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THE COST OF TRADE WITH CHINA

Women and Low-Wage Workers Hit Hardest by Job Losses in All 50 States

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The U.S. trade deficit with mainland China, which topped $39 billion in 1996, is growing more rapidly than with any other country. Last year, the U.S. imported $4.30 worth of goods from China for every $1 it exported there. So far in 1997, the deficit has risen another 30%.

Even if Hong Kong is included in China's trade figures, the U.S. still had a $35.5 billion deficit with China in 1996 (**Table 1**), an increase of $24.9 billion in real 1996 dollars since 1989 (the year of the last U.S. business cycle peak). This China-Hong Kong trade deficit translated into 603,759 lost job opportunities in 1996 (**Table 2**), an increase of 381,780 since 1989.

An analysis of the impact of this job loss among the states and among different socioeconomic groups reveals that:

- Every one of the 50 states and the District of Columbia has experienced net job loss as a result of the China deficit (**Table 3**). States with large job losses include California (61,521 jobs lost), New York (45,424), North Carolina (42,285), Pennsylvania (32,434), and Georgia (23,857). These losses represent, in part, the high concentration of apparel, footwear, and toy industry employment in these states.
- Women have been particularly hard hit (**Table 4**), absorbing 328,000 job losses (54% of the total, although they represent only 47% of the labor force). Blacks, Hispanics, and other minorities also experienced disproportionately large job losses, reflecting the heavy employment of all of these groups in the industries noted above.

- Low-wage workers and workers with low levels of education experienced a disproportionately large share of lost job opportunities. Workers in the bottom fifth of the income distribution, who make up 36% of the labor force, lost 44% of the jobs. Workers with no college education, who represent half of the labor force, lost 68% of the jobs.
- Sectors with major trade deficits in 1996 included apparel (146,000 jobs lost), toys (66,000 jobs lost), footwear (60,000 jobs lost), textiles (58,000 jobs lost), and consumer electronic devices (29,000 jobs lost).
- Recent trade data (U.S. Department of Commerce 1997) show that China is now moving up the product ladder. While Chinese exports to the U.S. of apparel, toys, and footwear continue to grow rapidly, China is also rapidly increasing its exports of computer equipment and consumer electronic devices. This new trend suggests that job losses among higher-wage workers will grow as the persistent China trade deficit continues to expand.

There are two primary causes of the United States' trade deficits with China (Commission on U.S.-Pacific Trade and Investment Policy 1997, 61-77). The first is China's complex set of formal and informal barriers to imports, complemented by numerous official discriminatory trade policies and by China's failure to live up to its commitments under international trade agreements. The second is the undervaluation of China's currency, the yuan. Following the model of export-led development initially established by Japan and later by Korea and Taiwan, China has been able to accumulate immense foreign exchange reserves by intervening to depress the value of its own currency, thereby promoting exports and discouraging imports.

TABLE 1
U.S. Trade With China and Hong Kong, 1989 and 1996
(Millions, 1996 Dollars)

	China	Hong Kong	China & Hong Kong
Exports			
1989	$6,570	$6,806	$13,376
1996	11,978	13,956	25,934
Change	5,408	7,149	12,557
Imports			
1989	$13,257	$10,611	$23,868
1996	51,495	9,867	61,363
Change	38,239	(744)	37,495
Net Exports			
1989	$(6,687)	$(3,805)	$(10,492)
1996	(39,517)	4,088	(35,429)
Change	(32,830)	7,893	(24,937)

TABLE 2
Job Effects of U.S. Trade With China and Hong Kong, 1989 and 1996

	China	Hong Kong	China & Hong Kong
Exports			
1989	80,125	73,755	153,880
1996	141,568	161,273	302,841
Change	61,443	87,518	148,960
Imports			
1989	(205,865)	(169,994)	(375,859)
1996	(744,751)	(161,848)	(906,599)
Change	(538,886)	8,146	(530,740)
Net Exports			
1989	(125,740)	(96,239)	(221,979)
1996	(603,183)	(576)	(603,759)
Change	(477,444)	95,664	(381,780)

TABLE 3
Job Loss Due to China-Hong Kong Trade, by State, 1996

State	Net Job Loss*		Share of U.S. Labor Force	Change in Real Median Wage
	No. of Jobs	Share of Total		
U.S. Total	(603,759)	100%	100%	-4.0%
Alabama	(17,150)	3%	1.5%	-4.1%
Alaska	(324)	0%	0.2%	-5.8%
Arizona	(4,501)	1%	1.5%	-9.8%
Arkansas	(10,454)	2%	0.9%	-0.7%
California	(61,521)	10%	10.6%	-5.1%
Colorado	(5,538)	1%	1.6%	4.2%
Connecticut	(5,209)	1%	1.3%	0.0%
Delaware	(727)	0%	0.5%	1.2%
District of Columbia	(767)	0%	0.3%	-0.8%
Florida	(15,272)	3%	5.1%	1.6%
Georgia	(23,857)	4%	2.9%	-0.2%
Hawaii	(801)	0%	0.5%	-7.8%
Idaho	(920)	0%	0.4%	-0.4%
Illinois	(22,805)	4%	4.8%	-1.1%
Indiana	(19,750)	3%	2.4%	1.6%
Iowa	(4,818)	1%	1.2%	5.2%
Kansas	(1,443)	0%	1.0%	-1.3%
Kentucky	(12,441)	2%	1.4%	2.5%
Louisiana	(4,778)	1%	1.5%	-5.8%
Maine	(10,705)	2%	0.5%	0.3%
Maryland	(4,334)	1%	1.9%	0.4%
Massachusetts	(18,838)	3%	2.5%	-3.7%
Michigan	(15,805)	3%	3.6%	3.4%
Minnesota	(9,764)	2%	2.0%	3.8%
Mississippi	(10,483)	2%	0.9%	1.2%
Missouri	(17,296)	3%	2.2%	1.8%
Montana	(752)	0%	0.3%	-1.2%
Nebraska	(1,692)	0%	0.7%	0.6%
Nevada	(1,649)	0%	0.7%	-1.9%
New Hampshire	(4,592)	1%	0.5%	1.4%
New Jersey	(17,076)	3%	3.1%	-4.7%
New Mexico	(1,435)	0%	0.6%	-1.3%
New York	(45,524)	8%	6.7%	-4.2%
North Carolina	(42,285)	7%	2.9%	3.4%
North Dakota	(86)	0%	0.3%	2.7%
Ohio	(21,721)	4%	4.5%	-2.6%
Oklahoma	(4,115)	1%	1.1%	-5.3%
Oregon	(4,829)	1%	1.2%	-6.1%
Pennsylvania	(32,434)	5%	4.5%	-0.2%
Rhode Island	(5,237)	1%	0.4%	-2.1%
South Carolina	(17,053)	3%	1.4%	-0.9%
South Dakota	(632)	0%	0.3%	6.2%
Tennessee	(27,943)	5%	2.1%	1.5%
Texas	(32,857)	5%	6.9%	-4.6%
Utah	(4,531)	1%	0.8%	0.8%
Vermont	(1,124)	0%	0.2%	-2.5%
Virginia	(14,730)	2%	2.6%	-5.7%
Washington	(4,950)	1%	2.0%	-9.9%
West Virginia	(2,543)	0%	0.6%	1.2%
Wisconsin	(13,429)	2%	2.2%	-0.8%
Wyoming	(243)	0%	0.2%	-1.6%

* Excluding effects on wholesale and retail trade and advertising.

Source: EPI analysis of BLS and Census Bureau data.

TABLE 4
Employment Impact of 1996 Trade Deficits With China and Hong Kong
(Thousands of Jobs)

	Job Changes Induced by Trade Deficit*		Share of Labor Force**	
			Whole Economy	Manuf. Only
Total	(604)	100%	100%	100%
Men	(276)	46%	53%	65%
Women	(328)	54	47	35
White	(463)	77%	80%	81%
Black	(67)	11	10	9
Hispanic	(34)	6	5	6
Other	(40)	7	5	5
College	(64)	11%	19%	14%
Non-college	(540)	89	81	86
Some College	(128)	21	31	26
High School	(231)	38	31	38
Less Than High School	(181)	30	19	23
Wage Bracket***				
High (75-99)	(93)	15%	21%	25%
Medium (21-75)	(247)	41	43	48
Low (0-20)	(264)	44	36	28
Agriculture	16	-3%	3%	—
Manufacturing	(545)	90	16	—
Services	(70)	12	55	—
Other	(4)	1	26	—

* Excluding effects on wholesale and retail trade and advertising.
** Census data on 1989 labor force.
*** Wage brackets are based on the real 1979 wage distribution. Numbers in parentheses are percentiles. Brackets correspond to hourly wages of less than $8.83, $8.84 to $19.08, and above $19.09 (1996 dollars).

Source: EPI analysis of BLS and Census Bureau data.

Methodology[1]

This study uses a newly developed model for analyzing the effects of trade on employment. This model solves some of the problems prevalent in recent research (see, for example, U.S. Department of Commerce 1996), which include:

- looking only at the effects of exports and ignoring those of imports;
- using trade data that have not been adjusted for inflation;
- applying single employment multipliers to all industries, despite differences in labor productivity and utilization.

This study's model is based on the Bureau of Labor Statistics' 183 sector employment requirement table, which was derived from the 1987 U.S. input-output table and adjusted to 1993 price and productivity levels (BLS 1996). The model uses three-digit-industry, SIC-based trade data (Bureau of the Census 1997), deflated with new industry-specific, chain-weighted price indices (BLS 1997a).

We have extended the model to calculate state-level employment effects. Imports and exports are allocated to the states on the basis of their share of three-digit, industry-level employment (BLS 1997b).[2] Similarly, demographic impacts are based on the demographic characteristics of each industry's workforce.

Endnotes

1. See Rothstein and Scott (1997a) and Scott, Lee, and Schmitt (1997) for a more detailed treatment of the methodology used.

2. Other studies have allocated all employment effects to the state of the exporting company. This practice is problematic because the production—along with any attendant effects—need not have taken place in the exporter's state. If a Chicago firm buys grain from a farmer in North Dakota and sells it to China, these studies will find job creation in Illinois. The grain, however, is not grown in Illinois; the employment effects should instead be attributed to North Dakota and other states with high levels of agricultural production. Likewise, if the same firm buys apparel from China, the loss of employment will occur in apparel industry states, not in Illinois.

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