LOSS OF TEXTILE AND APPAREL JOBS: IS PROTECTIONISM WARRANTED? Richard B. McKenzie and Stephen D. Smith

Introduction

Backers of the recently vetoed Textile and Apparel Trade Enforcement Act of 1985 (S.680) sought to reduce textile imports by as much as 36 percent and apparel imports by as much as 20 percent from their 1985 levels.¹ If it had been enacted, the bill would have, according to one estimate, raised wholesale prices for textile imports by 33 percent and for apparel imports by 16 percent. It would have also added at least \$3.4 billion to the annual consumer cost of textile protectionism already estimated at more than \$20 billion a year (see Megna and Emrich 1985).

These proposed textile and apparel trade restrictions have been tendered on the proposition that expanding textile and apparel imports have caused the closure of as many as 250 plants since 1980 and have robbed American textile and apparel workers of hundreds of thousands of jobs during the past decade (*New York Times* 1985, p. 33). Indeed, the bill's drafters write that the total 1984 volume of textile and apparel imports represented "over 1 million job opportunities lost to the United States workers" (*New York Times*, p. 5).

Ellison McKissick, president of the American Textile Manufacturers Institute, argued that "our markets have been overwhelmed by

Cato Journal, Vol. 6, No. 3 (Winter 1987). Copyright © Cato Institute. All rights reserved.

Richard B. McKenzie is Professor of Economics at Clemson University and Stephen D. Smith is Research Assistant at the Center for the Study of American Business at Washington University in St. Louis. The authors are indebted to Lee Benham, Kenneth Chilton, Arthur Denzau, Robert Parks, Chris Varvares, and Keith Womer for helpful comments on earlier drafts. The paper was written during Richard McKenzie's stay at the Center for the Study of American Business, where he was John M. Olin Visiting Professor of American Business.

¹See Hudgins (1985) for a review of the history of textile and apparel import restrictions and of the features of the Textile and Apparel Trade and Enforcement Act of 1985.

imports.... Since 1980, more than 300,000 fiber, textile and apparel workers have lost their jobs" (McKissick 1985, p. 23). And the backers of the 1985 textile and apparel bill argued: "If the rate of growth of imports of textiles and textile products into the United States that occurred since 1980 continues, plant closings will continue to accelerate, leaving the United States market with reduced domestic competition for imported products" (S.680, p. 8).

Concerned about plant closings in his home state caused partially by shirts that can be made in "downtown Shanghai, China for 18 cents an hour," South Carolina Senator Fritz Hollings called the textile and apparel bill "sensible protection." He and other supporters of protection maintained that all they want is to return to "fair trade, to make the table level again" (McKissick 1985, p. 23).

The purpose of this study is to assess the impact of changes in textile and apparel imports as well as domestic textile and apparel productivity on U.S. textile and apparel employment. While the findings are mixed, the research reported here should prove useful in future public debates over textile and apparel protection.

Textile and apparel employment combined would have fallen substantially (by possibly more than 200,000 jobs) during the 1973–84 period even if there had been no textile imports at all. Contrary to the contentions of protection proponents, textile imports have not in any systematic and predictable manner, or to any statistically significant extent, adversely affected U.S. textile employment between 1960 and 1985. However, apparel imports appear to have had a significant negative impact on employment in both industries.

Textile employment losses can, to a significant degree, be attributed to productivity improvements. (Determining the extent to which these productivity improvements may have been spurred by textile and apparel import competition is, however, beyond the scope of this paper.) On the other hand, productivity improvements have not been a statistically significant factor in employment losses in the apparel industry.

The findings of this study help explain why many textile firms have remained profitable in the face of employment cutbacks. Another, more predictable, conclusion of the analysis is that employment in both industries is significantly influenced by changes in real personal disposable income in the United States.

The paper begins with a brief description of developments in the textile and apparel industries between 1960 and 1984. A regression model is then used to analyze the effects of imports, personal disposable income, and productivity on textile and apparel employment. The final section summarizes the results and conclusions drawn from the empirical findings.

Industry Descriptions

In many respects, the textile and apparel industries are of similar size and have confronted similar employment, production, and import patterns during the 1960–84 period. During these two and a half decades, both industries faced mounting imports, productivity increases, and relative price declines.²

The Textile Industry

Between 1960 and 1973 textile industry (SIC 22) employment rose from 924,000 to slightly more than 1 million, but by 1984 industry employment had fallen irregularly to 746,000, or by slightly more than a quarter of its 1973 peak employment level (see Figure 1).

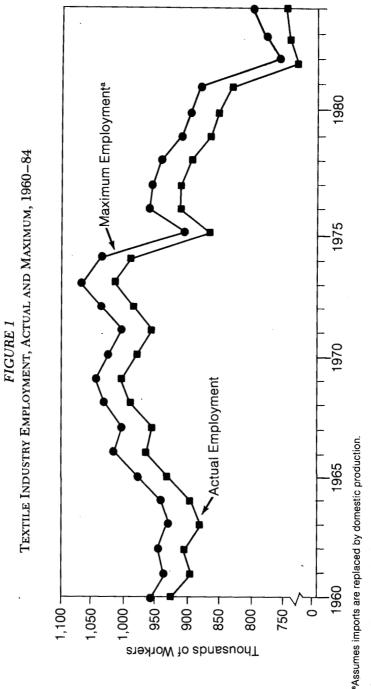
Total industry shipments in constant-dollars (1984) nearly doubled between 1960 and 1973, rising from just over \$29 billion to nearly \$53 billion (see Figure 2).³ After falling for two years, real shipments rose until 1978, peaking at nearly \$65 billion. Textile shipments then began to fall again during the recessions of the early 1980s. By 1984, however, industry shipments had climbed back to just under \$58 billion, in spite of a continuing drop in textile employment and an increase in textile imports.

During the 1960–84 period, worker productivity, defined as real shipments per worker, increased 147 percent, rising in real (1984) dollars from \$31,407 per worker in 1960 to \$77,526 per worker in 1984. Constant-dollar textile imports more than quadrupled during the period, yet market share expanded more modestly. Imports grew from \$922 million, or 3.2 percent of total domestic textile shipments, in 1960 to nearly \$3.8 billion, or nearly 6.5 percent of domestic textile shipments (see Figure 2).

How much have textile imports directly affected textile industry employment? A rough estimate of maximum potential employment can be obtained by assuming that textile industry employment is proportional to sales and then computing industry employment

²Employment data were taken from U.S. Bureau of Labor Statistics, *Employment*, Hours, and Earnings: 1909–1984 and Employment and Earnings (July 1985); industry shipments and import data were taken from U.S. Department of Commerce, U.S. Industrial Outlook (various annual editions). The 1984 industry shipment and import figures are estimates.

³Constant-dollar textile and apparel shipment and import figures were obtained by deflating the current-dollar figures by the textile and apparel price index (1984 = 100).



SOURCES: U.S. Bureau of Labor Statistics, Employment, Hours, and Earnings: 1909–1984; Employment and Earnings (July 1985).

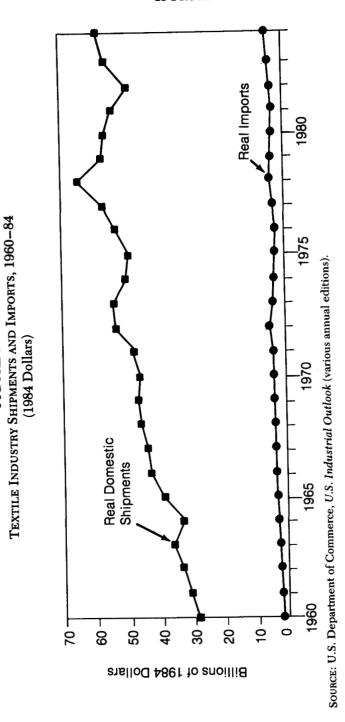


FIGURE 2

assuming that the import share would have been supplied by domestic firms.⁴

In the absence of imports, textile industry employment naturally would have been higher in every year between 1960 and 1984. (Compare the actual and maximum employment patterns in Figure 1.) Between 1973 and 1984, however, textile employment would still have fallen by virtually the same amount (267,000) as it actually did fall (264,000) even if imports could have been replaced by domestic production.⁵ This is the case because the elimination of textile imports would have led to approximately the same increase in employment, about 50,000, in both 1973 and 1984.⁶

Practically the same conclusion can be reached about the impact of eliminating textile imports on textile employment between 1980 and 1984. During that period textile employment fell by 102,000, whereas industry employment would have fallen by 98,000 in the absence of imports. As will be discussed later, the substantial rise in real apparel imports, incorporating foreign textiles, did contribute, however, to declining employment in domestic textiles during both the 1973–84 and 1980–84 periods.

The Apparel Industry

In 1960 there were approximately 1.2 million apparel workers in the country. Employment in the industry (SIC 23) peaked in 1973 at over 1.4 million workers, fell to 1.2 million by 1975, and then rose to 1.3 million in 1979. In 1980 apparel employment began a steady decline to just under 1.2 million workers by 1984 (see Figure 3).

However, industry shipments in constant dollars moved irregularly upward from over \$29 billion in 1960 to more than \$57 billion in 1984 (see Figure 4). But unlike the textile industry, the value of industry shipments in apparel was greater in 1984 than in any previous year between 1960 and 1984.

Worker productivity doubled in real terms from \$23,649 per worker in 1960 to \$47,858 per worker in 1984. However, this increase was

⁴These estimates of the direct impact of textile imports are necessarily tentative because they do not account for other variables that can directly influence textile employment or the indirect effects of imports on employment through pressures on prices and productivity. The econometric work that follows partially remedies these problems.

⁵It is unlikely that domestic production could ever fully supplant imports. The higher prices of the domestically produced goods would cause total sales to drop below the level achieved with imports.

⁶In 1973 the elimination of imports, which represented 5 percent of domestic shipments, would have led to an increase in textile employment of about 50,000. In 1984 the elimination of imports, which then represented 6.5 percent of domestic shipments, would have led to an increase in employment of approximately 49,000.

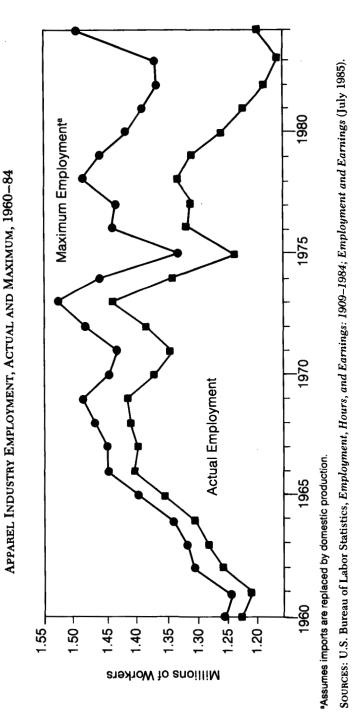


FIGURE 3

737

slightly less than 70 percent of the productivity improvement in textiles. Constant-dollar apparel imports surged dramatically during the 1960–84 period, rising more than twentyfold from under \$600 million, or 2 percent of domestic apparel sales, in 1960 to over \$14 billion, or nearly 25 percent of domestic apparel sales, in 1984 (see Figure 4).⁷

Did the rise in apparel imports adversely affect apparel employment? If we again assume that apparel employment is proportional to sales and that apparel imports could be replaced by domestic production during the period 1960–84, apparel employment would have been 2 percent higher in 1960 and 25 percent higher in 1984.⁸ The computed maximum apparel employment would have dropped 35,000 between 1973 and 1984, whereas actual employment fell by 241,000. In other words, between 1973 and 1984 apparel imports may have resulted in the loss of as many as 200,000 apparel jobs. (Compare the actual and maximum employment patterns in Figure 3.)

Much of the employment impact of apparel imports was indeed felt during the 1980–84 period, when U.S. apparel employment could have grown by 77,000 jobs but actually fell by 67,000. Possibly as much as three-quarters of the apparel job losses during the 1973 to 1984 period were caused by increased apparel imports over the first four years of the 1980s.⁹

Prices of Textile and Apparel Products

The 1984 price index for textile and apparel products was 111 percent above its 1960 level. However, the prices of other goods and services during the 1960–84 period rose much more rapidly, especially during the late 1970s. As a consequence, textile and apparel product prices declined relative to the consumer price index by one-third during the period.¹⁰

Statistical Models and Results

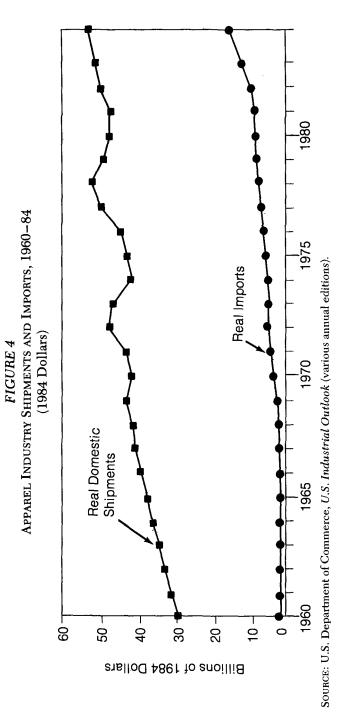
The actual impact of textile and apparel imports on domestic employment can be more accurately assessed through regression

 10 In 1984 the textile and apparel index (1967 = 100) stood at 211, whereas the consumer price index was 311.

⁷Some of the surge in apparel imports could have been in response to quota restrictions on the importation of textiles.

⁸As with the textile industry, imports would have further reduced apparel employment through their indirect effects on industry prices and productivity.

⁹Of course, lower-priced textile imports probably enabled domestic apparel firms to lower their costs and compete more effectively with apparel imports and kept apparel employment from falling as much as it otherwise would have.



analysis. Domestic textile and apparel employment can be influenced by many factors, including productivity change, real textile and apparel imports, and real disposable personal income. Textile and apparel employment may be expected to vary directly with real disposable personal income: the greater the real disposable personal income, representing buying power of consumers, the greater the demand for textile and apparel products and workers. The directional impact of the other three variables, however, is less certain. Productivity improvements can increase or decrease textile and apparel employment, depending on the elasticity of demand for textile and apparel products.

Textile and apparel imports can increase or decrease employment in these industries, depending on the relative magnitudes of the substitution and income effects of imports. Imports may substitute for U.S. firms' textile and apparel products because of either lower prices or higher quality.¹¹ In addition, imports—especially textile imports—can lower production costs of textile and apparel firms and prices of U.S. goods that use textile and apparel products, thus expanding sales and demand for U.S. or imported textile and apparel products.

The real income effects of textile and apparel imports can be expected to be positive; however, the substitution effects of imports—especially textile imports—are more ambiguous. On the one hand, apparel imports, ceteris paribus, can be expected to reduce domestic apparel and textile employment, while textile imports can make domestic apparel goods and textile goods that incorporate imported unfinished textiles more competitive. As a consequence, textile imports may have a positive effect on both domestic textile and apparel employment.¹²

To test the employment effects of imports, separate log-linear, least-squares regression models for the textile and apparel industries were developed, with total employment in the respective industries as the dependent variable. The time-series models covered annual

¹²Finally, an increase in textile and apparel imports may be caused by a rise in income and may accompany a rise in imports of a wide range of foreign goods and services (including textile and nontextile machinery and materials). Lower-priced and higherquality imports of many goods and services can make American industries more competitive and can support the continued expansion of real income and employment in the U.S. economy. Of course, as noted in the text, textile and apparel imports can spur domestic firms to become more productive, which can indirectly lead to job losses in the textile and apparel industries.

¹¹Textile and apparel imports may also contribute to an expansion of real U.S. income via expanded purchasing power of consumer dollars that, in turn, may marginally expand the demand for U.S. textile and apparel products.

data for the period 1960–84. The four independent variables used in the regression equations are: (1) industry labor productivity as measured by the current-dollar value of total annual industry (textile or apparel) shipments adjusted by the textile and apparel price index divided by total industry employment;¹³ (2) real disposable personal income as measured by current-dollar annual disposable income adjusted by the consumer price index; (3) real textile imports as measured by the current-dollar value of annual textile imports adjusted by the textile and apparel price index; and (4) real apparel imports as measured by the current-dollar value of annual apparel imports adjusted by the textile and apparel price index.

The Effect of Imports

The results of the least-squares analysis are presented in Table 1. As can be seen, the four variables explained nearly three-quarters of the variance in employment for both the textile and apparel equations. As indicated by their high F values, both equations offer robust explanations of textile and apparel employment over the 1960–84 period.

Textile Imports. During the 1960–84 period, real textile imports had a relatively small but statistically significant positive impact on both domestic textile and apparel employment levels, suggesting that textile imports may well have enabled some domestic producers to be more competitive through the use of cheaper unfinished textile imports. (The significance level of textile imports is lower for the apparel equation than the textile equation.) The two equations indicate that a 1 percent increase in real textile imports will lead to approximately a .16 percent increase in both the domestic textile and apparel employment.¹⁴

Apparel Imports. The coefficient for real apparel imports is negative and highly significant in both employment equations. The size of the negative apparel import coefficient, which is roughly the same in both equations, is also substantially higher than the positive coefficient for textile imports in both equations.

The statistical tests indicate that a 1 percent increase in real apparel imports will lead to approximately a .25 percent reduction in both

¹³The results of the empirical analysis should be evaluated with one caveat in mind. Since industry employment is used as the dependent variable and as the denominator in the measure of productivity, a measurement error for employment can introduce a negative bias in the coefficient for worker productivity.

¹⁴Conversely, the regression equation, using 1984 figures, suggests that reducing textile imports to zero theoretically could *reduce* textile employment by almost 125,000 jobs and apparel employment by almost 200,000 jobs.

TABLE 1

Independent Variables	Dependent Variables	
	Total Employment in the Textile Industry	Total Employment in the Apparel Industry
Intercept	0.731 (0.666) ^a [.5131] ^b	2.222 (2.766) [.0119]
Productivity	-0.455 (-2.123) [.0464]	-0.076 (-0.400) [.6937]
Real Disposable Personal Income	1.143 (5.381) [.0001]	0.789 (5.659) [.0001]
Real Textile Imports	0.166 (2.243) [.0364]	0.159 (3.198) [.0045]
Real Apparel Imports	-0.257 (-3.659) [.0016]	-0.245 (-4.715) [.0001]
Adjusted R ²	.756	.742
F Value	19.541 [.0001]	18.266 [.0001]

LOG-LINEAR RECRESSION EQUATIONS FOR THE TEXTILE AND APPAREL INDUSTRIES

^aFigures in parentheses indicate the t statistic.

^bFigures in brackets indicate the significance level.

textile and apparel employment. However, it should be noted that if textile and apparel imports both expand by 1 percent, the increase in textile imports will partially offset the negative impact of the increase in apparel imports.¹⁵

The Effect of Income

As expected, during the 1960–84 period, real disposable personal income had a highly significant and strong positive effect on both textile and apparel employment. A 1 percent increase in real annual

¹⁵Put in more concrete terms, our statistical analysis, using 1984 data, indicates that reducing apparel imports to zero would increase textile employment by 191,000 and apparel employment by 293,000 jobs at most.

disposable personal income can be expected to lead to a 1.14 percent increase in textile employment and a .79 percent increase in apparel employment. These findings reveal that, in terms of 1984 employment levels, a 1 percent increase in real disposable personal income can be expected to add approximately 8,500 textile jobs and 9,500 apparel jobs.¹⁶

The Effect of Productivity

Changes in worker productivity had different effects in the textile and apparel industries, perhaps reflecting a difference in the ability of the two industries to adjust to competitive pressures. Productivity changes did not have a statistically significant impact on apparel employment, whereas they did have a statistically significant and relatively strong negative influence on employment in the textile industry. A 1 percent increase in productivity in textiles can be expected to lead to a .46 percent reduction in textile employment.

The 1973-84 Period. As noted, textile employment peaked in 1973. Between 1973 and 1984, textile employment fell by 264,000 workers at the same time that worker productivity rose by 49 percent. According to the regression results of this study, that productivity increase had the potential of reducing textile employment by approximately 225,000 jobs (about 85 percent of the actual decrease in textile employment of 264,000).

The 1980–84 Period. The textile and apparel industries have been especially concerned with recent employment trends in their industries. The findings of this study suggest that the 21 percent increase in worker productivity in the textile industry during this period led to a decrease in textile employment of about 81,000 (or approximately 80 percent of the actual employment loss).

Production and Peak Employment

Some of the productivity increase experienced by the textile and apparel industries has resulted from the closing of inefficient plants, as well as from technological advances and competitive pressures brought on by imports. For this reason, the production capacities of these industries, for any given size of the labor force, must remain

¹⁶Future employment in the textile and apparel industries depends on the general health of the U.S. economy. If these estimates of the impact of income changes hold for the remainder of the 1980s, and if real personal disposable income rises by 3 percent a year throughout the remainder of the 1980s, textile and apparel employment combined could increase over 18 percent, or nearly 350,000 jobs, during the 1984–90 period. These combined employment gains in the textile and apparel industries can be expected to be tempered by productivity and import increases.

rough estimates. Nevertheless, it is useful to note that, given the 1984 productivity of textile workers, if textile employment could be returned to the 1973 industry peak, textile output in 1984 would have been 35 percent greater, nearly \$17 billion higher than the total of constantdollar domestic production plus imports. Similarly, if apparel employment returned to the 1973 peak, the industry's output at current productivity levels would be 20 percent greater than it was, or only \$3 billion less than the combined total of constant-dollar industry shipments and imports.

The point is that a return to the 1973 employment peaks in the textile and apparel industries is unlikely, even with drastic cutbacks in imports (as contemplated by the backers of the Textile and Apparel Trade Enforcement Act of 1985). Given the increased productivity in the two industries, the supply of products at the peak employment levels would approximately equal (in the case of apparel) or greatly exceed (in the textile situation) consumer demand.

The Industry Impact of Imports

The impact of textile and apparel imports may indirectly affect domestic textile and apparel employment through competitive pressure on prices and productivity. An expansion of imports can place downward pressures on textile and apparel prices and upward pressures on productivity. Those firms that lead the way in expanding productivity in the face of price declines can maintain—and even expand—employment and profitability. However, those firms that face declining relative prices without compensating increases in worker productivity can be forced to cut employment or close altogether.

Regression equations not reported here indicate that the relative price decline of textile and apparel products has had an impact on industry employment.¹⁷ However, the exact amount of the price effect caused by import competition is unclear because the price, productivity, and employment effects are highly entangled. Textile and apparel prices can also be affected by domestic as well as foreign supplies that can be affected by productivity changes. In addition, the productivity changes can be a response to import pressures on prices.

¹⁷Indeed, when the ratio of textile and apparel prices to the consumer price index is introduced into each of the two equations as a fourth independent variable, the price ratio is positive, as might be expected, and highly significant. Imports are then statistically insignificant.

Summary and Conclusions

Several important conclusions can be drawn from this study. First, the findings cast doubt on the charge that textile imports are directly to blame for job losses in the textile and apparel industries. Job losses in the textile industry are not directly attributable to increases in textile imports during the early 1980s. If textile imports during the period had any negative effect at all on textile and apparel employment, it was likely an indirect effect through competitive pressures forcing U.S. textile firms to innovate and improve productivity.

The findings do, however, support apparel industry claims that employment has declined as a result of imports. In fact, both industries have been affected by apparel imports. The study also reaffirms the commonly acknowledged proposition that textile and apparel employment is strongly influenced by fluctuations in real disposable income.

Second, this study indicates that during the past 25 years, job losses in the textile industry have been due to a substantial degree to ongoing productivity increases. The same cannot be said about the apparel industry. One explanation is that the opportunities for laborsaving machinery to fend off import penetration appear to be much greater in textiles than in apparel, where labor-intensive "cutting and sewing" operations remain a significant part of the production process.

Third, the study suggests that much of the financial distress confronted by many domestic textile and apparel firms may be the consequence of expanded supplies of textile and apparel products caused in part by domestic productivity increases. Many firms that have closed or reduced operations have done so because they have been unable or unwilling to keep pace with industry productivity improvements. The analysis presented here helps explain why some major textile firms have been able to maintain rates of return on equity in excess of 10 percent (sometimes even significantly above 20 percent) at a time when textile and apparel plants are closing and employment is being cut.¹⁸

In summary, proponents of trade restrictions maintain that import protection is justified because of the presumed connection between observed textile and apparel imports and domestic employment. The

¹⁸In 1984, of the 21 major Southeastern textile firms evaluated, 12 had rates of return on equity in excess of 10 percent, of which 5 had rates of return on equity in excess of 15 percent. One firm had a rate of return on equity of more than 46 percent. Only two major textile firms on the list had losses in 1984 (*Jenks Southeastern Business Letter* 1985).

presumed connection has been shown to be applicable in the case of apparel imports but not for textile imports. But in neither case is the magnitude of the employment loss anything approaching the one million lost jobs advertised by protectionists.

Further, as Will Rogers once said, "If a business thrives under a protective tariff, that don't mean that it has been a good thing. It may have thrived because it made the people of America pay more for the object than they should have, so a few got rich at the cost of the many." If apparel and textile imports are further restricted, the prices of such goods to consumers will likely rise, resulting in a hidden transfer of income from consumers to textile and apparel producers. Such curbs also will likely discriminate against lower-income groups because quantity controls typically cause a disproportionate reduction in lower-priced goods usually purchased by those groups.

Nor are the effects of quotas necessarily all positive for the textile and apparel industries themselves. Increased prices for domestic and imported textiles will increase the cost of textile and apparel production. The main long-run effect of curbs on textile and apparel imports seems to be some retardation of productivity improvements caused by reduced competitive pressures. Ultimately, slower productivity growth means that many U.S. textile and apparel firms will be less able to compete in the global marketplace.

References

- "Guilford Mills, Carriage Industries Rated Tops in Textile Survey." Jenks Southeastern Business Letter. 24 June 1985: 4–5.
- Hollings, Fritz. "We're in a Trade War." Reports. Washington, D.C.: U.S. Senate Offices, July 1985.
- Hudgins, Edwin. "Why Limiting Textile Imports Would Hurt Americans." *Backgrounder*. Washington, D.C.: Heritage Foundation, 30 September 1985.
- McKissick, Jr., Ellison S. "Sweatshirts and Sweatshops." Wall Street Journal (4 September 1985): 23.
- Megna, Laura, and Emrich, Thomas. "An Analysis of the Impact of the Textile and Apparel Trade Enforcement Act of 1985." Washington, D.C.: International Business and Economic Research Corporation, June 1985.
- "Textile Industry Imports, Too." New York Times (10 October 1985): 5, 33.
- U.S. Congress. Senate. "Textile and Apparel Trade and Enforcement Act of 1985." S.680, 26 February 1985.

NATIONAL EMERGENCY AND THE EROSION OF PRIVATE PROPERTY RIGHTS Robert Higgs and Charlotte Twight

Only an emergency can justify repression. —Justice Brandeis

The scope of private property rights in the United States has been greatly reduced during the 20th century. Much of the reduction occurred episodically, as governmental officials took control of economic affairs during national emergencies—mainly wars, depressions, and actual or threatened strikes in critical industries. Derogations from private rights that occurred during national emergencies often remained after the crises had passed. A "ratchet" took hold. People adjusted first their actions, then their thinking, to accommodate themselves to emergency governmental controls. Later, lacking the previous degree of public support, private property rights failed to regain their pre-crisis scope.

Emergency restrictions of private property rights are by no means of concern only to historians of the growth of governmental power. Today, emergency restrictions limit many private rights, and many more sweeping restrictions could be lawfully imposed at the President's discretion. The possibility is real. Like several presidents before him, Ronald Reagan has dipped repeatedly into the government's reservoir of emergency economic powers. The potential exists for the greatly expanded use—and abuse—of such powers.

Presuppositions

Rulers prefer more power to less, but in a liberal democracy the rulers are constrained by institutions that sustain private rights.¹

Cato Journal, Vol. 6, No. 3 (Winter 1987). Copyright © Cato Institute. All rights reserved.

Robert Higgs is the William E. Simon Professor of Political Economy at Lafayette College. Charlotte Twight is Assistant Professor of Economics at Boise State University and a member of the Washington State Bar.

¹The ideas in this section are elaborated in Twight (1983, chap. 2), Higgs (1985), and Higgs (1987, chaps. 1–4).