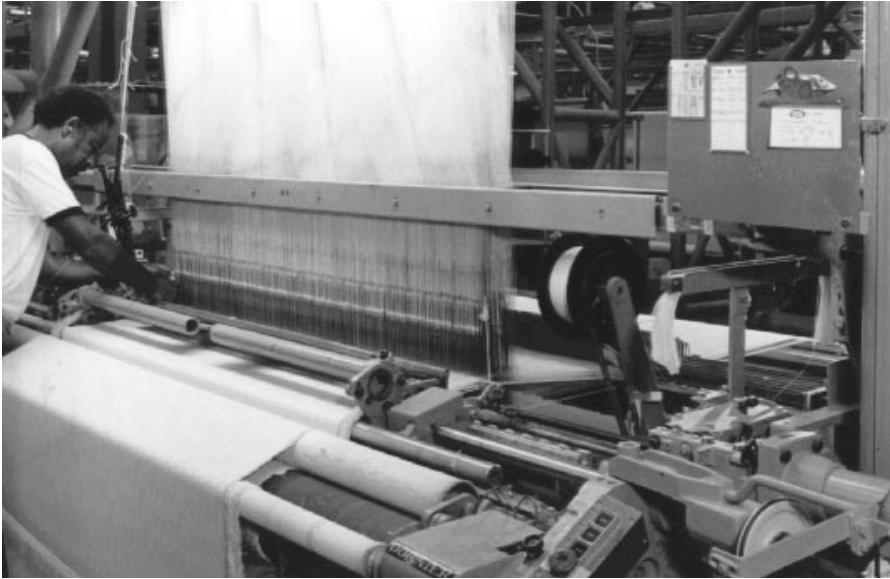


World Agriculture & Trade



U.S. Cotton Production & Textile Imports Weave New Relationship

U.S. imports of cotton textiles (yarn and fabric) and apparel have been rising during 1998 at twice the average rate of the last decade. In part because of this import surge, U.S. textile mills are expected to use less cotton fiber in 1998/99. The U.S. milling industry purchases domestically produced cotton fiber almost exclusively, and farmers are seeing their best customer reduce its purchases.

At the same time, Asian textile exporters that traditionally ship to the U.S. are now expected to enter the next century with weaker currencies and with notably lower wages and incomes than originally expected, making their exports more price-competitive. Consequently, the coming termination of U.S. textile import quotas in 2005 could have a larger impact on textile trade and cotton production than previously anticipated.

During 1998, the U.S. economy and U.S. dollar have probably been their strongest against the rest of the world since the mid-1980's. In particular, the U.S. economy and currency have strengthened enormously relative to the textile exporting

countries affected by the Asian financial crisis. The volume of U.S. textile imports during January-June 1998 compared with a year earlier rose 22 percent. Imports from Thailand, South Korea, and Pakistan rose 40, 30, and 45 percent. Since the system of import quotas originally developed under the Multi-fibre Arrangement (MFA) will largely remain in effect through 2005, the potential for imports from these countries has limits. However, World Trade Organization (WTO) rules schedule a gradual elimination of quota restrictions through termination of selected quotas before 2005 and accelerated increases in quantities for the remaining quotas.

Changes in the nature of the textile industry and in trade policy have altered the structure of world textile trade since the 1980's. The increasing technical complexity and vertical integration of the U.S. textile industry, combined with several decades of global trade liberalization, suggest that U.S. cotton farmers will continue to find both domestic and foreign customers for their fiber despite a continually shrinking U.S. share of apparel sold in the U.S. and worldwide.

Apparel Imports Grow Despite Quotas

The MFA quotas evolved during the decades before the Uruguay Round of the General Agreement on Tariffs and Trade (GATT), largely in response to surging imports of apparel from developing countries. Although textiles have become increasingly capital-intensive, apparel remains probably the world's most labor-intensive industrial good. Thus, apparel industries in high-wage, developed countries like the U.S. are inevitably vulnerable to competition from developing countries. The MFA quotas reflected this—quota levels and growth rates for apparel were more restrictive than those for yarn and fabric, and apparel quotas to meet WTO obligations are scheduled to terminate later, on average, than yarn and fabric quotas.

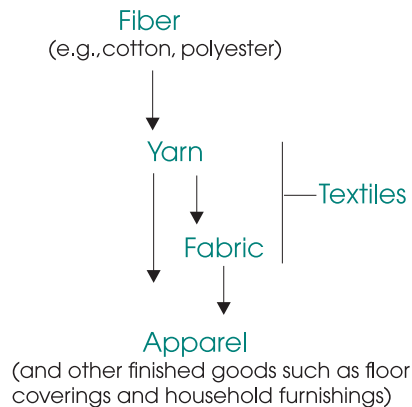
Apparel production has steadily migrated to developing countries despite the use of MFA quota restrictions. When these export-oriented apparel industries first appear in developing countries, they are likely to import fabric from more developed countries. Later, fabric production appears, with yarn imported from more developed countries. Finally, a yarn industry develops, and fiber is imported. A number of Asian countries have followed this sequence, beginning with Japan, followed by Taiwan and South Korea, then China and Southeast Asia. Bangladesh is at an intermediate stage—it is just beginning to replace its textile imports with a domestic industry—and Vietnam has only recently begun expanding its apparel exporting industry.

Two generalizations help explain why a growing apparel industry in a developing country has traditionally resulted in a growing textile industry there. One concerns the reduction of transaction costs through vertical coordination between apparel and textile industries sharing a common economic environment.

Since developing countries may accumulate a significant share of their industrial financial and human capital through foreign trade in apparel, a logical application for these new resources is producing a familiar

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Transforming Fiber into Finished Goods



product with an assured market—textiles. Domestic textile production means the apparel and textile industries share a common currency and economy, making them less likely to incur the cost of changing customers (for the apparel industry) or suppliers (for the textile industry) during periods of economic disruption. This, along with cultural affinity, can encourage specialized investment within the industry with less risk that foreign firms—or their governments—will later appropriate inordinate shares of profits. Specialization permits economies of scale, and the reduced risk permits greater amounts of such cost-cutting investment.

The other generalization is that developing countries have traditionally pursued policies that favor nascent capital-intensive industries, even at the expense of existing labor-intensive ones. Their underlying premise has been that by increasing the amount of capital available per member of the labor force, the wages and well-being of the population will increase. To this end, developing countries have tended to subsidize capital, lowering the cost of developing a capital-intensive textile industry to supply the already existing local apparel firms. Also, trade policies have assured that effective rates of tariff protection for textile products have been high—often in excess of 100 percent.

While firms exporting apparel products have had widespread access to duty-free textile imports, this access has not always been consistent. Quantitative restrictions, credit restrictions, and duty prepayments, among other methods, have been used to

restrict imports. Moreover, sudden policy changes have also occurred. During the 1970's, for example, Indonesia assessed import duties on the basis of assumed prices rather than invoices, to avoid the underinvoicing inspired by currency controls. In 1975, the assumed prices on textiles were raised 75 percent. In contrast, Indonesia operated concessionary exchange rates for raw cotton and cotton yarn to facilitate its imports when the country's currency was overvalued.

Under these circumstances, the shift of apparel production out of a developed

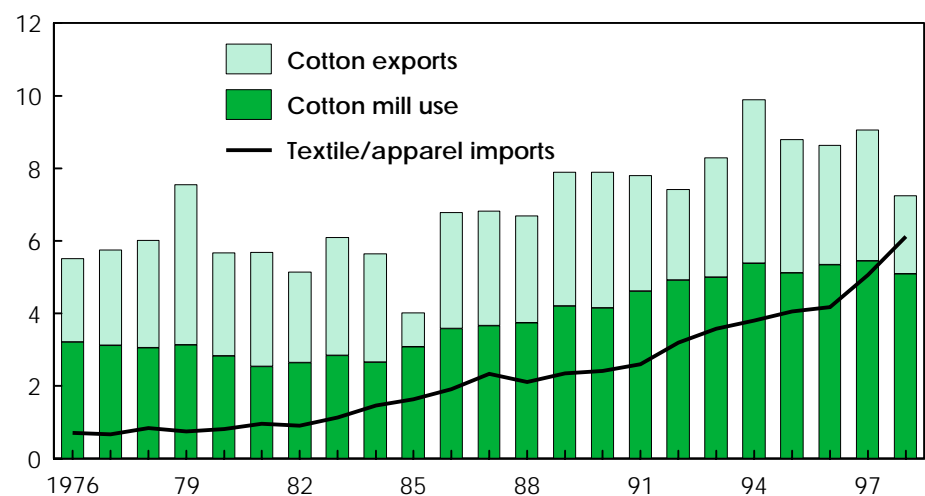
country like the U.S. has eventually resulted also in the shift of the initial fiber-consuming segment of the industry—yarn production. A continuation of this trend could have negative implications for U.S. cotton farmers since foreign yarn producers utilize a lower share of U.S. fiber than do domestic yarn producers. Indeed, during the 1970's and early 1980's, as the U.S. share of world cotton yarn production fell, the U.S. share of cotton fiber production fell as well. However, technical change and restructuring in the U.S. textile and apparel industry, and a global trend toward trade liberalization, mean these older relationships are not likely to exert as strong an influence.

U.S. Cotton: Fiber for a Restructuring Industry

Under competition from imports, and in response to the opportunities provided by the North America Free Trade Agreement (NAFTA) and the Caribbean Basin Initiative, the U.S. textile and apparel industry has become more amenable to undertaking foreign direct investment (FDI) and exporting from the foreign plants, two strategies that tend to preserve U.S. fiber consumption despite growing apparel imports. Attrition in the U.S. apparel industry has fallen more heavily on

Total Use of U.S. Cotton Has Trended Up Despite Rising Imports of Textiles and Apparel

Billion lbs.



Calendar years for imports. (1998 is annualized January-June data); marketing years beginning August 1 for use (1998 forecast); fiber equivalent. Cotton production was down sharply in 1998 due to lower yields (adverse weather) and acreage (including abandonment).

Economic Research Service, USDA

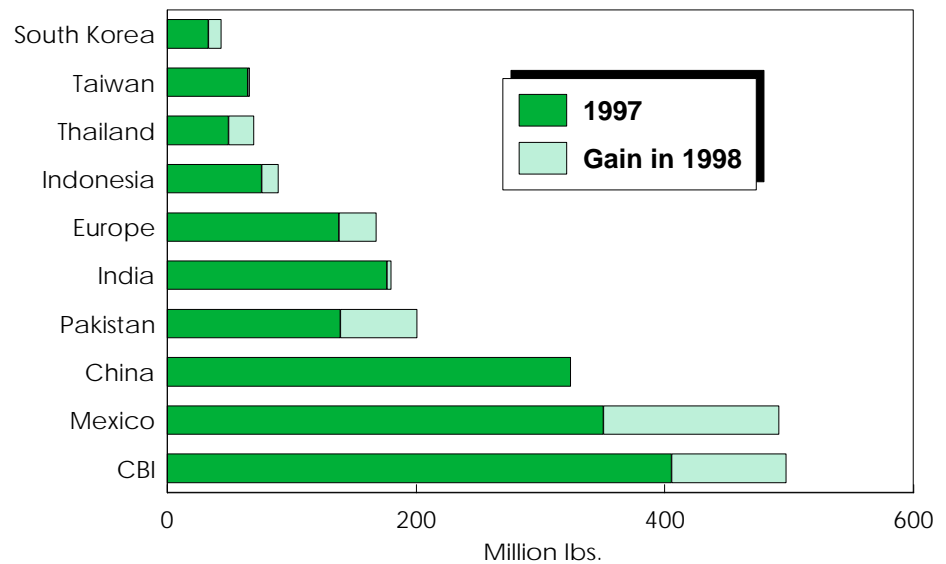
smaller firms, leading to an increase in the average firm's capital and knowledge intensity, making it more likely for the firm to engage in FDI or in outward processing. Firms engaged in outward processing of apparel perform only the most capital-intensive steps—like cutting fabric—in the developed country and contract the labor-intensive steps—such as sewing—to a developing country.

Vertical integration has proceeded since the 1980's to a greater extent in the U.S. industry than elsewhere, and a company that pursues vertical integration domestically is likely to pursue it globally. The same efforts to capture profits from intangible capital (e.g., brand loyalty, technical expertise) occur across borders as well as within the home country of the vertically integrated firm. Thus, with vertical integration, the capital-intensive production would more likely remain in the firm's home country than would be the case if the steps were performed by different firms, even as the labor-intensive steps are moved to low-wage countries.

These developments have not been confined to the U.S. Relatively greater rates of vertical integration and FDI are longstanding attributes of Japan's textile industry, and outward processing trade between Europe and Eastern Europe has also increased. Poland has become the second-largest market for the European Union's fabric (after the U.S.), resulting in a reduced cotton fabric trade deficit for the EU. Tunisia and Morocco are also important EU outward processing points.

Trade liberalization may reduce developing countries' ability to limit imports from developed countries. While it is possible for developing countries with balance-of-payments problems to maintain quantitative restrictions on trade and remain in conformity with WTO provisions, the trend has been toward reducing such barriers. By not subsidizing and protecting capital-intensive industries, developing countries can more effectively exploit their comparative advantage in producing labor-intensive goods. This would imply importing capital-intensive intermediate products, and under conditions of general global liberalization of trade and investment, such new patterns are emerging.

U.S. Increased Imports of Cotton Textiles and Apparel from Most of Its Suppliers in 1998



January-June. CBI=Caribbean Basin Initiative. China figures include Hong Kong. Economic Research Service, USDA

During the first half of 1998, Mexico was the largest source of textile and apparel imports to the U.S.—surging 40 percent from January to June—with a group of Caribbean Basin countries (led by Honduras and the Dominican Republic) the second largest, rising 23 percent. U.S. exports of textiles to these regions also rose substantially, and virtually all of the cotton fiber used by their industries was U.S.-origin. Liberalization of textile trade with Mexico and, to a lesser extent, the Caribbean Basin, has permitted increased FDI by U.S. companies and domestic investment by Mexican, Caribbean, and Central American firms oriented to using U.S. cotton.

In 1997, Asia accounted for less than half of all U.S. cotton textile and apparel imports, compared with 65 percent in 1993. North America (including Mexico and the Caribbean Basin) accounted for 37 percent of all U.S. cotton textile imports, compared with 19 percent in 1993. This textile trade shift can be quantified in terms of U.S.-produced cotton fiber, based on earlier research by USDA's Economic Research Service on the amount of U.S.-sourced cotton fiber embodied in textile and apparel imports. In 1993, nearly 2.1 billion pounds of

cotton textiles and apparel were imported by the U.S. from the 10 largest import sources, and about 26 percent of that was returning U.S.-produced fiber. During 1997, 3.1 billion pounds were imported from the 10 largest sources, and nearly 40 percent was returning U.S. fiber.

Forecasting developments in location of textile production requires careful examination of each country's domestic investment, changing industry structure, and changing international trade policies. With potentially large shifts in apparel production after 2005, this examination will be crucial in foreseeing the international distribution of textile production.

During most of the 20th century, increased foreign apparel production also pulled textile production into countries that utilized a higher proportion of non-U.S. fiber, reducing prospects for U.S. cotton growers. However, a continuation of more recent trends in industrial organization and trade policy could mean textile trade rather than production follows shifting apparel production, sustaining cotton production in the U.S.

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