficient degree of sectoral disaggregation.

Let $(I - A^d)^{-1}$ be the Leontief domestic inverse, an element of which, a_{ij} , indicates total input requirements from sector i to meet a unit of final demand for sector j . Here A^d is the domestic input-output coefficient matrix (i.e., technical coefficient matrix net of imports) and let M be the matrix of import coefficients where its element m_{ij} represents the amount of intermediate import i required to produce one unit of good j . Then

$$M(I - A^d)^{-1} = K,$$

where K is "the domestic import requirement matrix" a typical element of which, K_{ij} , indicates the amount of import i (both direct and indirect) required to produce a unit of commodity j locally. Therefore, when there is a unit increase in final delivery from sector i , the corresponding increase in import demand from that sector is given by the row sum of K .

On the basis of matrices M and K , the following two sectoral import dependency measures are defined:

$$\text{direct import content, } \beta^1 = \sum_{i=1}^n m_{ij}, \quad (j=1, 2, \dots, n) \quad (3.1)$$

$$\text{total unit import content, } \beta^2 = \sum_{i=1}^n k_{ij}. \quad (j=1, 2, \dots, n) \quad (3.2)$$

Both β^1 and β^2 are direct measures of import dependence with the value limit 0 to 1. According to the method of derivation, β^1 indicates the direct import requirement to produce one unit of final output in a given sector. The measure β^2 embodies both this direct requirement as well as the import content of local inputs utilized in producing that unit (i.e., the cumulative import requirement).

B. *Pattern of Import Dependence*

Measures β^1 and β^2 calculated for 1965 and 1970 using formulae, 3.1 and 3.2 are given in Table IV together with sectoral value added shares. Forty-one production sectors of the I-O table have been classified into seven broad groups in order to facilitate the discussions.¹⁸

In both years under consideration, the overall picture of import dependence of the economy indicates a great variation among various production sectors. As one would expect a priori, export production and domestic agriculture show significantly low import coefficients owing to their "strong domestic resource base." It is the low import dependence of these two sectors coupled with their

¹⁸ The method employed to classify sectors is the one adopted by the Perspective Planning Division of the Ministry of Planning and Economic Affairs in formulating the long-term growth model covering the period 1968-77 [24]. Two modifications were made to the original classification to suit our purpose: (a) three sectors—desiccated coconut and copra (15), oils and fats (25), coconut fiber and yarn (26), originally included in broad group 3—and the mining and quarrying sector (9) originally included in the broad group 4 were put under the export production category; (b) machinery and equipment broad group (33 and 34) used in the original classification was amalgamated with industries based on imported raw materials.

TABLE IV
IMPORT CONTENT OF SECTORAL PRODUCTION

Sector Code	Direct Unit Import Content (β^1)		Total Unit Import Content (β^2)		Contribution to Value Added (V_i) (% Share)	
	1965	1970	1965	1970	1965	1970
1. Export production*	0.068	0.073	0.075	0.102	18.61	9.23
1, 2, 9, 15, 25, 26						
2. Domestic agriculture*	0.029	0.031	0.035	0.044	23.67	26.79
Coconut	0.025	0.021	0.037	0.028	5.22	4.53
Paddy	0.067	0.027	0.070	0.041	5.00	8.37
Livestock	0.024	0.041	0.019	0.056	1.64	1.88
Fishing	0.011	0.019	0.013	0.022	1.98	2.11
Logging & firewood	0.012	0.000	0.014	0.006	0.43	1.08
Other agriculture	0.015	0.045	0.021	0.062	8.39	8.82
3. Industries based on agriculture (other than export processing*)	0.087	0.175	0.116	0.202	3.45	4.72
Milling	0.028	0.016	0.071	0.058	0.26	0.46
Dairy products	0.030	0.584	0.056	0.605	0.03	0.07
Bread	0.148	0.535	0.490	0.545	0.39	0.41
Other bakery products	0.159	0.329	0.201	0.360	0.18	0.24
Carbonated beverages	0.100	0.214	0.141	0.248	0.12	0.06
Other processed food	0.063	0.272	0.083	0.280	0.22	0.23
Distilling	0.066	0.068	0.095	0.104	0.31	0.36
Tobacco	0.055	0.019	0.061	0.031	0.92	1.16
Wood products	0.007	0.008	0.030	0.022	0.52	0.97
Leather	0.174	0.115	0.207	0.180	0.16	0.17
Rubber	0.324	0.094	0.357	0.134	0.16	0.23

TABLE IV (Continued)

Sector Code	Direct Unit Import Content (β^1)		Total Unit Import Content (β^2)		Contribution to Value Added (V_i) (% Share)	
	1965	1970	1965	1970	1965	1970
4. Industries mainly based on imported raw materials*						
Textile	0.262	0.240	0.306	0.355	4.90	5.97
19	0.297	0.184	0.335	0.512	1.58	1.09
Paper	0.246	0.242	0.287	0.277	0.72	0.70
21	0.376	0.275	0.396	0.326	0.67	1.09
Chemicals	0.000	0.000	0.010	0.008	0.43	0.27
28	0.183	0.207	0.212	0.217	0.09	0.13
Ceramics	0.318	0.110	0.369	0.189	0.18	0.34
30	0.483	0.559	0.488	0.593	0.02	0.15
31	0.243	0.290	0.331	0.369	1.08	1.64
Light engineering	0.564	0.430	0.565	0.453	0.02	0.32
34	0.119	0.529	0.205	0.564	0.06	0.07
Machinery & other equipment	0.396	0.154	0.413	0.211	0.05	0.17
33						
Transport equipment						
35						
Other manufacturing						
5. Construction*	0.126	0.062	0.169	0.112	5.49	8.39
36						
6. Electricity, petroleum, & coal products*	0.129	0.044	0.137	0.145	0.77	1.75
27, 37						
7. Trade, transport, & services*	0.063	0.071	0.078	0.071	31.14	31.72
38, 39, 40, 41						
Total domestic production	0.072	0.075	0.086	0.096		

Source: See Table II.

* Sectoral import coefficients were aggregated using value added weights.

predominance in the value added mix that has resulted in a remarkably low import dependence coefficient for the overall economy in both years. The relatively low ranking of domestic agricultural sectors—paddy, livestock, fishing, etc.—in the import dependence ladder is important from a policy point of view because consumer food items that can be produced in these sectors still constitute nearly 35 per cent of the total import bill [6, 1978, p. 8] reflecting a hitherto unexploited import-substituting potential. Production sectors belonging to the manufacturing category—broad groups (3) and (4)—indicate a remarkably high level of import dependence. It is in these sectors that IS industrialization has been taking place at a rapid rate since the beginning of the 1960s.

The more important message of Table IV is the apparent increasing trend of import dependence over time. The aggregate import dependence ratio β^2 has increased from 0.086 in 1965 to 0.096 in 1970—a nearly 12 per cent increase. However, at the sectoral level the increase is more prominent. Except the service (7) sector which indicates a mild decrease, all of the other six broad groups have intensified their dependence, while this intensification is more apparent in manufacturing sectors—both agro-based and imported raw material-based.

As we have mentioned earlier, when IS emerges mainly as a by-product of balance of payment restrictions, the new industries tend to take the form of “processing and packing operations” with a high import intensity. However, whether this high import bias would continue to increase or tend to decline with the passage of time is determined by counteracting forces emanating within the IS process itself. A priori, one can expect the dependence to reduce when these new products are gradually domesticated creating a market for backward linkage investment or when the IS process receives a firm basis from which the industrialization process extends to spheres of intermediate and capital goods [18]. On the other hand, the industrialization process could reflect a bias toward capital-intensive techniques as the IS process continues, resulting in a shift in domestic intermediate demand toward inputs either not available locally or whose local quality is low and/or cost of production is relatively high because of the prevailing underdeveloped stage of industrial development [19, p. 65]. Similarly, attempts to produce intermediate and capital goods locally, in order to provide a domestic base for nascent industries can result in more, not less, import dependence especially in a resource-limited economy. Klock provides yet another explanation for higher import intensity, in terms of foreign exchange and balance of payment policies which are typical of an IS regime. According to him, maintenance of an overvalued exchange rate and provision of other concessions on foreign exchange for new industries amount to a subsidy on intermediate imports which would result in a bias among local entrepreneurs toward imported raw materials, because of low unit cost vis-à-vis the local supplies [28, p. 458].

A full-fledged empirical investigation into the above arguments is beyond the scope of the present study. However, a close look at the behavioral pattern of direct and total import coefficients between the two periods would shed some light on this issue. Out of all the forty-one sectors, thirty-four sectors have increased their total import dependence over the period. However, out of these

thirty-four sectors, twenty-seven sectors have reduced their direct dependence on imported inputs reflecting their increasing reliance on local supply sources. The rank correlation coefficient between change in direct unit import content $\Delta\beta^1$ and change in total unit import content $\Delta\beta^2$ turned out to be only +0.12 suggesting an insignificant relationship between the variation of the two series. This evidence suggests that direct increase in utilization of imported intermediates, due to implicit subsidizing of importation of such commodities under the IS regime or otherwise, has not been a significant reason for the overall increase in import dependence of domestic production in Sri Lanka. Increase in indirect import content of sectoral production due to intersectoral repercussions emanating from attempts to produce intermediate goods domestically¹⁹ seems to be a more plausible cause of this situation.²⁰

Reflections of the above observed new form of trade dependence, the overwhelming reliance of the modern sector of the economy on imported inputs, could be seen in the growth performance of the economy since early as 1964. In that year the central bank annual report reported, "Ceylon encountered shortages of supplies in respect of various categories of goods. Foreign exchange difficulties have begun to limit Ceylon's ability to meet her full requirements of raw materials, machinery and spares, not only for accelerating development, but also for the fullest utilization of existing capacity" [6, 1964, p. 1]. Similarly, the bank ascribed the main weight of the slow down of economic growth during the period 1964-68 to meagre inflows of development imports [6, 1969, p. 15]. On the other hand, the remarkable recovery recorded in 1968 and 1969 was mainly due to expanding import flows owing to import liberalization—"the expansion in the preceding two years was sustained to a large extent by the availability of a wide range of imports, mainly for industry and transport and communication and construction" [6, 1970, p. 2]. Again, in the first half of the 1970s scarcity of imported raw materials and machinery, due to unexpected export shortfalls which were not fully compensated by foreign capital inflow, had become one of the most often quoted causes of unsatisfactory growth performance of the economy. On the contrary, respectable growth rates achieved during the last three years were closely related with increasing import flows which were made possible by increase in exchange allocations associated with favorable export performance and subsequently by foreign exchange liberalization measures implemented in November 1977. According to central bank statistics, capacity utilization in the manufacturing sector continued to rise appreciably from 54 per cent in 1976 to 61 per cent in 1977 and again to 70 per cent in 1978 in line with increasing import flows [6, 1978, p. 29].

¹⁹ Considerable increase in value added percentages of cement, basic metal, machinery, and transport equipments etc. (Table IV) reflects the expansion of intermediate good production during this period.

²⁰ Two recent empirical investigations into the working of the two state owned industrial ventures have reported results which support this view [40] [43].

V. SUMMARY

The import substitution attempts have, in fact, brought forward significant structural changes in the economy of Sri Lanka over the last two decades by way of contributing toward growth of industry and activization of domestic agriculture. These developments have resulted in a considerable decline in the relative direct contribution of export agriculture to total domestic output and employment. It was because of the new growth momentum in industry and domestic agriculture that the economy was able to enjoy a positive moderate growth rate despite the near zero, or perhaps negative, growth rate exhibited by the export sector. In line with the gradual expansion of the nascent industrial sector into the areas of intermediate and capital goods production, the overall pattern of sectoral interdependency of the economy also has begun to indicate some signs of improvements.

However, these new developments have brought about a new and a more delicate form of trade dependence—the increasing reliance of the production performance of the modern sector on imported inputs. In the colonial era and in the early part of the post-independent period, disruptions in import flows were directly reflected on the level of supply of imported consumer goods. During the IS era, imports act as a major determinant of the level of activity in the manufacturing sector and the related activities. Under this new form of dependence, any decline in export earnings which is not compensated by foreign capital inflow or by the utilization of foreign reserves could lead to an industrial recession, through forced import curtailments.

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