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THE PHILIPPINE COTTON TEXTILE INDUSTRY

by

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INTRODUCTION

This is the first in a series of nine comparatively short industry studies which will become part of a larger research project on the development of manufacturing firms in the Philippines. These industry studies are designed to serve a number of purposes, and after further revision and analysis they will become the first chapters of a larger paper analyzing the growth of firms in each industry studies. In this context they will provide the general historical and environmental background within which the firms of each industry operated. An accounting-financial analysis of the firms in the industry will follow, as well as an analysis of the results of interviews with each sample firm. The relationships which emerge will be further subjected to both time series and cross section statistical analyses.

An additional function of these industry studies is to provide material which supplements the work being done on the framework of the Philippine economy by other members of the NPA team in the Philippines.

Despite the many purposes mentioned above, each industry study will be presented as a self-contained field work report which can be read with benefit by those not concerned with the rest of the study.

The present study of the textile industry is primarily descriptive and historical. Other studies in the finishing stages (those on the cement and milk processing industries) are more analytical. I decided to use a slightly different format for each study so that, after the lapse of some time and further analysis

on the firm level, I might select that form which best serves the purposes of the study as a whole.

The library work and the research for a first draft of a substantial part of this study was done by my research assistant, Miss Teresita A. Victoria. Persons with knowledge of the textile industry in the Philippines read an earlier draft and offered some comments and suggestions. It is difficult, however, to find people in the Philippines who are knowledgeable about the textile industry and also completely objective.

The names of companies and information regarding them are used here only if they have already appeared in accessible studies which are acknowledged in our footnotes. The material which I gathered on individual companies through interviews and analysis of confidential data is not included here on a company basis.

This study should be regarded as a preliminary draft, and no part may be quoted without the permission of the author.

PART I

HISTORY OF THE INDUSTRY

Early and Pre-Modern

During pre-Mohammedan times the simple clothing requirements of Filipinos--which consisted of a breechcloth, popularly known as the G-string, and a shortsleeved, collarless jacket for men, and an unsewn skirt for women--were satisfied by cottage industry and the spinning of local cotton, abaca, banana, and pineapple fibers.[1] Early in the 13th century, in addition to producing cloth for local consumption, the local spinners and weavers also produced cloth for barter with China. About the geginning of the 13th century, a Chinese scribe named Chao Ju-Kua wrote: "...when the merchant ships arrive, they anchor in front of an openplace...which serves as a market. From the Filipinos, they took yellow wax, cotton, pearls, shells, betel nuts and cloth, in return for which they offered porcelein, gold leaden objects, glass beads, iron cooking pans and iron needles."[2]

The Spanish discovered the islands during the 16th century and, according to an old chronicle, found that the natives, from slave to chief without distinction

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[1]Alfred L. Kroeber, Peoples of the Philippines (New York: American Museum Press, 1919), pp. 121, 128, cited by Lawrence Davis Stifel, The Textile Industry--A Case Study of Industrial Development in the Philippines (New York: Cornell University, 1963), p. 21.

[2]David Bernstein, The Philippine Story (New York: Farrar, Straus, 1947), p. 31.

of rank all wore cotton fabrics. The seafaring Sangleys (Chinese merchants), however, were able to establish booming trade posts in strategic places and were soon bringing many ships to the islands laden with cloth and other merchandise from China. According to the account, the natives soon began to wear garments of silk, satin, and damask cloths from the land of the Sangley, and discarded their own native cloth altogether.[3]

This caused such a decline in local weaving that Spanish authorities were prompted to issue an "Ordinance Forbidding the Indians to wear Chinese Stuff" in 1591.

This partiality for foreign fabrics continued and became even more predominant when the Philippines was formally opened to world trade in 1835. Before this, only Spanish ships were permitted to have a share of Philippine commerce; trade was prohibited with all Western countries except Mexico and even this could run only between Manila and Acapulco.[4] In 1896, the first year for which statistics are available, textiles constituted the largest single import of the Philippines and amounted to 33 percent of total imports.[5]

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[3]Jovy Rodas, Fiber and Finish, cited by Jaime Alvarez, "The Philippine Textile Industry--Its Development, Problems and Prospects" (unpublished undergraduate thesis, College of Business Administration, University of the Philippines, 1953), p. 5.

[4]Bernstein, op. cit., p. 46.

[5]Economic Development Foundation, The Textile Industry, 1965, p. 7.

By the time of the American period, more accurate custom data verified the high dependence on textile imports. The data on imports for the year 1912 indicate that over 65 million square yards of cotton cloth were imported. By contrast, only 15 million square yards of cotton cloth or less were produced locally. In spite of its minor contribution to national textile requirements, cottage industry activity continued to be prevalent. The 1903 Census listed 569,906 spinners and weavers.[6] But the crude spindles and looms had low productivity and were frequently idle. In a survey of Ilocos Sur during the American period, two-thirds of the looms were inactive.[7] The decline of cottage industry production during the American period dates back to earlier centuries when Spanish authorities preferred to have the natives concentrate on growing tobacco instead of cotton.[8]

Modern Industry

The first major step in the development of the local textile industry came in 1930 with the establishment of the Philippine Cotton Mills by the Madrigal

[6]Most agricultural occupations in the Philippines entail extended intervals of inactivity, and even at present 40 percent of Filipino workers and farmers are estimated to have secondary occupations, generally performed in the household unit. See Area Handbook on the Philippines (New Haven, Conn.: Human Relations Area Files, 1956), p. 1,284.

[7]Alvarez, op. cit., p. 28.

[8]Lawrence Davis Stifel, The Textile Industry - A Case Study of Industrial Development (New York: Cornell University, 1963), p. 23.

interests. About 300 employees operated the 7,420 spindles and 320 looms in the mill. This was followed in 1936 by the National Development Company's (NDC) Manila mills with 10,000 spindles and 104 looms.[9]

The NDC was a government company and, reportedly, was established to achieve three objectives. The first, and perhaps the principal objective was to supply home weavers with yarn at low prices so that they would be better able to meet competition offered by inexpensive imports from Japan and China. The second purpose was to reduce unemployment by creating factory jobs and providing employment to the cottage weavers. The third purpose was to reduce textile importation, which amounted to over 113 million square yards the year before, by satisfying local demand from domestic production.[10]

The development of the textile industry was curtailed by the coming of World War II. The NDC mills were taken over by the Japanese, and the one mill owned by the Philippine Cotton Mills was destroyed during the war and has not been rebuilt.[11]

The early postwar years saw important changes in the industry which were largely a result of government policies to rebuild the devastated infrastructure and its ambitious plans for industrial and economic development. The

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[9]Economic Development Foundation, op. cit., p. 8.

[10]Stifel, op. cit., p. 33.

[11]Advertising and Marketing Associates, Inc., A Study of the Philippine Textile Industry (Manila, 1964), p. 8.

government adopted programs of tariff protection for domestic industry, restrictions on imports, and laws imposing limitations on alien ownership and participation in various enterprises. These measures encouraged the development of an indigenous textile industry.

Incentives Laws

The principal stimulation to development of the Philippine textile industry was the implementation of import and exchange controls in December 1949. The imposition of stringent quantitative controls was reflected in a 38 percent reduction in the total quantity of imports and a 44 percent reduction in the quantity of cotton textile imports from 1949 to 1950.[12] The supply of imported textiles declined because of controls, but the demand for them remained unchanged or increasing (the partiality of Filipinos for foreign fabrics continued), thus prices of imported textiles rose, thereby giving a price advantage to domestic manufacturers. The overvalued rate of the pesos used to finance approved importations[13] made imported machinery, equipment, and raw materials comparatively cheap, thereby providing further encouragement for investment in industrial ventures.

Another form of incentive was provided by the policies favoring "new and necessary industries," (Policies which included the textile industry). Immedi-

[12]Economic Development Foundation, op. cit., p. 8.

[13]The official rate was established at ₱ 2 to US $1 until 1960, while the black market rate fluctuated at much higher levels. According to Pick's Blackmarket Yearbook, the black market rate rose as high as ₱ 4.65 per US $1 in July 1959.

ately after liberation (1946), the Philippine Congress approved Republic Act (R. A.) 35 to induce private capital, both local and foreign, to invest in industries defined as new and necessary for the economic development of the country. R. A. 35 provided that "any person, partnership, company or corporation who or which shall engage in a new and necessary industry shall, for a period of four years from the date of organization of such industry be entitled to exemption from the payment of all internal revenue taxes..." However, in spite of R. A. 35 and the other incentives, six years passed and, with the exception of some eight industries, there had been no industrial development to speak of.[14] In June 1953, a new incentives law, R. A. 901, was passed. It provided for the exemption of "new and necessary" industries from the payment of all revenue taxes until December 31, 1962, or for a period approaching 10 years, as contrasted to the four-year period provided for by R. A. 35.

The program of exemptions under R. A. 901 provided for full exemption from all internal revenue taxes up to December 31, 1958. After that the percentage of exemption was reduced on a sliding scale as follows:

From Jan. 1 to Dec. 31, 1959 - 90 percent.
From Jan. 1 to Dec. 31, 1960 - 75 percent.
From Jan. 1 to Dec. 31, 1961 - 50 percent.
From Jan. 1 to Dec. 31, 1962 - 10 percent.
Full taxes after 1962.

[14] Philippine Council for U. S. Aid, Industrial Development Branch, Industrial Philippines: A Cross Section (Manila: Philippine Council for U. S. Aid, 1953), p. xxiii.

This Act also had a provision that grantees of tax exemption, whether R. A. 35 or R. A. 901, after enjoying full and/or partial tax exemption for six years, shall pay income tax in full. As for the other internal revenue taxes, full or partial exemption applied in accordance with the schedule above. Total exemption under both Acts was not to last for more than 10 years for any benefitting company.[15]

The development pattern of the textile industry was also affected by a condition stipulated in a circular of the Secretary of Finance on August 20, 1953 and directed specifically at the textile industry. According to that circular, a textile manufacturer who wished to benefit from the above exemption privilege was required to use local raw materials whenever possible and to follow a fully integrated plant plan. The first condition provided a leverage to encourage the domestic producers of cotton, yarn and gray cloth, while the second encouraged investments through approved programs of backward integration.[16]

The development of the knitting industry was one result of these provisions. Knitting was preferred by investors to textile manufacturing because it was easier to enter, required less capital, involved a shorter installation period

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[15] Ibid, p. xxiv.

[16] Presidential Economic Staff, Codification of Laws Pertaining to Industries (Manila, 1966), p. 5.

and a shorter time to realize a return of investment.[17] The knitting industry was a stimulant to textile manufacturing because its increased demand for yarn encouraged larger spinning capacities. This practically assured market, plus the generally favorable local and foreign demand situation, encouraged entrance into spinning. By 1956, there were 68,368 spindles and 2,131 looms in the Philippines.

In 1957, the industry embarked on a path of vertical integration from the spinning of raw cotton into yarn, through weaving of the yarn into cloth, to the finishing of the cloth into final merchandise.[18] These, and the other intermediate processes could all be undertaken in one plant.[19] In the same year, the Central Bank enforced its selective credit policy which was designed to channel the credit resources of the banking system into productive activities. The textile industry was classified under Priority I in the selective credit policy so that textile millers

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[17]Economic Development Foundation, op. cit., p. 9. Knitting is the construction of a fabric by forming the yarn into loops which hang one upon the other. The two basic methods of constructing knitted cloth are warp knitting and weft knitting. The essential difference between warp knitting and weft knitting is that the former uses many parallel yarns which are carried by as many needles in a vertical direction; the latter usually uses one yarn in a crosswise direction.

[18]For a detailed description of the process and stages in the production of cloth see Appendix A.

[19]Advertising and Marketing Associates, op. cit., p. 9.

received the most generous accommodation possible in the Central Bank's credit system.[20] The Central Bank also gave top priority to machinery and equipment required by "new and necessary" industries (which included the textile industry) in the rationing of dollars. In that year, the industry grew to 111,312 spindles and 3,190 looms. The following year, further growth brought the industry to 172,936 spindles and 4,163 looms.

Decontrol

During the early sixties, changes occurred which altered the position of the textile industry. Most of these changes were a result of the implementation of gradual decontrol. Essentially, the decontrol consisted of a combination of devaluation and increased exposure of domestic manufactures. One result was reduction in profits. The profitability ratio of net profit to net sales in the textile industry averaged 9.13 percent in 1960. This ratio declined to 2.76 percent in 1961, and the decline coincided with the first phase of decontrol when peso prices of imported raw materials rose as a result of the implementation of the composite rate of ₱2.75 to US $1 instead of the previous rate of ₱2.00 to US $1. In the same period, the industry was also subjected to increased taxation because of the provisions of R. A. 901 which reduced the industry's tax exemption from 75 percent in 1960 to 50 percent in 1961.

[20] Miguel Cuaderno, Sr., "Selective Credit Policy," Central Bank News Digest (May 21, 1957), pp. 2-5.

The further decline of the ratio of net profit to total assets from 2.76 percent to 1.92 percent in 1962 coincided with the administration's decontrol moves in January of that year. As a result, payments for imported raw materials were made on the basis of the free market rate which was ₱ 3.794 to US $1 on January 22, 1962, and amounted to ₱ 3.910 to US $1 in December of the same year. At the same time, the industry's tax exemption under R. A. 901 was reduced from 50 percent in 1961 to 10 percent in 1962.[21]

The difficulties caused by the decontrol program were not restricted, of course, to the higher costs of current operations, for the program also caused the peso cost of imported machinery, equipment, and spare parts to rise. Most of the mills were programmed on a basis of ₱ 2 to US $1. In the case of machinery and equipment secured on a deferred payment basis, remittances for amortizations have risen in terms of peso value. The situation has been aggravated by the failure of the Central Bank to honor its commitment to a conversion rate of ₱ 3.20 to US $1 for deferred payments on machinery and equipment contracted for before the devaluation. As a result, the mills have had to remit these payments at the free market rate of ₱ 3.90 to US $1.[22]

Another apparent result of decontrol was significant increase in textile imports. Exchange control was the government's most effective tool for

[21] Advertising and Marketing Associates, op. cit., p. 74.

[22] Advertising and Marketing Associates, op. cit., pp. 33-34.

regulating imports, and the expiration of these controls was closely followed by large increases in textile imports. In 1962, total recorded imports were 176,993,000 yards and constituted 46 percent of the total supply available. Total recorded imports went up to 246,517,000 yards in 1963 or an increase of 39 percent.[23] By 1964, about one-half of the total supply available was supplied by importation. While this was no higher percentage than during the control period, some sources close to the textile industry report that textile importation (both recorded and unrecorded because of smuggling) increased by 130 percent during 1964.[24]

The difficulties of the industry were compounded later, especially in 1964 and 1965, by the tight money policy of the government. Industrial firms became saddled with long collection periods on the credit they had extended to customers, and this, together with the accrued inventories, seriously exhausted their working capital.

Some Remedial Measures

All of the above, plus the implementation in 1965 of the Minimum Wage Law, which raised the minimum industrial wage rate from ₱4 to ₱6 per

[23] Program Implementation Agency, A Status Report of the Textile Industry in the Philippines (Manila, 1965), p. 3

[24] Edward Kiunisala, "Life or Death for Industry," Free Press (August 20, 1966), p. 5. It is not clear what the 130 percent refers to because recorded importations increased by less than 7 percent. The most likely interpretation is that this statement refers primarily to unrecorded imports.

day, resulted in severe difficulties for manufacturing firms. However, some remedial measures were taken by the government in the form of the Basic Industries Law, passed June 17, 1961. This law exempts any person, partnership, company, or corporation engaged in "basic industries" (which includes textiles) from the payment of special import tax, compensating tax, and tariff duties on the importation of machinery, spare parts and equipment as follows:

From June 17, 1961 to Dec. 31, 1966 - 100 percent
From Jan. 1 to Dec. 31, 1967 - 75 percent
From Jan. 1 to Dec. 31, 1968 - 50 percent
Full taxes after 1968.[25]

A further assistance to the textile industry came in the form of R. A. 4086, otherwise known as the Textile Assistance Act. This Act, which was approved in 1964, provides for the exemption of this industry from the payment of duty, special import tax, sales and/or compensating tax, especially on the following items: imported natural or synthetic raw fibers and tow, chemical dyestuffs and spare parts, (which are) not grown, manufactured or produced locally in sufficient amounts required by the industry. In order to avoid duplication, section 5 of the Act states that "any person, partnership, company or corporation eligible to tax exemption privileges under this Act and enjoying tax exemption under other existing laws shall not enjoy tax exemption privileges under this Act."

The program of tax exemptions under this Act is as follows:

[25]Republic of the Philippines, Republic Act 3127, June 17, 1961.

From June 18, 1964 to Dec. 31, 1966 - 100 percent
From Jan. 1, 1967 to Dec. 31, 1968 - 75 percent
From Jan. 1, 1969 to Dec. 31, 1969 - 50 percent
From Jan. 1, 1970 to Dec. 31, 1970 - 25 percent
Full taxes after 1970.[26]

In spite of the government's assistance, however, there was a decline in textile production in 1964 which continued into 1965. An analysis of the financial reports of 22 firms filed with the Securities and Exchange Commission for 1961-1964 revealed declining sales since 1963 and declining profitability. This resulted in an alleged loss of ₱4 million to the industry in 1964. Interviews conducted in 1965 by the Economic Development Foundation covering the period 1961-1964 revealed that 14 firms reported reduced profits, two reported steady profits, and two reported rising profits. Eleven of the 14 firms claiming declining profits were of the large integrated type. The decline in profitability may be a result of the drop in sales of woven cotton goods (woven fabrics) which is the main cause of the overall decline in sales. Sales of knitted cotton, artificial and synthetic fibers, and other lines remained steady or improved, but not high enough to offset the losses in cotton goods.[27]

Competing Imports

A major source of complaint by the textile industry has been the alleged misuse by the embroidery industry of its special textile import privileges.

[26]Republic of the Philippines, Republic Act 4086.

[27]Economic Development Foundation, op. cit., p. 46.

In order to supervise such importations, an Embroidery Board was established by the enactment of R. A. 3137, which was passed June 17, 1961. The Board was to take over-all control and administration of all those textile imports which were duty-free on the condition that the importers process them into finished products and then reexport them within two years.[28] Sources close to the textile industry claim, however, that the bulk of such duty-free textile imports continued to be sold in the black market thereby depriving the textile industry of the tariff protection it was supposed to enjoy.

Another development unfavorable to the domestic industry was the increase in the importation of used clothing. The most spectacular change in imports of textile goods between 1961 and 1965 has occurred in this class. From less than 15 million yards per year in 1960, 1961, and 1962, imports of used clothing have increased to more than 140 million yards annually in 1964 and 1965.

This great shift is illustrated by the following: Before 1963, used items comprised the smallest or second smallest component of total yardage of imports of textile goods. In 1963, however, used clothing rose to second place behind remnants; and in 1964 and 1965, the total yardage of imported used clothing was higher than the total of imported remnants and piece goods combined. Used items include a wide variety of colors, materials and styles for children and adults of both sexes. The goods are generally of good quality, except for

[28]Agusto Africa, "Queries and Answers on the Embroidery Board," Department of Finance Statistical Bulletin (July 1965), p. 249.

some minor deformity. Being ready-made, the goods require no further expenditure for sewing. Hence, they are particularly popular among low-income groups.

Remnants are also a major source of competition to the local textile industry,[29] and they can be found throughout the country in a variety of material types, styles, and lengths. Many remnants apparently come in pre-cut lengths, suitable for shirts, dresses or other purposes.

Several producers stated that local remnants importers work hand-in-hand with U. S. and Japanese exporters in supplying the local market with the desired cuts and material types. In effect, therefore, the bulk of remnants entering the country are similar to piece goods in both quality and use, yet are not subject to the same tariffs. Remnants are subject to a 30 percent import tariff, whereas finished piece goods are subject to a 100 percent tariff.

With regard to the importation of remnants, records of the Bureau of Census show that during the period 1960-64 there was a decline in the number of yards of imported remnants from an average of 69.9 percent of total textile importation to an average of 39.5 percent.[30] This drop in total yardage imported may be a result of the increase in the tariff rate imposed on remnants from 15

[29]The official definition of "remnants" is the yards of cloth in excess of the standard 40 yards per bale. Bales often have 42 to 45 yards and the excess over 40 yards qualifies as remnants. However, the largest importation of remnants comes in the form of cut pieces. So long as a piece does not exceed 5 meters in length it qualifies as "remnant."

[30]Economic Development Foundation, op. cit., p. 35.

percent to 30 percent ad valorem on June 28, 1962,[31] and also to the increase in the total yardage of imported used clothing which is comparatively cheaper than remnants.

However, with the reorganization of the Embroidery Board and the passage of R. A. 4653 in 1965, which aims to "safeguard the health" of the people by prohibiting the commercial importation of textile articles commonly known as used clothing and rags, the competition from imported textiles has declined.

Status as of 1965

By the end of 1965 there were 29 textile mills in the Philippines, of which 17 were integrated plants. The total estimated annual capacities were as follows: spinning--about 200,000,000 lbs. of yarn; weaving--about 542 million yards of gray cloth; and finishing--about 576 million yards (see Table 1).

Two other important pieces of information emerge from Table 1. First, almost all of the textile mills are located in the greater Manila area. The reasons for this appear to be the usual ones. Manila is the main port of entry of raw materials; it is relatively well endowed with infrastructure services including power supply; and it has the largest concentration of buying power in the country. Second, according to the Program Implementation Agency study, the only mills situated

[31] Program Implementation Agency, A Status Report of the Textile Industry in the Philippines, (Manila, 1965), p. 5.

outside Manila are those which depend on local raw materials such as ramie.[32]

[32] Program Implementation Agency, Economic Atlas, 1964, p. 132.

Table I

LOCATION AND CAPACITY OF ALL TEXTILE MILLS AS OF DECEMBER 1965

Name of Firms	Date of Estab-lishment	Location	ESTIMATED ANNUAL PLANT CAPACITY SPINNING No. of Spin-dles	SPINNING Lbs. Yarns	WEAVING No. of Looms	WEAVING Yards Gray Cloth	FINISHING Yards Finished Fabrics
A. Integrated Textile Mills							
1. Artex Development Corporation	12- 9-58	Malabon, Rizal	51,000	14,399,089	1,560	58,905,403	45,000,000
2. Central Manufacturing Corp.	9-14-58	Balintawak, Q.C.	40,920	7,365,600	1,842	34,020,000	51,030,000
3. Consolidated Textile Mills	4-21-59	Las Pinas, Rizal	40,656	14,400,000	1,079	33,600,000	36,000,000
4. Eastern Textile Mills	2-17-56	Meycauyan, Bulacan	38,236	11,530,000	1,008	36,320,000	45,000,000
5. Floro Textile Mills	2- 3-48	Pasig, Rizal	36,288	12,446,304	560	14,717,040	14,717,040
6. General Textile Mills	3-31-58	Santolan, Cubao, Q.C.	40,128	14,000,000	1,037	48,000,000	48,000,000
7. International Textile Mills	8-26-55	Muntinglupa, Rizal	21,952	5,405,000	540	16,770,000	25,000,000
8. Lirag Textile Mills	12-22-53	Ilaya St., Manila	46,000	15,030,000	1,400	50,400,000	58,500,000
9. Litton Textile Mills	2- 2-54	Bo. Rosario, Pasig, Rizal	44,000	13,200,000	907	24,000,000	30,000,000
10. Union Textile Mills	1-18-60	Sta. Mesa, Manila	20,240	6,000,000	506	18,000,000	18,000,000
11. Riverside Mills Corporation	9-15-52	Pasig, Rizal	76,612	21,283,500	1,145	42,060,000	42,060,000
12. Synthetic Textile (Rayon)	7-12-54	Mandaluyong, Rizal	15,248	4,751,290	396	15,145,385	16,012,500
13. United Textile Mills	9-10-55	Marikina, Rizal	30,480	10,560,000	610	27,145,000	43,200,000
14. Universal Textile Mills	1- 8-54	Marikina, Rizal	59,384	17,500,000	1,684	60,000,000	60,000,000
15. Daratex	6- 4-59	Daliao, Davao	6,000	1,500,000	168	4,500,000	5,000,000
16. Ramitex	1-18-56	Valenzuela, Bulacan	6,480	2,000,000	200	6,000,000	6,000,000
17. Superior Textile Mills	8- 4-56	Talaibon, Ibaan, Batangas	13,368	11,976,000	499	22,353,000	22,500,000
T O T A L			599,264	175,095,493	14,377	511,935,828	566,019,540

Table I (continued)

LOCATION AND CAPACITY OF ALL TEXTILE MILLS AS OF DECEMBER 1965

Name of Firms	Date Of Estab-lishment	Location	ESTIMATED ANNUAL PLANT CAPACITY SPINNING No. of Spin-dles	SPINNING Lbs. Yarns	WEAVING No. Of Looms	WEAVING Yards Gray Cloth	FINISHING Yards Finished Fabrics
B. Spinning and Weaving							
1. Adamson & Adamson	5-17-54	Santolan Road, Q.C.	204	36,000	110	2,640,000	
2. Manila Bay Spinning Mills (with knitting mills)	8- 2-56	Canonigo St., Paco, Mla.	13,656	3,596,000	9	216,000	
3. NDC(Ilocos Mills)		Narvacan, Ilocos Sur	18,000	3,170,000	300	7,200,000	
4. Paramount Textile Mills	10-15-55	Bo. Talon, Las Pinas, Rizal	10,080	3,629,000	150	6,750,000	
5. Filtex Int'l (Yupangco)	10-19-62	Makati, Rizal	21,240	4,950,000	502	9,000,000	
TOTAL			63,180	15,381,100	1,071	25,806,000	
C. Spinning (with knitting and/or thread mills)							
1. Allied Thread Manufacturing	9- 3-53	Isaac Peral, Paco, Mla.		1,080,000			
2. Atlas Textile Mills	3- 6-52	San Francisco del Monte, Quezon City		1,760,000			
3. Continental Thread Mills	6-10-60	Mandaluyong, Rizal		1,900,000			
4. Pacific Spinning Mills	n.a.	A. Bonifacio, Q.C.		2,530,000			
5. Universal Hosiery Mills	n.a.	Tanque St., Paco, Mla.		915,000			
TOTAL				8,185,000			

Table I (continued

LOCATION AND CAPACITY OF ALL TEXTILE MILLS AS OF DECEMBER 1965

			ESTIMATED ANNUAL PLANT CAPACITY				
			SPINNING		WEAVING		FINISHING
Name of Firms	Date of establishment	Location	No. of Spindles	Lbs. Yarns	No. of Looms	Yards Gray Cloth	Yards Finished Fabrics
D. Weaving and Finishing							
1. Metropolitan Textiles	6- 5-54	Polo, Bulacan			84	2,016,000	6,000,000
2. Sarangaya, Industires, Inc.	12-11-62	n.a.			17	2,700,000	3,500,000
TOTAL					101	4,716,000	9,500,000
GRAND TOTAL				198,661,593		541,737,828	575,519,540

*Now Roxas-Kalaw Textiles

Source: Unpublished material in the files of the Presidential Economic Staff.

PART II

TRENDS IN PRODUCTION

Yarns are the end-product of the spinning process (and when woven they emerge as gray or greige cloth). There has been a definite increase in the yearly production of cotton yarn except for the year 1963. The yearly increase in the domestic production of cotton yarn during the period 1956-62 may be attributed to the generally favorable conditions then existing in the textile industry. The upward trend in the production was interrupted in 1963 when production fell by .08 percent (see Table 3). At first blush, the cause for the drop in production may be attributed entirely to the decontrol measures instituted in 1962 which may not have affected the textile companies until the following year. However, a study of the textile industry during the years 1961-65, conducted by the Development Bank of the Philippines, showed that the total production of yarn (which includes cotton, rayon, dacron, etc.) for the year 1963 increased by 10 percent over that of 1962 (see Table 2 below). The decrease in production of cotton yarn for the year 1963 may have been a result of the increase in the production of some other type of yarn (e. g., rayon) and not a result of decontrol alone. The upward trend in production was resumed in 1964.

Table 2

Total Yarn Production of All Materials (1961-1965)

Year	Quantity (thousand lbs.)	Percent Increase or (Decrease)
1961	73,038	-
1962	94,324	29
1963	104,683	11
1964	92,548	(11)
1965	89,655	(3)

Source: Unpublished report on a study on the textile industry conducted by the Development Bank of the Philippines.

Cotton Knitted Fabrics

Knitted fabrics which are produced by textile mills equipped with knitting mills, are the raw materials utilized in the manufacture of knitted sport shirts, knitted vests, or knitted undershirts, children's knitted wear and other knitted wear for men and women. Sweaters, socks and hosiery are excluded from this classification.

The erratic movement in the production of cotton knitted fabrics may have been caused by the carry-over of inventories. The situation of the textile industry for the years 1964 and 1965 was rather a bleak one and there was a decrease in the production of all types of fabrics, including cotton knitted fabrics.

Cotton Fabrics

The term "cotton fabrics" includes cotton gray sheets, which are gray

Table 3

Cotton Yarn Production

Year	Quantity (Thousand Kilos)	Value (Thousand Pesos)	Average Price (FOB factory) Per Kilo
1955	n. a.	n.a.	n.a.
1956	1,849	7,755	₱ 4.19
1957	4,160	16,484	3.96
1958	6,295	22,794	3.62
1959	7,305	25,090	3.43
1960	8,212	28,586	3.48
1961	9,608	37,779	3.93
1962	9,757	41,625	4.27
1963	8,905	n.a.	n.a.
1964	13,943	n.a.	n.a.
1965	16,478	n.a.	n.a.

Source:

Republic of the Philippines, Bureau of the Census and Statistics, Industry Division.

Table 4

Supply of Cotton Yarn

Year	Importation (Kilos)	Production (Kilos)	Apparent Total Supply * (1) + (2)
	(1)	(2)	(3)
1955	4,815,376	n.a.	-
1956	5,702,444	1,849,000	7,551,444
1957	1,696,875	4,160,000	5,856,875
1958	4,316,124	6,295,000	10,611,124
1959	4,358,058	7,305,000	11,663,058
1960	2,713,767	8,212,000	10,925,767
1961	606,969	9,608,000	10,214,969
1962	12,339	9,757,000	9,769,339
1963	6,426	8,905,000	8,911,426
1964	3,558	13,943,000	13,946,558
1965	5,477	16,478,000	16,483,477

*No data on inventories

Sources:

Column (1) Republic of the Philippines, Bureau of the Census and Statistics, Foreign Trade Statistics.

Column (2) Table 3.

Column (3) the sum of Columns (1) and (2).

Table 5

Local Production of Cotton Thread

Year	Quantity (Thousand Lbs.)	Value (Thousand Pesos)	Average Price (FOB factory) Per Lb.
1955	n.a.	n.a.	n.a.
1956	n.a.	n.a.	n.a.
1957	2,479	8,309	₱ 3.35
1958	2,022	10,219	5.05
1959	3,676	13,513	3.68
1960	3,918	14,258	3.64
1961	2,794	15,368	3.50
1962	3,917	17,167	4.38
1963	n.a.	n.a.	n.a.
1964	n.a.	n.a.	n.a.
1965	n.a.	n.a.	n.a.

Source:

Bureau of the Census and Statistics, Industry Division.

Table 6

Cotton Thread Supply

Year	Importation (Lbs.)	Production (Lbs.)	Apparent Total Supply* (Lbs.) (1) + (2)
	(1)	(2)	(3)
1955	incomplete data	n.a.	-
1956	1,360,251	n.a.	-
1957	1,370,395	2,479,000	3,849,395
1958	795,150	2,022,000	2,817,150
1959	1,186,387	3,676,000	4,862,387
1960	816,959	3,918,000	4,734,959
1961	61,976	2,794,000	2,855,976
1962	55,671	3,917,000	3,972,671
1963	29,865	n.a.	-
1964	32,945	n.a.	-
1965	26,660	n.a.	-

* No data on inventories

Sources:

Column (1) Bureau of the Census and Statistics, Foreign Trade Statistics.

Column (2) Table 5.

Column (3) is the sum of Columns (1) and (2).

Table 7

Local Production of Cotton Knitted Fabrics

Year	Production (Thousand Yards)	Value (Thousand Pesos)	Average Price (FOB factory) (per Yard)
1955	n.a.	n.a.	n.a.
1956	3,721	23,152	6.22
1957	4,358	27,703	6.31
1958	4,825	28,723	5.95
1959	4,507	27,502	6.10
1960	5,062	31,151	6.15
1961	4,519	29,702	6.57
1962	5,094	37,255	7.31
1963	4,921	38,284	7.77
1964	3,886	27,210	7.00
1965	3,451	24,506	7.10

Source:

Bureau of the Census and Statistics, Industry Division.

Table 8

Cotton Knitted Fabrics Supply

Year	Importation (Yds.) (1)	Production (Yds.) (2)	Apparent Total Supply* (Yds.) (1) + (2) (3)
1955	n.a.	n.a.	n.a.
1956	83,936	3,721,000	3,560,000
1957	28,616	4,358,000	4,386,616
1958	40,296	4,825,000	4,865,296
1959	16,640	4,507,000	4,523,640
1960	34,840	5,062,000	5,096,840
1961	21,440	4,519,000	4,540,440
1962	19,837	5,094,000	5,113,837
1963	830,480	4,921,000	5,751,480
1964	350,800	3,886,000	4,236,800
1965	64,720	3,451,000	3,518,720

*No data on inventories

Sources:

Column (1) Bureau of the Census and Statistics, Foreign Trade Statistics.

Column (2) Table 7.

Column (3) is the sum of Columns (1) and (2).

in appearance and unprinted, and cotton finished fabrics, which have already been printed, dyed and mercerized.

Although local production of cotton fabrics began to decrease starting in 1964, it still provides approximately 98 percent of the total supply of cotton fabrics. The total supply of cotton fabrics continues to decrease, however, and this may be explained by a definite upward trend in the practice of blending natural fibers (e. g., cotton) with synthetic or man-made fibers (e. g., polyester) instead of using cotton alone in the production of textile fabrics. Manufacturers prefer to use man-made and synthetic fibers because they are more versatile in achieving a variety of effects (For example, to achieve a silky finish one uses acetate, etc.). An increasing number of consumers also prefer man-made fabrics because of their wash-and-wear qualities. On the other hand, there are certain kinds of synthetic fiber (e. g., ban-lon) which, unlike cotton fabrics, need extra-care in washing because furious rubbing or wringing may destroy the fabric.

The machines used in the manufacture of synthetic and man-made fabrics are very different from the machines used in the production of cotton fabrics, and only the big textile mills in the Philippines (U-tex, Gentex, Eastern) have a few, special machines for the manufacture of synthetic and man-made fabrics. Only one textile mill, Synthetic Textile Mill, located in Mandaluyong, Rizal, was established specifically for the manufacture of synthetic fabrics.

Table 9

Local Production of Cotton Fabrics[a]

Year	Quantity (Thousand Yds)	Value (Thousand Pesos)	Average Price (FOB factory) (Per Yard)
1955	n.a.	n.a.	n.a.
1956	32,352	24,352	₱ 0.75
1957	72,248	49,891	.69
1958	102,661	67,175	.65
1959	93,721	68,327	.73
1960	136,282	97,621	.72
1961	149,343	114,193	.76
1962	181,063	159,987	.88
1963	196,363	180,604	.91
1964	173,085	162,700	.94
1965	162,708	156,200	.96

[a] Including blends with cotton as the predominant component.

Source:

Bureau of the Census and Statistics, Industry Division.

Table 10

Cotton Fabrics Supply

Year	Importation (Yds.)	Production (Yds.)	Apparent Total Supply* (Yds.) (1) + (2)
	(1)	(2)	(3)
1955	114,373,469	n.a.	-
1956	122,978,085	32,352,000	155,330,085
1957	184,505,578	72,248,000	256,753,578
1958	111,120,902	102,661,000	213,781,902
1959	68,639,921	93,721,000	162,360,921
1960	56,609,370	136,282,000	192,891,370
1961	21,507,424	149,343,000	170,850,424
1962	29,018,825	181,063,000	210,081,825
1963	4,873,235	196,363,000	201,236,235
1964	2,256,368	173,085,000	175,341,368
1965	1,074,688	162,708,000	163,782,688

*No data on inventories

Sources:

Column (1) Bureau of the Census and Statistics, Foreign Trade Statistics.

Column (2) Table 9

Column (3) The sum of Columns (1) and (2).

Other manufacturers of cotton fabrics, however, have began to expand their operations to include the production of synthetic cloth or at least to produce blends of cotton with man-made fibers. A good example would be Litton Mills located at Pasig, Rizal. Litton has, at present, some floor spaces within its production complex which have been earmarked for synthetic fabric production.

Raw Materials

Most of the raw materials used (approximately 95 percent as of 1967) by the textile mills in the Philippines are imported. These imports consist of raw cotton, dyestuffs, and chemicals such as caustic soda, soda ash and ascetic acid.

The major raw material, raw cotton, was grown in the Philippines at one time, but, it did not enjoy priority under the Spanish authorities who preferred that the natives grow tobacco instead.[33] Nonetheless, it is reported that as late as the 19th century there was large scale growing of the highest quality cotton.[34] Such cotton cultivation declined, however, and by the American period the cottage textile industry was dependent upon cotton imports.[35]

[33]Lawrence Davis Stifel, The Textile Industry--A Case Study of Industrial Development in the Philippines (New York: Cornell University, 1963), p. 23.

[34]Eufronio Alip, Political and Cultural History of the Philippines, cited by Stifel, op. cit., p. 45.

[35]Stifel, op. cit., p. 46.

Government attempts to develop cotton growing in the Philippines have not been successful. Before World War II, the National Land Settlement Administration under the management of the late General Paulino Santos started a program of intensive cotton planting in the Koronadal Valley, Mindanao, but it had to be discontinued because of the war. The Japanese, too, tried large scale production of cotton and sought to bring 100,000 hectares under cultivation. The venture was highly subsidized and seeds, fertilizers, farm equipment, and technical service were provided by Japanese cotton companies. The attempt failed, however, probably because of the unsuitability of cotton to the region chosen (Central Luzon) and because of insect damage.[36] At present, domestic cotton growing (in the Ilocos region) is negligible, amounting to about 500 bales per year which is enough to keep existing mills in operation for only 12 hours.[37]

Since 1962 there has been a decline in the importation of raw cotton coupled with an increase in the importation of artificial and synthetic fibers (see Tables 11 and 12). The increase in the importation of man-made and synthetic fibers can be explained by the versatility of such fibers, mentioned earlier, and the growing preference of local manufacturers for blending them with cotton fibers. Such blending enables manufacturers to secure properties which could not be

[36] Industrial Development Branch, Industrial Philippines: A Cross Section (Manila: Philippine Council for U. S. Aid, 1953), p. 13.

[37] Program Implementation Agency, The Textile Industry: Demand and Supply Analyses, 1963, p. 8.

Table 11

Raw Cotton Importation

Year	Quantity (Lbs.) (1)	Wholesale Price (₱ Per Lb.) (2)	Value (Peso) (1) x (2) (3)
1955	5,096,430	.8109	4,312,695
1956	10,602,970	₱.8117	8,606,431
1957	18,933,541	.6571	12,441,230
1958	27,829,690	.6420	17,866,661
1959	50,950,731	.66085	33,670,791
1960	65,620,289	.8049	52,817,771
1961	71,219,218	.7684	54,724,847
1962	89,201 119	1.08	96,337,209
1963	82,815,566	1.33	110,144,703
1964	64,811,523	1.33	86,199,326
1965	56,811,517	1.33	75,811,517

Source:

Column (1) Bureau of the Census and Statistics, Foreign Trade Statistics, Kilo figures converted to Lbs. by the factor 2.2.

Column (2) The Central Bank, Price Statistics Division.

Column (3) The sum of Columns (1) and (2).

Table 12

Importation of Artificial and Synthetic Fibers

Year	QUANTITY Kilos	Pounds*	Value (₱)
1961	1,270,667	2,795,467	1,884,628
1962	8,020,552	17,645,214	12,941,350
1963	9,425,087	20,735,191	18,098,112
1964	10,426,517	22,938.337	22,095,481
1965	10,100,858	22,221,888	22,595,517

* Calculated by multiplying the kilos by 2.2.

Source:

Bureau of the Census and Statistics, Foreign Trade Statistics.

obtained with the use of one kind of fiber alone. For example, cotton fabrics are relatively hard to the touch but if blended with polyester (a man-made fiber), they acquire a softer touch.

Chemicals

In the past few years, there has been an increase in the domestic production of chemicals (ascetic acid, caustic soda) used by the textile industry and this has been reflected in decreasing chemical imports (see Table 13). The total volume of local production has not been very high, however, and the bulk of chemicals used by the industry are still imported. According to rough estimates as of 1964, each yard of locally produced textile contains not more than ₱0.039 of local materials out of a total value of materials of ₱1.00 per yard.[38] Table 4 shows the level of such importations during the period 1955-65.

[38]Advertising and Marketing Associates, Inc., op. cit., p. 26.

Table 13

Raw Materials Importation

	CAUSTIC SODA		ASCETIC ACID	
Year	Quantity (Kilos)	FOB Value (₱)	Quantity (Kilos)	FOB Value (₱)
1955	9,556,578	1,274,668	624,677	230,420
1956	13,323,464	1,826,550	362,608	137,112
1957	13,100,909	1,947,146	707,071	301,560
1958	13,060,713	1,820,691	795,136	375,407
1959	15,387,260	2,157,986	1,168,218	439,613
1960	18,393,771	2,334,363	588,640	254,017
1961	19,858,846	1,938,829	n.a.	n.a.
1962	13,493,584	2,427,568	n.a.	n.a.
1963	21,008,907	4,993,854	841,952	587,047
1964	16,369,366	5,026,262	1,086,220	819,670
1965	9,106,727	2,779,662	1,364,513	1,061,056

Source:

Bureau of the Census and Statistics, Foreign Trade Statistics.

Table 13 (continued)

Raw Materials Importation

Year	COAL TAR DYES Quantity (Kilos)	COAL TAR DYES FOB Value (₱)	INDIGO NATURAL Quantity (Kilos)	INDIGO NATURAL FOB Value (₱)	Other N.E.S. (Including artificial color lakes; other dyes not prepared for final use.) Quantity (Kilos)	Other N.E.S. FOB Value (₱)
1955	n.a.	n.a.	1,831	1,736	340,738	1,706,024
1956	493,735	1,617,996	5,078	16,814	432,043	1,358.518
1957	823,772	4,240,624	12,809	54,388	973,907	2,268,012
1958	639,542	3,076,670	26,410	74,916	803,293	1,938.475
1959	631,485	3,147,885	4,326	40,219	1,129,944	2,624,030
1960	1,066,122	4,885,096	46,031	83,394	830,957	2,086,788
1961	600,790	3,652,515	4,146	22,803	727,015	2,815,884
1962	714,030	8,010,733	832	5,417	547,457	2,871,872
1963	887,078	9,426,384	411	7,805	285,444	2,338,347
1964	*		*		588,432	4,890,297
1965	427,070	6,252,978	456	9,415	809,325	6,548,086

*Coal tar dyestuffs and Indigo natural importation for the year 1964 was 1,131,769 kilos and the FOB value was ₱11,926.

Source: Bureau of the Census and Statistics, Foreign Trade Statistics.

PART III

DEMAND, SUPPLY, AND CAPACITY UTILIZATION

During the last few years a significant development has taken place which is of importance to the textile industry but has not received sufficient analytical attention. It might best be referred to as a change in the buying public's taste. The buying public, in the past few years, has shown an increasing preference for fabrics made either entirely of artificial fiber or of artificial fiber blended with cotton. The significance of this apparent trend is the bearing it has on capacity utilization of the Philippine textile industry which, with one exception, was not adequately equipped for the production of synthetic fabrics. Some firms can and do produce blends of man-made fibers (including rayon) with cotton. In fact, the production of blends has become a major product of the textile industry in the Philippines.[39]

Demand

Because of an absence of commonly agreed-upon data, estimates of demand for textiles in the Philippines made by different research groups do not entirely agree. Particularly scarce are direct estimates of consumption. The

[39]There are no reliable data on the breakdown of total production into the different categories of fabrics. One can make educated guesses based on the supply of various fibers, however, or by making assumptions concerning the percentages of the different fibers in the blends. In 1967 the Presidential Economic Staff made such estimates and concluded that, although hardly any blends were produced prior to 1962, the production of such blends outstripped the production of pure cotton fabrics every year since 1962 with the sole exception of 1963.

latest direct estimates available are those gathered during the 1961 Philippine Statistical Survey of Households, conducted in April 1962. However, the results of that survey are not directly applicable to our purposes here. It does not contain estimates of per capita consumption by yards, but, instead, total spending on clothing (as against woven fabrics which are the products of the textile industry under study) by family units.[40]

We will refer here to two estimates of demand done by two different research groups. Their results differ because they use slightly different population estimates and they vary in the assumed annual yardage of per-capita consumption. Therfirst study is by Advertising and Marketing Associates (1964) referred to earlier in this paper. Basing their estimates on an assumed constant annual consumption of 12.6 yards per capita, they came up with the results presented in Table 14 below. In spite of some doubts concerning their basic assumptions, we decided to include their results both for comparison purposes and because they contain projections to 1970. From these projections we can see that, should per capita annual consumption remain constant at 12.6 yards, the existing capacity of the industry (see Table 1) will be sufficient to supply all the demand through

[40]There are other difficulties with the study concerning family size and ages of members, coverage of sample, etc., which need not be entered into here.

Table 14
Estimated National Requirements for Textiles
(1955-1970)

Year	Population[1/] (Thousands)	Estimated and Projected Demand[2/] (Thousand Yards)
1955	22,241	280,237
1956	22,775	286,965
1957	23,322	293,857
1958	24,010	302,526
1959	24,718	311,447
1960	27,791	350,167
1961	28,715	361,809
1962	29,665	373,779
1963	30,644	386,114
1964	31,652	398,815
1965	32,690	411,894
1966	33,761	425,389
1967	34,865	439,299
1968	36,004	453,650
1969	37,179	468,455
1970	38,391	483,727

1/ Population figures for the period 1955-1959 are estimates made by the Inter-Agency Committee on Demography, National Economic Council. Figures for the period 1960-1970 are projections by the Bureau of Census and Statistics.

2/ Projection of demand based on NEC estimate of 12.6 yards per capita.

Source: Advertising and Marketing Associates, A Study of the Philippine Textile Industry, 1964, p. 71

1970.[41] There is, of course, an implicit assumption here that the estimated demand will be for products which the existing capacity in the Philippines is technologically capable of producing. We have seen already that this is not completely true.

The second study is the latest effort by the Presidential Economic Staff (PES): "Textile Industry", September 1967 (in draft). The estimates in this study differ from the above primarily in that the PES study drops the assumption of a constant per capita annual consumption. The PES estimated demand on the basis of gross national expenditures on clothing minus expenditures on knitted fabrics, thereby obtaining the demand for woven fabrics.[42] The results, together with their version of the population figures, are given in Table 15.[43]

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[41]According to the Presidential Economic Staff (PES) study, "Textile Industry" (1967), there are, in addition to the comparatively large-scale firms listed in Table 1, also about 1,000 semi-mechanized and hand-operated looms in the Philippines. The latter are estimated to produce about 24 million yards of fabrics annually. See PES, "Textile Industry," September 1967 (mimeo.),p. 2.

[42]The procedure they followed (which we did not wish to adopt) was as follows: after deducting the estimated aggregate demand for knitted fabrics from aggregate estimated expenditure on clothing they obtained the aggregate value of demand for woven fabrics. This was divided by the population estimates to arrive at the value of per capita expenditures on woven fabrics. This was divided, in turn, by the average price per yard to obtain the per capita consumption measured in yards.

[43]We wish to emphasize that we present Tables 14 and 15 merely as the currently available informed estimates, without making claims about their accuracy. The population figures differ somewhat in the two versions and both do not agree with the 1960 population census which recorded the number of people in the Philippines on February 15, 1960 at 27,087,685. See Republic of the Philippines, Census of the Philippines 1960, Population and Housing, Summary, p. xi.

Table 15

Apparent Demand for Textile
(1958-1966)

Year	Population (Thousands)	Per Capita Consumption	Apparent Demand (Thousand Yards)
1958	25,795	13.1	309,376
1959	26,584	10.9	289,612
1960	27,410	10.5	287,586
1961	28,313	10.2	289,889
1962	29,257	12.6	368,229
1963	30,241	13.9	421,162
1964	31,270	14.6	457,617
1965	32,345	14.9	483,396
1966	33,472	15.8	528,281

Source:

Presidential Economic Staff, "Textile Industry", 1967, (mimeo) p.8.

If the trend of per capita annual consumption from 1962 on, as indicated in Table 15, is valid and will continue in the future, the consumption estimates in Table 14 will have to be revised upward. Even after such revision there seems to be enough capacity domestically to supply such increased local demand, provided that the types of fabrics demanded can be produced with the existing equipment.

Supply

The calculations of supply are based on local production plus imports plus inventories. The figure for total textile supply in Table 16 show the quantities and percentages of supply from current production and from recorded imports (of all types of used clothing, remants, rags and fabrics) excluding inventories.[44] The import figures may not be reliable, however, in view of the widespread belief that official import figures do not reflect the full amounts of actual importations. Because of physical as well as technical smuggling, one can safely expect that actual imports have been substantially larger than the amounts shown in Table 16.[45]

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[44]The figures in Column 3 of Table 16 do not agree with the figures in Table 9 because they include all fabrics, including fabrics made from artificial fibers and blends where the share of artificial fiber is larger than the share of cotton in the blended fabrics.

[45]A recent attempt by the Textile Manufacturers Association of the Philippines (TMAP) to estimate the magnitude of such unrecorded imports may be mentioned here. Their method was to compare the payments on textile imports as recorded by the Central Bank (CB) with figures on the same items derived from the U. S. Embassy in Manila and the Japanese Ministry of International Trade and Industry (MITI)--the U. S. and Japan being the main sources of textile imports. The results are summarized in the following table:
(continued on the following page)

With the notable exception of 1964 and 1965, especially 1965, domestic production of textiles has shown a steady upward trend. During the full-fledged decontrol period (1962-1965), the share of locally produced textiles in total current recorded supply was higher than recorded imports. But this share was on a decreasing trend until 1966. Some sources maintain that, starting in 1962, technical smuggling all but strangled the textile industry and that

[45](continued) Possible Value of Unrecorded Textile Importations
(Thousand U. S. Dollars)

	1965	1966
U. S. Embassy figures	29,202	21,107
CB figures for importations from the U. S.	5,790	11,404
Difference for U. S.	23,412	9,703
MITI figures	36,490	50,293
CB figures for importations from Japan	8,947	16,280
Difference for Japan	27,543	34,013
Total difference for both countries	50,955	43,716

Sources for the table: Adopted from a report on the TMAP estimates in the Economic Monitor, Manila, November 27, 1967.

Original sources: Central Bank of the Philippines; U. S. Exports, Country by Commodity Groupings, FT420; Ministry of International Trade and Industry, Japan

Moreover, the TMAP claims that in addition to these "invisible payments" for the importations of textiles, one should add the smuggling through misdeclarations and the direct entry of textile cargoes which are claimed to be of even larger quantities.

Table 16

Total Textile Supply from Current Sources
(Excluding Inventories)
1958-66 (In Thousand Yards)

Year	Total Recorded Textile Imports (New and Used)	%	Locally Produced Textiles (New)	%	Total Textile Supply Excluding Inventories (New and Used)	%
1958	198,314	62.7[a]	118,067	37.3[a]	316,380	100
1959	165,624	57.7	121,297	42.3	286,921	100
1960	170,445	55.5	136,483	44.5	306,929	100
1961	104,624	50.3	163,491	49.7	268,115	100
1962	176,933	46.7	200,598	53.1	377,531	100
1963	246,517	47.1	276,678	52.9	523,195	100
1964	262,423	49.0	249,200	51.0	511,623	100
1965	241,846	52.8	216,396	47.2	458,242	100
1966	98,511	26.2	277,245	73.8	375,756	100

a/Correction of a mistake in the source.

Source: Presidential Economic Staff, "Textile Industry", September 1967, pp. 4 and 5. Original source for importations was the Central Bank. The conversion ratio applied was 1 kilo = 8 yards.

the market was glutted with cheap imported fabrics. Used clothing was underdeclared;[46] and remnants, rags, and fabrics were undervalued. Textiles were smuggled in the guise of embroidery materials, which qualified them to be imported tax-exempt by virtue of R. A. 3137. Instead of being re-exported within two years as the law specifies, it is claimed that much of these duty-free imported fabrics were channeled to the black market in competition with local products. As a result, better-quality imported fabrics were available at a price lower than locally produced textiles, local manufacturers suffered, and the local production of textiles decreased in 1965.

One development which facilitated the importation of foreign products was the abolition of exchange controls and licensing. A large volume of imported fabrics flooded the market, reducing the demand for local textiles. The decontrol program also seems to have raised raw material prices more than the prices of imported finished goods, especially the smuggled goods. Since most of the raw materials had to be imported, the change in the exchange rate caused a large increase in domestic production costs.

The composition of textile importations shifted from new textile fabrics and remnants to used clothing during the period 1961-65. This is demonstrated both in the study of the textile industry conducted by the Economic

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[46]Edward Kiunisala, "Life or Death for Industry," Free Press (August 20, 1966), p. 5.

Development Foundation (EDF), and the PES study.[47] Importation of fabrics and remnants declined substantially while those of used clothing showed a huge increase. Used clothing includes a wide variety of colors and is generally of good quality. Because it is ready made, simple alterations can be made at little or no expense. Hence its low cost and popularity among the low-income groups. Remnants, on the other hand, are attractive to those who are "stateside-quality-conscious" yet have limited means. Remnants cost less than the regular imported textile fabrics and are of comparatively better quality than locally made fabrics.

As indicated earlier, the supply figures should also include inventories. In Table 17 (taken from the PES) supply (including inventories) and demand data mentioned so far is consolidated. In spite of some reservations about the data (including the absence of data on unrecorded imports), we present Table 17 as the best estimates available. The most interesting item is the indication of large inventories during 1963-65 and their disappearance

[47]The EDF study uses Bureau of Census data on importations, while the PES uses the Central Bank's data. Since the quantities reported by the two sources are vastly different, we do not quote them here in order to avoid the need to go into the details of the reconciliation. For our purposes, it is sufficient to report that in spite of such differences the series in both sources clearly confirm the trends in the composition of imports referred to in our text above.

Table 17

Supply and Demand Picture, 1958-66

Year	Supply[1/] (Thousand Yds.)	Demand[2/] (Thousand Yds.)	Year End Inventory[3/] (Thousand Yds.)
1958	316,380	309,376	7,004
1959	293,925	289,612	4,313
1960	311,242	287,586	23,656
1961	291,771	289,889	1,882
1962	379,413	368,229	11,184
1963	534,349	421,162	113,187
1964	624,810	457,617	167,193
1965	625,435	483,396	142,039
1966	517,795	528,281	none

[1/] Composed of local production, importation, and year-end inventory of the preceding year.

[2/] From Table 15.

[3/] These are simply "supply" estimates minus "demand" estimates and not independent estimates of inventories

Source: Presidential Economic Staff, Textile Industry, 1967, p. 9.

following the strong anti-smuggling campaign in 1966.[48]

Credit Conditions and Capacity Utilization

In addition to such difficulties as the high cost of imported materials and the competition from smuggled goods, the textile industry suffered from yet another development related to decontrol, namely, tight credit. The average interest on loans as a percentage of net sales increased from 3.6 percent in 1960, to 5.2 percent in 1962, to 8.7 percent in 1964. Outstanding obligations could not be met and continued at high levels while credit granted the industry went down (see Table 18).[49] This tended to reduce production because of the shortage of working capital. Textile firms unable to obtain long term loans were forced to secure short-term loans instead, and, as a consequence, their operating capital was reduced because of early payment and high interest requirements. Textile mills were also forced to finance a larger amount of accounts receivable (e. g., through credit to customers), because of the low liquidity of the public. Manufacturers had to extend credit to wholesalers up

[48]We would like to voice a word of warning here. The inventory figures in Table 17 were not derived independently. Rather they were derived simply by deduction of the Demand Column from the "Supply" Column. This may cast doubt on the accuracy of the inventory figures. However, we should hasten to add that the company data on the firms in our sample do show increases in inventories during 1964 and 1965.

[49]Esdras Martinez, "Problems of the Textile Industry," Economic Research Journal, XIII (September 1966), 123.

Table 18

Total Credits Granted the Textile Industry by Other Banks[a]
(Thousand Pesos)

Year	Credits (1)	Outstanding Obligations (2)
1958	120,018	71,385
1959	121,475	87,026
1960	174,210	100,956
1961	255,458	128,940
1962	316,085	162,440
1963	329,696	183,718
1964	292,340	199,085
1965	257,644	186,818

[a] "Other Banks" consist of commercial banks, savings banks (excluding the Postal Savings Bank) and rural banks.

Source: Central Bank of the Philippines. Statistical Bulletin, XVI, (December 1966), pp. 62 and 87.

to 120 days or be left with a big stock of unsold fabrics. Tight credit slowed market velocity; that is, people did not buy as much clothing materials as they had in the past. Consequently, manufacturers could not sell as much of their products as they could manufacture[50] and were saddled with large inventories which further reduced their working capital.

It should be emphasized again that the difficulties faced by the textile industry were not merely a result of the changing environment and government policies. In a real sense the new environment only served to expose weaknesses and "softness" developed during the period of extreme protection. In connection with financing, not only was the industry pampered by a series of tax exemption laws,[51] but it enjoyed a substantial financial support from the government owned Development Bank of the Philippines (DBP). The total financial support from DBP alone as of April 30, 1967 amounted to ₱238 million. The formal breakdown was as follows:[52]

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[50]Gloria Carandang, "Refinancing of the Textile Industry"(unpublished thesis, College of Business Administration, University of the Philippines, 1965), p. 19.

[51]See Appendix C for a list of the important laws and regulations supporting the textile industry.

[52]From Program Implementation Agency, "Textile Industry," September 1967 (mimeo), p. 11.

Outstanding straight loans (principal only)	₱ 120,047,864
Deferred payment loan	₱ 57,813,095
Guarantees	₱ 23,879,420
Preferred convertible shares	₱ 36,000,000
Total	₱ 237,740,379

The amount of preferred shares is actually larger than above because ₱ 73 million worth of loans extended to six firms were also converted to preferred shares under the Refinancing Program. By such conversion of loans into shares the DBP freed these companies from the interest burden.

In spite of the DBP financial support, which was extended in one form or another to practically all textile mills, and in spite of all the other assistance, the textile industry was in very bad straits up to 1966. During that year sales, total production, and capacity utilization showed an uptrend.

The trends in the available figures on capacity utilization confirm some of our contentions although not fully. For figures on capacity utilization in the textile industry as a whole, we must rely on the data compiled by the PES, which is based on their survey of the textile firms. These data are reproduced in Table 19. What is somewhat surprising is the comparatively high capacity utilization in 1962 and 1963. During the latter year, not only was decontrol already in full implementation, but there was also a large increase in installed capacity that year. One explanation is that there was some miscalculation on the part of the producers, a possibility confirmed by

Table 19

Total Rated Capacity, Production, and Capacity Utilization

Year	Spinning Mills			Weaving Mills			Finishing Mills		
	Rated Capacity	Production	Capacity Utilization	Rated Capacity	Production	Capacity Utilization	Rated Capacity	Production	Capacity Utilization
	(Million Pounds)		(Percent)	(Million Yards)		(Percent)	(Million Yards)		(Percent)
1958	61	31	50	227	86	38	246	118	48
1959	76	49	64	300	146	49	318	121	38
1960	86	65	76	303	171	56	318	136	43
1961	94	84	90	316	191	60	345	163	47
1962	96	84	87	331	209	63	345	201	58
1963	130	n.a.	-	378	n.a.	-	465	277	60
1964	168	89	53	437	192	44	527	249	47
1965	197	91	46	506	208	41	541	216	40
1966	197	108	55	531	244	46	554	277	50

Source: Presidential Economic Staff, "Textile Industry," September 1967 (mimeo.) p.3.

the very large increase in inventories that year.[53] The decline in capacity utilization during 1964 and 1965 is of course quite in line with our analysis.[54]

One of the interesting developments during the decontrol period was the continued expansion of installed capacity, which took place in spite of all the complaints voiced over decontrol by the textile people. We will have more to say about this apparently contradictory phenomenon at a later stage in our study. Here it is sufficient to mention the following reasons: Some companies were committed to the purchase of equipment either before or a little after the onset of decontrol and received the equipment with considerable delay (in addition to a further delay because of the time needed for construction and installation). One kind of investment which usually continues even in bad times is expansion designed to correct imbalances between the capacities of different stages in the production process within the plant. Another important

[53]See Table 17. Data on production are in Table 15 and data on rated capacity in Table 19.

[54]Some explanation is required, however, for the comparatively low capacity utilization during the years 1958-61. Barring a mistake in data, the following are explanations suggested by PES personnel: The low capacity utilization in finishing was ascribed to the nature of the demand in those years which was mostly for gray fabrics which are the products of weaving without finishing. The comparatively low capacity utilization in weaving was explained thus: it was more profitable for the producers at the time to import gray cloth rather than import thread and then weave it into cloth. The comparatively high capacity utilization in the spinning mills during 1960-62 was explained by the demand of the knitting mills.

factor in the increased capacity was the need to meet the consumers' changing taste in favor of synthetic and blended fabrics which required new equipment.

The above arguments notwithstanding, one is struck by the persistence of low capacity utilization in good times as well as bad times. There are, of course, the well known ambiguities concerning the correct definition of capacity. The PES data on rated capacity appear to have been based on the standard engineering capabilities which assume 300 working days a year, 24 hours a day. The number of shifts actually employed varied between periods. When a textile factory operates on less than three shifts we may legitimately consider it an indication of under-utilization of plant and equipment. Since much of the equipment is comparatively new (10 years is the vintage of the oldest machines while the estimated life of such equipment is 15 to 20 years) the underutilization is an indication of bad planning on the part of the industry. Therefore, while some of the grievances of the industry are legitimate, the textile people are not without blame.

Distribution

One of the difficulties of the industry is that the textile millers have not developed effective sales and distribution systems. They appear often to be at the mercy of wholesalers and distributors. There are eight wholesaler-distributors who practically control the textile market in the Philippines.

Some writers say that their number is restricted to six large distributors.[55] One manufacturer estimated that three distributors account for the sales of almost 200 million yards a year.

One indication that millers are dependent distributors is the reported financing by the latter of production operations of mills with short working capital. Such financing gives the distributors leverage concerning the conditions under which they will acquire the fabrics from the millers. In an interview with an official of the Textile Mills Association of the Philippines, we learned of a common practice of overpricing (or undercharging) in invoices of sales of textiles to wholesalers, thereby helping them to avoid paying taxes (e. g., recording ₱ 0.90 per yard while the miller gets in fact only ₱ 0.85 per yard). Such practices cut into the markups of the millers. PIA reported that the profits in the textile industry were largely realized by the marketing end.[56]

One of the corollaries of the dependence of the mills on the distributors is the absence of known price agreements among textile manufacturers in the Philippines. Nor is there any single mill (or a small group) which

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[55]Economic Development Foundation, The Textile Industry, 1965, p. 55.

[56]Program Implementation Agency (PIA), A Status Report of the Textile Industry in the Philippines, July 1965, p. 15.

may be said to dominate the industry. The millers do have an association, however, and a vocal and well-heeled one at that. The main activity of the Association is to secure favorable government policies. Its main focus during the last few years has been on its attempts to curtail importations of competing products, especially tax-exempt cloth for the embroidery establishments. Substantial sums of advertising money were spent in support of the government anti-smuggling drive. This drive had some success and, together with the passage of R. A. 4653 which banned the importation of used clothing and rags, it brought about a degree of recovery in 1966 and 1967.

These tribulations were naturally reflected in the financial statements of the textile mills. Table 20 presents a consolidated picture for the period 1962-66.

The recovery during 1966 confirms many of the arguments voiced above. However, some difficulties persist and the future of the industry without continued government support is still uncertain. The correction of the technological difficulties in shifting to new products, the high under-utilization of capacity, and the defective marketing system will require quite substantial effort.

Table 20

Summary Consolidated Statement of the
Financial Structure of the Textile Industry, 1962-66
(In Million Pesos)

	1962[a]	1963[a]	1964[a]	1965[a]	1966[b]
Total Assets	₱538	₱258	₱599	₱635	₱700
Net Sales	219	256	225	219	277
Cost of Sales	182	217	195	194	240
Operating and Other Expenses	33	38	35	35	38
Total Cost and Expenses	215	255	230	229	278
Net Income (Loss)	₱ 4	₱ 1	(₱ 5)	(₱ 10)	(₱ 1)

[a] Based on the data of 15 integrated firms which comprise about 93 percent of the industry's capacity.

[b] Estimated from the gross sales of 15 integrated firms.

Source: Presidential Economic Staff, "Textile Industry" 1967, p. 10.

APPENDIX A

The Manufacturing Process in the Textile Industry

The manufacture of finished fabrics from raw cotton involves three major operations, namely: spinning of the yarn, weaving of the unfinished fabric which is known as cotton gray goods, and finishing of the gray cloth into bleached, dyed, and printed fabrics.

SPINNING--The raw material (raw cotton) enters the mill in bales. In the opening process, the raw material is fed into bale openers which break up the high density bales into smaller pieces. The bale openers then deposit the pieces onto a conveyor belt which transports them to the blowroom. In the blowroom, the material is further opened and blended and emerges in the form of a roll of thick flat sheeting called a lap. The laps are then fed into carding engines where the material is cleaned further, the fibers are paralled and the laps are converted into a coarse rope-like form called a sliver. The sliver is fed into drawframes which further draw the fibers parallel to one another and produce a sliver more consistent with respect to weight per yard. In instances where higher quality yarns are required, after the first drawing, the slivers are fed into lap winders and combers and then back to the second drawing process. The sliver is then drawn further into the finer strands called roving. The roving process further reduces the sliver to the proper size for spinning. The finished roving is then conveyed

to the spinning frame where it is converted into yarns. Spinning consists in the reduction of the strand by rolls similar to those used in roving, and then twisting the strand to give added strength to the yarn.[1] It is at this stage that thread is obtained. Thread is produced by tightly twisting several yarns together in order to produce strength for sewing. Threads then undergo a finishing process which includes gassing, mercerization, bleaching, dyeing, or waxing. Gassing, which is a singeing process, removes superfluous hairy fibers or surface fuzz. Mercerization consists of a treatment of strong caustic soda applied while the thread is subjected to great tension, giving the resulting product a gloss. Inasmuch as the thread has a gray appearance before being finished, it will be bleached if it is to be offered in white or other colors.[2]

Yarns which are not to be made into thread but woven into finished fabrics are now ready for the second process which is weaving.

WEAVING--The warp yarns, which are the longitudinal yarns in the woven gray cloth, are wound in parallel lines on a single beam. Warping is interrupted when the warp yarns break, and the operation is resumed after the broken yarns have been repaired. The breaks in warping are caused by faulty winding or spooling. For this reason, it is necessary that care be

[1]The above description of the spinning process is based on information furnished by the Economic Development Foundation.

[2]Apparel Institute Inc., "So You Want to Know About Thread," (Kogos International Corporation, New York, 1964), p. 8.

exercised in spooling the warp yarns. After warping, the yarns are sized to give added strength and firmness to the warp and to minimize breaking of the warp yarns during weaving. This sizing of the warp yarns is known as slashing. It consists of passing the warp yarns from several warp beams over a roller into the sizing solution, pressing of the yarn between sets of rollers to remove the excess moisture, drying the yarns in drying chambers or cylinders, and, finally, bringing the yarns to the loom beam. After slashing, the yarns are wound on loom beams and brought to the looms by means of a hoist or any convenient conveyor. The filling yarns, or those woven across the warp yarns, are brought directly from the spinning section to the looms. The woven gray cloth is wound in rolls and prepared in the cloth room either for the market or for finishing which is the final major process in the manufacture of finished textile goods.

FINISHING--The gray fabrics are brought to the finishing plant in large rolls and are sewn together to form a long, continuous sheet of fabric so that the finishing process may be accomplished with a minimum of interruptions. These continuous sheets are then singed to burn off any undesirable loose surface fibers. To put out the sparks, the fabrics are passed through a quench box which contains a solution of water and desizing material. By this step, the sizing materials (starch, fats, oils, and gum mixed with water) are easily removed. After being stored for from 1 to 8

hours, in order to allow the desired chemical reaction to take place, the fabrics are washed. The fabrics are then boiled in a chemical solution and rinsed in water to remove the non-fibrous contents and other impurities. After removal of the impurities, the fabrics are bleached to produce cloth of uniform whiteness. Mercerizing usually follows bleaching although it can be done at any stage in the process. In this operation, the fabrics are passed through mangles from which the mercerizing solution is squeezed into the cloth.

Mercerizing increases the tensile strength of the fabric, produces a luster on the cloth, and makes the fabric more receptive to dyes. The mercerized fabrics are then brought to the dye room where they are impregnated with the desired coloring materials. After dyeing, finishing operations may consist of calendering and tenter framing only, or they may be more complex and involve several operations such as water-proofing, special heat treatments, shrinkage control, and special calendering. In the calendering operation, the fabrics, usually dampened with water and sized with starch and other sizing materials, are pressed between rolls called calenders from which they emerge crisp and with a smooth surface.

The next operation, called tenter framing, restores the fabrics to the proper finished width and improves the alignment of the filling yarns with the warp yarns which may have been altered by previous operations.

After tenter framing, the fabrics are usually dried by means of dry cans or loop drying bins. The fabrics are then sanforized in order to minimize any shrinkage which may result during or after laundering. In the sanforizing process, the cloth is dampened with steam or hot water and compressed so that it will resist further shrinkage when it is laundered. All operations, such as desizing, boiling, bleaching, mercerizing, and dyeing, which involve the application and removal of some finishing materials are followed by cloth washing to remove impurities and excess processing materials which may cause trouble in subsequent operations. Some textile mills cure finishing materials like resins. The fabric is impregnated with resin and heated in a drying bin to temperatures above the boiling point of water. The heat causes the resin to set and become an integral part of the fabric. After the finishing operations, the fabrics emerge in finished form and are prepared for the market. The finished fabrics are folded. The folding operation is started by cloth-folding machines or hookers and completed by manual folding. This operation includes the separation or identification of the various fabric lots prior to their subsequent segregation, cutting out of unwanted seams, removal of defective portions of the finished cloth, and the determination of the yardage of each folded lot. The folded fabrics are finally inspected at the cloth winding machine to determine those below the standard agreed upon between the plant and the customer. A defective

fabric, called "second", is usually offered at a reduced price. After the final inspection, the fabrics are segregated according to colors. Finally, the fabrics are re-rolled on a winding machine, folded and wound into bolts by doubling and rolling machines, hand sewn at the edges to prevent the bolts from opening up, and then packed in bales.[3]

[3]Industrial Development Center, Textile Industry in the Philippines, 1957, pp. V-IX.

APPENDIX B

Natural and Man-made Fabrics

Cotton textile products have always been the largest component among the different types of textile materials imported or in the Philippines. The fabrics woven from cotton range from crisp, sheer organdies or fine broadcloth shirtings to heavy ducks and flannels. It may be knitted into sweaters and socks, made into laces and curtains, and laid down in non-woven textile materials as thin as paper or as heavy as felt. Cotton is peculiarly adaptable to these many uses because it is readily washable, cool, water absorbent, and has good color permanency and strength.

Cotton is especially adaptable to tropic countries such as the Philippines. It is cool in the summer because its characteristics enable it to absorb moisture, hold moisture, and dry quickly. All these contribute to a rapid withdrawal of body moisture from the skin and to the cooling effect which results from the evaporation of the moisture vapor.[1] Other advantages of cotton are its launderability (it can withstand repeated washings in soap and water) and strength (shows no appreciable loss in strength even after periods of 50 years or more).

Although cotton fabrics compose the largest segment among the

[1] Jules Labarthe, Textiles: Origins to Usage (MacMillan Company, New York, 1964), pp. 146-548.

different types of textile fabrics, there has been a decline in their production because of a definite trend in the practice of blending natural fibers (cotton) with man-made or synthetic fibers instead of using pure cotton alone in the production of textiles. By mixing cotton fibers with other textile fibers, properties may be secured which are not obtainable from the use of either kind of fiber alone. For example, cotton is not crease-resistant, but if it is mixed with polyester, a man-made fiber, it acquires the particular characteristic of crease-resistance. Cotton, on the other hand, will take readily the most color-fast of all dyestuffs in a wide variety of colors. The fabrics that emerge from the blending of cotton with polyester fibers, therefore, acquire the characteristics of color-fastness and crease-resistance, both of which could not have been obtained with the use of either fiber alone. The increase in the production of fabrics making use of man-made and synthetic fibers can also be explained by the fact that these fibers are more versatile. In the production of textile fabrics, if a silky finish is desired, textile, textile manufacturers may use acetate (a man-made fiber); if they want the fabric to be transparent, they may use nylon, and if they want the cloth to have the characteristics of woolen fabrics, such as an ability to provide warmth during cold days, they may use acrylic fibers and still get them cheaper than wool (a natural fiber). In order to make cotton fabrics shiny, they must be specially finished, or "mercerized", but this is not

necessary in fabrics made of synthetic fibers since they are naturally shiny. All of this has contributed to the decline in the production of cotton fabrics, although they are still the largest type of textile produced in the world today.

Our study deals primarily with cotton textiles which compose most of the imported as well as locally produced textiles in the Philippines. Most integrated plants in the Philippines are equipped to handle the manufacture of cotton fabrics. The production os synthetic cloth, however, requires different, more adaptable equipment than is common in Philippine mills.

The cotton products covered by this study include yarns and woven fabrics, either in gray or in finished types, manufactured from cotton fibers. Woven fabrics include various types ranging from gauze and mosquito nets (lightweight fabrics), to sheetings and draperies (mediumweight fabrics), and ducks and canvasses (heavy fabrics). The study also includes cotton knitted fabrics and cotton thread (see Table 18).

The cotton used in the Philippines is an imported natural fiber which is grown commercially in the United States, Central America, Europe, and India. Although the Philippine climate has been found to be suited for cotton propagation, cotton has not yet been successfully grown here on a commercial scale because of a lack of necessary preparations.

APPENDIX C

Laws and Regulations Affecting the Textile Industry

Year	Republic Act	Provision
1946	R. A. 35	Provided for the exemption of new and necessary industries from the payment of all internal revenue taxes for a period of four (4) years.
1953	R. A. 901	Provided for the exemption of new and necessary industries from the payment of all internal revenue taxes. Exemption for 10 years starting on December 31, 1958 with full (100 percent) exemption, and the percentage of exemption on a sliding scale until December 31, 1962, after which full taxes had to be paid.
1957	R. A. 1937	Imposed high tariff rates on imported textile fabrics and other textile products.
1961	R. A. 3127 (Basic Industries Law)	Provided for the exemption of basic industries from the payment of special import tax, compensating tax, and tariff duties on the importation of machinery, spare parts, and equipment. Percentage of exemption was on a diminishing scale which started with full exemption during the period of June 17, 1961 (date of approval) to December 31, 1966. After December 31, 1968 full taxes shall be paid.

APPENDIX C (continued)

Year	Republic Act	Provision
1961	R. A. 3137	An Act creating an embroidery and apparel control and inspection board covering control issuance of entry permits and inspection of conditionally tax free raw materials importation by local manufacturers and the corresponding liquidation of re-exportation thereof as Philippine made embroideries and apparels.
1962	Tariff Regulation	Regulation which provided for the increase in the tariff rate imposed on remnants from 15 percent to 30 percent ad valorem.
1964	R. A. 4086 (Textile Assistance Act)	Provided for the exemption of the textile industry from the payment of duty, special import tax, sales and/or compensating tax on the following items: imported natural or synthetic raw fibers and tow, chemical dyestuffs and spare parts, (which are) not grown, manufactured, or produced locally by the industry. Percentage of exemption was on a sliding scale which started with 100 percent exemption for the period June 18, 1964--December 31, 1966. After January 1, 1970, full taxes must be paid.
1964	Quarantine Administrative Order No. 43	Required that shipments of used clothing and rags be accompanied by certificates of disinfection.

APPENDIX C (continued)

Year	Republic Act	Provision
1966	R. A. 4653	An Act which aims to "safeguard the health of the people" by prohibiting the commercial importation of textile articles commonly known as used clothing and rags.
1967	Title IV of PL 480	Raw cotton may be purchased on easy terms through Development Bank of the Philippines' guarantees until November 30, 1967.

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