

Sweatshops and Third World Living Standards: Are the Jobs Worth the Sweat?*

BENJAMIN POWELL and DAVID SKARBEEK

San Jose State University, San Jose, CA 95192

Many studies have shown that multinational firms pay more than domestic firms in Third World countries. Economists who criticize sweatshops have responded that multinational firms' wage data do not address whether sweatshop jobs are above average because many of these jobs are with domestic subcontractors. We compare apparel industry wages and the wages of individual firms accused of being sweatshops to measures of the standard of living in Third World economies. We find that most sweatshop jobs provide their workers an above average standard of living.

I. Introduction

Over the past decade, U.S. firms and their subcontractors have faced protests from student groups, union leaders, and some government officials for employing sweatshop labor. Sweatshops are places of employment with low pay, poor working conditions, and long hours. Most economists view so-called sweatshops as a benefit to Third World workers and recognize that the anti-sweatshop activists' activities could reduce Third World employment and investment, thus making workers worse off. In response to the anti-sweatshop movement, economists in the Academic Consortium on International Trade (ACIT), led by Jagdish Bhagwati, circulated a letter in 2000 to colleges and universities urging them to become aware of the downsides to anti-sweatshop movement demands before adopting any policies.

Economists view sweatshops from an exchange perspective in which both workers and employers gain when they voluntarily enter into a labor contract—no matter how low the wages may seem to external observers. From Williams (2004) on the right to Krugman (1997) on the left, economists across the political spectrum have defended sweatshops in the popular press.¹ One economist critical of sweatshops even observed that most economists' opinion is "as simple as this: 'Either you believe labor demand curves are downward sloping, or you don't,' as a neoclassical colleague said to me. Of course, not to believe that demand curves are negatively sloped would be tantamount to declaring yourself an economic illiterate" (Miller, 2003: 107).

Not all economists support sweatshops, however. In response to the letter circulated by ACIT, a group called Scholars Against Sweatshop Labor (SASL) circulated a letter with 434 signatories (73 percent of whom were economists) supporting the student anti-sweatshop movement. At least one scholarly article, (Miller, 2003) "Why Economists Are Wrong about Sweatshops," has criticized the mainstream economic view of sweatshops.

Much of the scholarly work on sweatshops has been performed by non-economists or has been limited to documenting the organization and activities of the anti-sweatshop movement. Examples include Mandle (2000), Appelbaum and Dreier (1999), and Firoz and Ammaturo (2002). Only a few economic studies have dealt directly with sweatshops. Brown et al. (2003) modeled the theoretic frameworks in which multinational firms could raise or lower wages. Elliot and Freeman (2001) outlined the most harmful of the anti-sweatshop activists' demands. Moran (2002, Chapters 1 and 2) documents that firms created by foreign direct investment provide above average pay and benefits for Third World workers.

Most scholarly work by economists related to sweatshops has focused on wages of employees, and several econometric studies demonstrate the benefits provided by multinational firms. Aitken et al. (1996) and Lipsey and Sjöholm (2001) both find that after controlling for other factors, multinational firms pay higher wages than domestic firms in Third World countries. Feenstra and Hanson (1997) report that multinational firms improve workers' lives by increasing the demand for labor. Budd and Slaughter (2000) and Budd et al. (2001) assert that as multinational profits go up, multinational firms share gains with Third World workers. Brown et al. (2003) summarize the literature documenting the benefits that multinational companies provide to Third World workers.

Economists critical of sweatshops usually do not dispute that multinational firms pay more than domestic firms in most cases. Miller (2003: 101) notes,

The ACIT writes that multinational corporations "commonly pay their workers more on average in comparison to the prevailing market wage for similar workers employed elsewhere in the economy." But, as the SASL authors correctly point out, "While this is true, it does not speak to the situation in which most garments are produced throughout the world—which is by firms subcontracted by multinational corporations, not the MNCs themselves."

We expand the existing literature by comparing sweatshop wages, without regard to whether a firm is multinational or a domestic subcontractor of such, to local living standards. We compiled a list of countries where U.S. news sources have reported sweatshops. The apparel industry is widely cited in the press for using sweatshops most frequently, so in Section II, apparel industry wages in these countries are compared to average income, average wages, and poverty earnings. In Section III, we compare the wages at individual firms identified as sweatshops with these same living standards.

II. *Apparel Jobs Compared to Average Local Living Standards*

The apparel industry has drawn the most attention in the popular press for its use of sweatshop labor. Sometimes U.S. firms employ Third World workers directly, but more often they subcontract with local producers. Table 1 contains the average apparel industry wages in countries where sweatshops supposedly exist.²

Apparel industry wages are low by U.S. standards, but they compare favorably with the local average standard of living. Figure 1 shows the average apparel worker's earnings as a percent of average per capita income. Since no data documenting the average number of hours worked in the apparel industry were available, we provide four estimates that vary the hours worked per week between 40 and 70. The 60- and 70-hour estimates are more likely to be accurate since these employees often work long hours and six days per week.

Figure 1 shows that if working 70 hours per week, apparel workers' average income exceeds the average income in each country.³ In nine of ten nations, average apparel industry income exceeds the national average at only 50 hours per week. Apparel workers in the Dominican Republic, Haiti, Honduras, and Nicaragua earn three to seven times the national average.

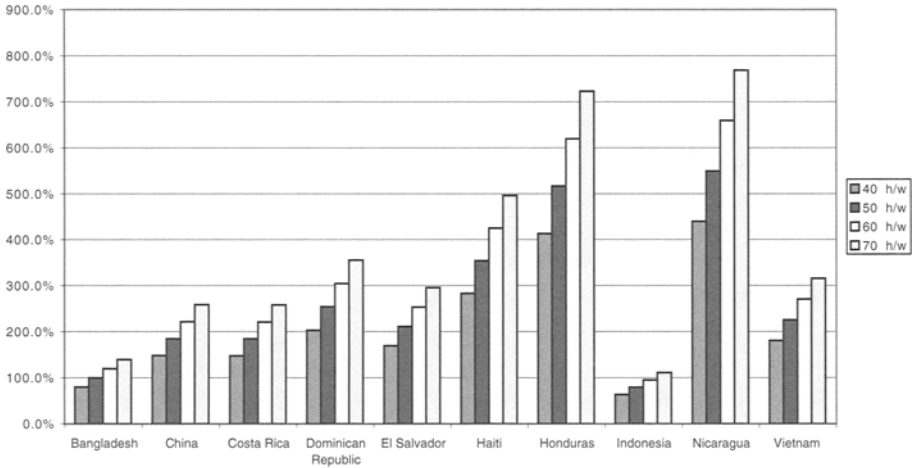
National income per capita divides the total output of the economy by the total population, both workers and nonworkers. If apparel industry workers tend to be young and without a family, or women and children, comparing apparel wages to average income per capita gives a fairly accurate assessment of how these individuals live compared to their counterparts. Women and children were often the workers in nineteenth century U.S. and British sweatshops, and some anecdotal evidence from the Third World suggests this may be true there too.

Table 1
Average Hourly Apparel Worker Wages

	Hourly Wage in U.S. \$
Bangladesh	\$0.13
China	0.44
Costa Rica	2.38
Dominican Republic	1.62
El Salvador	1.38
Haiti	0.49
Honduras	1.31
Indonesia	0.34
Nicaragua	0.76
Vietnam	0.26

Source: Mandle (2003, Table 7.2, p. 108).

Figure 1

Apparel Industry Wages as a Percent of Average National Income

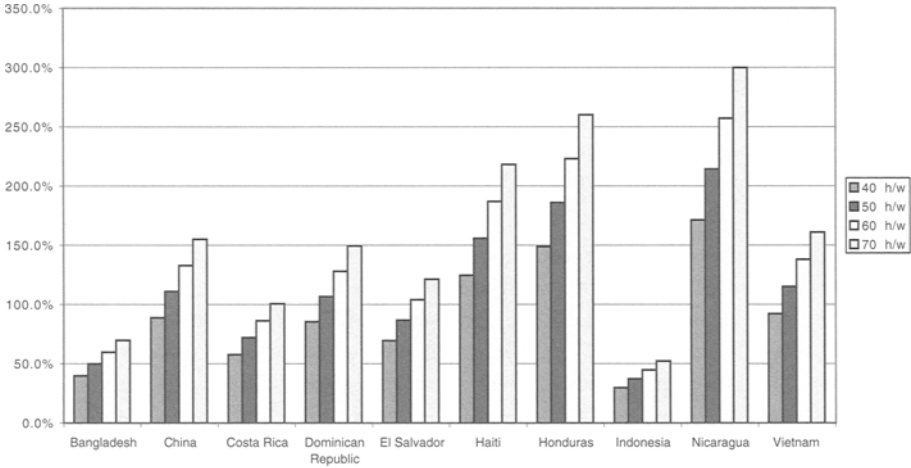
It is also useful to compare apparel industry workers' earnings to other workers' wages. Unfortunately, reliable wage data do not exist. To approximate average wage data, we have used employment participation data to adjust average income per capita to reflect average income per worker. Data on labor force size do not count workers in the informal sector, which can be quite large in these countries, but the value of what informal workers produce is often estimated in GDP measures.⁴ Accordingly, our measure of earnings per worker likely overstates average income per worker, so our estimate of apparel industry wages as a percent of average income per worker is understated. Figure 2 shows that despite this bias, average apparel industry wages equal or exceed average income per worker in eight of ten countries. At 70 hours of work per week, apparel worker earnings in six countries exceed 150 percent of average income per worker, and their earnings are more than double the average in three countries.

We can also compare apparel industry earnings to the extent of poverty in these countries. Table 2 reports the World Bank's estimate of the percent of the population who lives on less than \$1 and \$2 per day. In most of these countries more than half the population lives on less than \$2 per day. Yet, in nine of ten countries, working ten-hour days in the apparel industry lifts employees above (and often far above) the \$2 per day threshold. Even for the one exception, Bangladesh, working ten-hour days in the apparel industry results in earnings that exceed the \$1 per day that 36 percent of the population lives on.

The apparel industry has been widely criticized for "exploiting" Third World workers in sweatshops, but the data show that these workers are better off than most of their countrymen. Although the apparel industry as a whole pays better, anti-

Figure 2

Apparel Industry Wages as a Percent of Average National Income Per Worker



sweatshop activists sometimes single out particular firms as exploiters. We next look at examples in which specific firms have been protested for being sweatshops.

III. *Wages in Sweatshop Firms Compared to Local Living Standards*

Our data come from popular press articles that document sweatshop wages, and many of the wages quoted come directly from anti-sweatshop activists.⁵ Thus, any bias

Table 2
People Living on Less Than

	\$1 a Day	\$2 a Day
Bangladesh	36.0%	82.8%
Cambodia	34.1	77.7
China	16.6	46.7
Costa Rica	20.1	94.5
Dominican Republic	20.0	20.0
El Salvador	31.1	58.0
Honduras	23.8	44.4
Indonesia	7.5	52.4
Nicaragua	45.1	79.9
Vietnam	17.7	63.7

Source: World Bank, *World Development Indicators*.

Data for the most recent year available were used for each country. Currency conversions by PPP.

would understate the actual level of compensation.⁶ Despite this, we find that when compared to per capita income in these countries, most sweatshops pay more than the average standard of living.

Table 3 lists the wages that sweatshop workers reportedly earn and, when available, the company involved. These wages are obviously quite low compared to those in the United States, but a high percentage of people in these countries earn less than \$1 or \$2 per day. In 41 of 43 cases, working ten-hour days results in earning more than \$1 per day, and in more than half the earnings are greater than \$2 per day. Sweatshop wages raise workers' standard of living higher than a significant fraction of the population.

Figure 3 shows average reported sweatshop wages as a percent of each country's average income.⁷ Since many news articles contained hourly wage data without stating the number of hours worked, we again created four estimates that vary hours worked per week between 40 and 70. When articles reported daily wage data, we based our calculation on six days of work per week. The 40-hour estimate is probably low again since most sweatshop employees work long hours and often work six days per week. When articles provided estimated hours of work, most were in excess of 70 per week; we included the actual hours in the 70-hour estimate when they were available.

In nine of 11 countries, the reported sweatshop wages equal or exceed average income, doubling it in Cambodia, Haiti, Nicaragua, and Honduras (at 70 hours). However, these figures do not include non-monetary compensation. Nike's employees in Indonesia, for example, receive free health care and meals in addition to their wages (Jones, 1996). Since seven of eight Indonesian examples alleged that Nike factories are sweatshops, not including non-monetary compensation causes our Indonesian sweatshop wage estimates to appear far lower than they should. If firms in other countries also provide additional benefits, wages may be similarly understated. Overall, even with our data limitations, Figure 3 demonstrates that most of the jobs that some anti-sweatshop advocates protest raise their workers' standard of living above their nation's average.

Figure 3 compares sweatshop wages with average income for both workers and nonworkers. We can again make the adjustment, with the same data limitations as before, to compare protested sweatshop jobs with average income per worker. Due to not counting the large informal sector, we are again likely understating sweatshop earnings as a percent of average earnings per worker. Similarly, since much of our sweatshop wage data come from anti-sweatshop advocates, our data may again underestimate actual sweatshop wages.

Figure 4 shows that the average worker in a firm accused of being a sweatshop earns more than the average worker in Cambodia, Haiti, and Nicaragua. In most countries the protested wages are more than 60 percent of the average. It is important to remember the biases and limitations of these data when comparing these numbers.

In addition, the relevant comparison facing an individual worker is not average wages but individual alternatives. Sweatshops make a worker better off when they

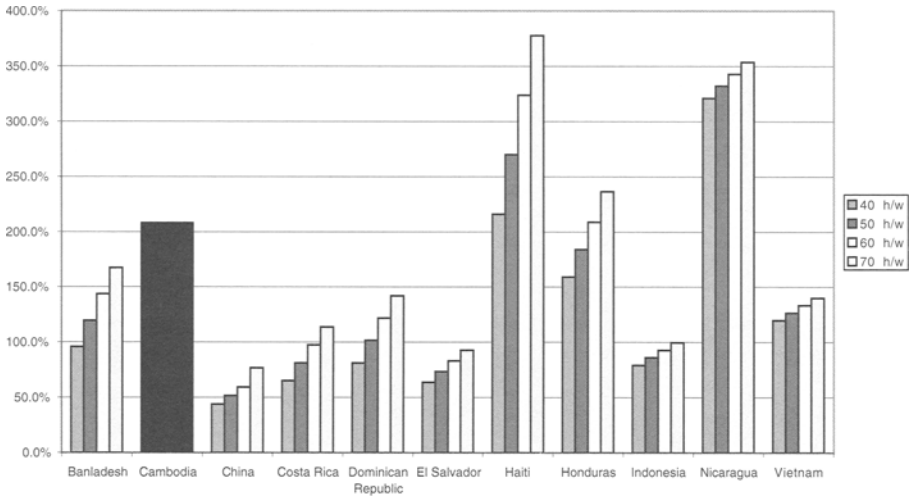
Table 3
Reported Sweatshop Weekly Wages

Country	Year	Company	Reported Wage
Bangladesh	2004	Mary Kate & Ashley	\$10.80
Bangladesh	2004	Mary Kate & Ashley	\$4.80
Bangladesh	1997		\$15.00
Burma	2004	NBA	\$8.40
Burma	2004	NBA	\$4.20
Cambodia	2004		\$12.00
China	2004	NFL, NBA, MLB	\$9.90
China	2004	NBA	\$9.60
China	2002		\$7.20
China	2001		\$12.00
China	2001		\$9.00
China	1998		\$7.80
China	1998		\$18.00
China	1997	Nike	\$10.50
China	1997		\$3.69
China	1996		\$5.77
Costa Rica	1998	Rawlings Baseball	\$67.20
Dominican Republic	2000		\$41.40
El Salvador	2001	Gap	\$33.00
El Salvador	2001	Gap	\$36.00
El Salvador	2001	Gap	\$30.00
Haiti	2004		\$33.00
Haiti	1996	Disney	\$16.80
Honduras	2003	P Diddy	\$45.00
Honduras	1996	Levi's and Nike	\$32.40
Honduras	1996	Wal-Mart/Kathie Lee	\$18.60
Honduras	1995		\$18.00
Indonesia	2002	Nike	\$16.20
Indonesia	1997	Nike	\$14.76
Indonesia	1996	Nike	\$13.68
Indonesia	1996		\$27.00
Indonesia	1996	Nike	\$26.54
Indonesia	1996	Nike	\$8.40
Indonesia	1996	Nike	\$13.20
Indonesia	1996	Nike	\$27.00
Nicaragua	2001		\$135.50
Nicaragua	2000	Kohl's dept. stores	\$18.00
Nicaragua	2000		\$10.20
Nicaragua	2000		\$11.40
Nicaragua	2000		\$12.00
Vietnam	2004	NBA	\$9.00
Vietnam	2000	Nike	\$10.85
Vietnam	1997	Nike	\$9.60

Note: Wages were reported as hourly, daily, weekly, and monthly. All were converted to weekly wages based on a 6-day, 60-hour work week.

Figure 3

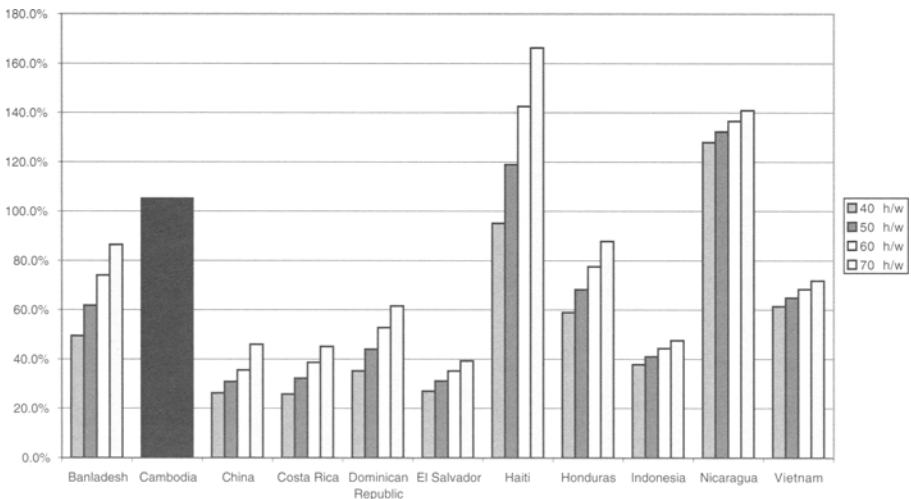
Average Protested Sweatshop Wages as a Percent of Average National Income



Note In Cambodia only weekly sweatshop wage data were available, so the various hourly estimates are not needed

Figure 4

Average Protested Sweatshop Wages as a Percent of Average National Income Per Worker



Note In Cambodia only weekly sweatshop wage data were available, so the various hourly estimates are not needed

pay more than the worker's next best alternative. Thus, even where earnings are less than 100 percent of average wages, as long as workers voluntarily choose to work at the sweatshop, the individual worker is better off.

Some caution should be used with the data for China. A few articles reported that the Chinese government "forced" people to work in sweatshops. If this is true, we cannot assume that the jobs make the workers better off. Since the extent to which the Chinese examples were voluntary or coerced was unclear, we averaged them all. As such, coerced labor may be causing their reported wages to be a lower percent of average income than other countries.

IV. Conclusion

Few dispute that multinational firms tend to pay their workers more than domestic firms in the Third World. Critics of sweatshops maintain that because subcontractors make many products for multinational firms, measuring only multinational firm wages does not address critics' complaints against sweatshops. We have addressed the deficiency in the literature by comparing apparel industry wages in countries that supposedly have sweatshops and the wages of individual firms accused of being sweatshops to measures of average standards of living in these countries. The data clearly show that, overall, apparel industry workers are far better off than most people in their economies.⁸ However, while the best available, the data were far from perfect. Biases are likely causing us to understate earnings as a percent of living standards. Despite data limitations, individual firms accused of paying sweatshop wages often still compare favorably with other standard of living measures.

NOTES

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¹Other excellent examples include Sowell (2004) and Henderson (2000).

²Countries where at least one U.S. news source claimed sweatshops existed were included.

³All data on average per capita income and labor force size in Figures 1–4 come from the World Bank's *World Development Indicators Online*, accessed July 2004. Conversions of per capita income from local currency to U.S. currency are made by the World Bank using the atlas method.

⁴The common perception is that "everybody works" in these countries, yet because much of the work is in agriculture or the informal sector, many workers are not counted in the official labor force participation numbers which we use.

⁵See Branigin (1998), Eversley (2000), Foster (2001), Greenhouse (1996), Greenhouse (2001), Grow (2000), Hayden and Kernaghan (2002), Hiam-White (1998), Holstrom (1996), Jones (1996), Kaufman and Gonzalez (2001), Kennel (1996), Mallick (1997), Meyer (1997), National Labor Committee (2004), O'Connor (1995), Pabst (2000), Sneider (2000), Stelzer (1996), *St. Petersburg Times* (1996), Tracinski (2000), *Washington Post* (2002), Wells (2004), and Williams (2004).

⁶Each article converted domestic wages into U.S. prices without mentioning the exchange rate method used for conversion. Two articles may quote different wages when referring to the same case because of different methods of conversion. When we identified multiple articles referring to the same case, we included the individual sweatshop only once in our sample.

⁷We compared each reported sweatshop wage with the average income in the year for which the wage was reported. To compare average sweatshop earnings to average income for a country without biasing the results, we also averaged the per capita income data for each observation. For example, if a country had two reported sweatshop cases in 1996, one in 1997 and one in 2000, we averaged those wages and compared to $[(\text{GNI } 1996) + (\text{GNI } 1996) + (\text{GNI } 1997) + (\text{GNI } 2000)]/4$.

⁸There are likely spillover benefits to the local economy in addition to the benefits that accrue to individual apparel and sweatshop workers. Since much of a sweatshop worker's income is spent locally, sweatshops can create additional jobs in their community. Sweatshops can also create additional demands for other services such as dockyards and airports to ship their products that will create a greater demand for other local laborers.

REFERENCES

- Academic Consortium on International Trade, ACIT Anti-Sweatshop Letter. <www.fordschool.umich.edu/rsie/acit/Documents/Anti-SweatshopLetterPage.html>, July, 2000.
- Aitken, Brian, Ann Harrison, and Robert Lipsey. "Wages and Foreign Ownership: A Comparative Study of Mexico, Venezuela, and the United States." *Journal of International Economics* 40 (May 1996): 345–71.
- Appelbaum, Richard and Peter Dreier. "The Campus Anti-Sweatshop Movement." *American Prospect*, September 1999.
- Branigin, William. "Chinese Sweatshops Labor for U.S. Retailers." *Washington Post*, March 19, 1998.
- Brown, Drusilla, Alan Deardorff, and Robert Stern. "The Effects of Multinational Production on Wages and Working Conditions in Developing Countries." National Bureau of Economic Research, Working Paper No. 9669, May 2003.
- Budd, John, Jozef Konings, and Matthew Slaughter. "International Rent Sharing in Multinational Firms." National Bureau of Economic Research, Working Paper No. 8809, February 2002.
- Budd, John and Matthew Slaughter. "Are Profits Shared Across Borders? Evidence on International Rent Sharing." National Bureau of Economic Research, Working Paper No. 8014, November 2002.
- Elliott, Kimberly and Richard Freeman. "White Hats or Don Quixotes? Human Rights Vigilantes in the Global Economy." National Bureau of Economic Research, Working Paper No. 8102, January 2001.
- Eversley, Melanie. "McKinney Says Military Buys from Sweatshop." *Atlanta Journal and Constitution*, December 6, 2000.
- Feenstra, Robert and Gordon Hanson. "Foreign Direct Investment and Relative Wages: Evidence from Mexico's Maquiladoras." *Journal of International Economics* 42 (May 1997): 371–93.
- Firoz, Nadeem and Caren Ammaturo. "Sweatshop Labour Practices: The Bottom Line to Bring Change to the New Millennium Case of the Apparel Industry." *Humanomics* 18 (2002): 29–45.
- Foster. "No Sweatshops, Please." *Milwaukee Journal Sentinel*, January 7, 2001.
- Greenhouse, Steve. "A Crusader Makes Celebrities Tremble." *New York Times*, June 18, 1996.
- . "Big-League Caps and Labor Flaps." *New York Times*, August 21, 2001.

- Grow, Doug. "Sweatshop Opponents Keep Up the Pressure on Kohl's: Members of St. Thomas the Apostle Add Their Voices with Christmas Messages to Executives." *Star Tribune*, December 25, 2000.
- Hayden, Tom and Charles Kernaghan. "Pennies an Hour, and No Way Up." *New York Times*, July 16, 2002.
- Henderson, David. "The Case for Sweatshops." *Weekly Standard*, February 7, 1997.
- Hiam-White, Heather. "A Look at . . . Manufacturing Christmas: Their Labor, Our Gifts, Your Choices." *Washington Post*, December 20, 1998.
- Holmstrom, David. "One Man's Fight against Sweatshops." *Christian Science Monitor*, July 3, 1996.
- Jones, Del. "Critics Tie Sweatshop Sneakers to 'Air' Jordan." *USA Today*, June 6, 1996.
- Kaufman, Leslie and David Gonzalez. "Made in Squalor: Reform Has Limits." *New York Times*, April 24, 2001.
- Kennel, Paul. "The Sweatshop Dilemma." *Christian Science Monitor*, August 21, 1996.
- Krugman, Paul. "In Praise of Cheap Labor, Bad Jobs at Bad Wages Are Better Than No Jobs at All." *Slate*, March 20, 1997.
- Lipsey, Robert and Fredrik Sjöholm. "Foreign Direct Investment and Wages in Indonesian Manufacturing." National Bureau of Economic Research, Working Paper No. 8299, May 2001.
- Mallick, Heather. "Stop the World I Want to Get Off." *Toronto Sun*, January 26, 1997.
- Mandle, Jay. "The Student Anti-sweatshop Movement: Limits and Potential." *Annals of the American Academy of Political and Social Science* 570 (July 2000): 92-103.
- . *Globalization and the Poor*. Cambridge, UK: Cambridge University Press, 2003.
- Meyer, Tara. "No Widespread Abuse at Nike's Asian Plants." *Chicago Sun-Times*, June 25, 1997.
- Miller, John. "Why Economists Are Wrong about Sweatshops and the Antisweatshop Movement." *Challenge* 46 (January/February 2003): 93-122.
- Moran, Theodore. *Beyond Sweatshops*. Washington, DC: Brookings Institution Press, 2002.
- National Labor Committee. "Sean John's Sweatshops." <www.nlcnet.org/campaigns/setisa/>, May 28, 2004.
- . "Toys of Misery 2004." <www.nlcnet.org/campaigns/he-yi/>, May 28, 2004.
- . "Baseball Workers Cry Foul." <www.nlcnet.org>, May 28, 2004.
- . "Bangladeshi Workers Deserve Maternity Rights." <www.nlcnet.org/>, May 28, 2004.
- . "Why Is the NBA Exploiting 7-Cent-an-Hour and Slave Labor, and Supporting Brutal Military Dictators and Drug Lords in Burma?" <www.nlcnet.org/campaigns/nba/>, May 28, 2004.
- O'Connor, Anne-Marie. "The Plight of Women Around the World; Central America; Labor: Sweatshops Meet U.S. Consumer Demand." *Atlanta Journal and Constitution*, September 3, 1995.
- Pabst, Georgia. "Nicaragua Union Leader Seeks Support for Garment Workers." *Milwaukee Journal Sentinel*, June 20, 2000.
- Scholars Against Sweatshop Labor. <umass.edu/epri/sasl/petition.htm>, October 2001.
- Sneider, Jaime. "Good Propaganda, Bad Economics." *New York Times*, May 16, 2000.
- Sowell, Thomas. "Third World Sweatshops: Why Cambodian Workers Bribe for 'Sweatshop' Jobs." *Capitalism Magazine* <capmag.com/article.asp?id=3487>, January 27, 2004.
- Stelzer, Irwin. "Sweatshops Put Heat on Bosses." *Sunday Times*, July 28, 1996.

- St. Petersburg Times*. "Celebrities Should Endorse Products Made in America." *St. Petersburg Times*, June 13, 1996.
- Tracinski, Robert. "Sweatshops or Opportunity for the Third World's Poor?" *San Diego Union-Tribune*, June 1, 2000.
- Washington Post*. "For Some, an Uncomfortable Fit." *Washington Post*, May 14, 2002.
- Wells, Jennifer. "T-Shirt Maker Struggles with Sweatshop Visuals." *Toronto Star*, February 29, 2004.
- Williams, Walter. "Sweatshop Exploitation." <www.gmu.edu/departments/economics/wew/articles/04/sweatshop.html>, January 27, 2004.
- World Bank. *World Development Indicators Online*. <www.worldbank.org/data>, May 2004.