2007

Capital Mobility and Job Loss: Corporate Restructuring, Production Shifts, and Outsourcing

Stephanie Luce  
*University of Massachusetts - Amherst*

Kate Bronfenbrenner  
*Cornell University, klb23@cornell.edu*

Follow this and additional works at: [https://digitalcommons.ilr.cornell.edu/articles](https://digitalcommons.ilr.cornell.edu/articles)

Part of the [International and Comparative Labor Relations Commons](https://digitalcommons.ilr.cornell.edu/articles), [International Business Commons](https://digitalcommons.ilr.cornell.edu/articles), and the [Organizational Behavior and Theory Commons](https://digitalcommons.ilr.cornell.edu/articles)

**Thank you for downloading an article from DigitalCommons@ILR.**
**Support this valuable resource today!**

---

This Article is brought to you for free and open access by the ILR Collection at DigitalCommons@ILR. It has been accepted for inclusion in Articles and Chapters by an authorized administrator of DigitalCommons@ILR. For more information, please contact catherwood-dig@cornell.edu.
Capital Mobility and Job Loss: Corporate Restructuring, Production Shifts, and Outsourcing

Abstract
[Excerpt] This chapter examines the impact of corporate restructuring and global outsourcing on employment in the Commonwealth and the shifts in production from workplaces in Massachusetts to other countries. In particular we focus on global outsourcing, the shifting of work from Massachusetts offshore to countries in Europe and Asia, and nearshore to Canada and countries in Latin America. Given the huge media attention that outsourcing and nearshoring have garnered, and the increasing trend they represent toward corporate restructuring and capital mobility with lasting repercussions for workers, families, unions, and communities in the Commonwealth, it is important to assess their relative impact on job loss in the state.

Keywords
Massachusetts, employment, outsourcing, production, nearshoring

Disciplines
International and Comparative Labor Relations | International Business | Organizational Behavior and Theory

Comments
Suggested Citation
http://digitalcommons.ilr.cornell.edu/articles/258/

Required Publisher Statement
Published in The Future of Work in Massachusetts edited by Tom Juravich. Copyright (c) 2007 by University of Massachusetts Press. http://www.umass.edu/umpress/title/future-work-massachusetts

This article is available at DigitalCommons@ILR: https://digitalcommons.ilr.cornell.edu/articles/258
Capital Mobility and Job Loss

Corporate Restructuring, Production Shifts, and Outsourcing

Stephanie Luce and Kate Bronfenbrenner

Over the past several years, global outsourcing—the shifting of jobs from the United States to other countries—has been a hot-button issue in American politics. Lou Dobbs made the “Exporting of America” a regular feature of his nightly news show, and states such as Ohio suddenly came up for grabs in the presidential race when John Kerry was unable to offer a motivating vision for the tens of thousands of workers who had watched their good jobs and their economic hopes and futures disappear over the previous decade. But as we found in our recent study on global outsourcing, completed for the U.S. China Economic Security Commission in the fall of 2004 (Bronfenbrenner and Luce), this is not just a U.S. story or a U.S. problem. Throughout the world, U.S.- and foreign-owned multinationals are simultaneously shifting production from high-wage countries to multiple low-wage destinations, across nearly every industry and market. Massachusetts, historically ahead of the curve in many U.S. economic trends, has played a similar role in the pattern of global outsourcing. Therefore, the story of global outsourcing in Massachusetts provides important insight into what is happening in the rest of the United States and worldwide.

In March 2004, when the U.S. Department of Labor released results of a study on job losses nationwide, Massachusetts was the state that had experienced the greatest percentage of job loss (more than 6 percent, compared with 2 percent nationally) since the recession of 2001 (Gavin 2004a). Indeed, unemployment rates rose from 2.7 percent in January 2001 to 5.6 percent in January 2004, and news stories seemed to confirm what many workers were feeling: they had been hit hard by a combination of plant closings, layoffs, and outsourcing. To understand the future
of work in Massachusetts, one must understand the phenomenon behind these trends. Where are the jobs going, and what, if anything, is different about what is happening in Massachusetts and what is happening in the rest of the country with regard to job loss and global outsourcing trends?

This chapter examines the impact of corporate restructuring and global outsourcing on employment in the Commonwealth and the shifts in production from workplaces in Massachusetts to other countries. In particular, we focus on global outsourcing, the shifting of work from Massachusetts offshore to countries in Europe and Asia, and nearshore to Canada and countries in Latin America. Given the huge media attention that outsourcing and nearshoring have garnered, and the increasing trend they represent toward corporate restructuring and capital mobility with lasting repercussions for workers, families, unions, and communities in the Commonwealth, it is important to assess their relative impact on job loss in the state.

Massachusetts has always been at the forefront of economic trends in this country. It was among the first states to undergo industrialization when textile mills developed in the eastern part of the state in the early 1800s, and some of the country’s earliest and most vibrant unions began in the Commonwealth. Then, by the 1970s, Massachusetts was one of the first states to experience large-scale deindustrialization. Although companies had been leaving for southern states for years, in this period there was a particularly large wave of plant closings and downsizings that shut manufacturing plants across the Commonwealth (Bluestone, Harrison, and Baker 1981). The state managed to rebuild its economy in the late 1980s and 1990s by encouraging the growth of the high-tech information and financial sectors. But when these industries began to source work to lower-wage countries in the late 1990s and early 2000s, Massachusetts again seemed the first to demonstrate a trend. And given that the state had a higher concentration of technology workers than most (7.5 percent of total employment, compared with 4.5 percent nationally), it was hit early by the high-tech stock-market-bubble crash (New England Economic Partnership 2004; Gavin 2004b).

In examining corporate restructuring and global outsourcing of jobs from Massachusetts in 2004, we compare state numbers with national data on global outsourcing for the first quarters of 2004 and 2001 (which we collected in studies we were asked to conduct by the U.S. China Economic Security Review Commission and its predecessor, the U.S. Trade Deficit Review Commission) to gain a better understanding of the nature, extent, and economic impact of national global outsourcing trends on U.S. workers and employment (Bronfenbrenner and Luce 2004; Bronfenbrenner and Burke et al. 2001).

Although globalization and outsourcing of jobs media and policy debates, there c measures the trends and the impact on a few limited sour First, there are data collected on the number of workers covered as well as their basic characteristics of job loss due to imports and job loss, however, that Massachusetts the number of TAA petitions filed a slight drop-off in 2004.

Second, private consulting firms level predictions estimating the number of millions of white-collar jobs, including tens of millions of white-collar and 2014 (Hilsenrath 2004; Krol tional, not state, data. Our own r and 2004 did break down our time period (one quarter) to provide a real understanding of the nature at small state such as Massachusetts Bronfenbrenner and Luce 2004), the same media-tracking methododevelop a clearer picture of the ext the Commonwealth.

Research Design

To calculate the number of planned we replicated our research metho...
Although globalization and outsourcing have become hot topics in the media and policy debates, there continue to be few hard data available to measure the trends and the impact on jobs and wages. Analysts therefore tend to rely on a few limited sources of information.

First, there are data collected by the federal government through the administration of government programs or policies. These include Trade Adjustment Act (TAA) data, administered through the Department of Labor (DOL).¹ The TAA provides for assistance to workers whom the DOL determines to have lost their jobs because of increased imports or production shifts overseas. Unfortunately, although the TAA compiles statistics on the number of workers covered by certified TAA petitions each year, as well as their basic characteristics, these data do not distinguish between job loss due to imports and job loss due to production shifts. These data do show, however, that Massachusetts experienced a steady increase in the number of TAA petitions filed and certified from 2001 to 2003, with a slight drop-off in 2004.

Second, private consulting firms and academic experts have made national-level predictions estimating the numbers of jobs expected to be outsourced in coming years, including extremely high estimates for the outsourcing of tens of millions of white-collar and service-sector jobs between 2004 and 2014 (Hilsenrath 2004; Kroll 2004), but all of these have been national, not state, data. Our own research on global outsourcing in 2001 and 2004 did break down our findings by state but focused on too brief a time period (one quarter) to provide the level of detail necessary to gain a real understanding of the nature and extent of global outsourcing within a small state such as Massachusetts (Bronfenbrenner and Burke et al. 2001; Bronfenbrenner and Luce 2004). For this reason we decided to employ the same media-tracking methodology we used in our national studies to develop a clearer picture of the extent and effects of global outsourcing in the Commonwealth.

Research Design and Methodology

To calculate the number of planned or actual job shifts in Massachusetts, we replicated our research methodology from previous studies. We constructed a database of firm and job relocations using an extensive search of English-language media sources, relying heavily on international, national, and regional news sources in Lexis-Nexis (the premiere database for full-text global news sources), as well as other online media search engines. We looked for cases of plant closings and relocations from Massachusetts to any other country, using a complex Boolean search string,
on a day-by-day basis for January 1 through December 31, 2004. In addition, we utilized government data sources to track plant closings, including TAA applications and determinations, Worker Adjustment and Retraining Notification (WARN) notices, and a variety of other sources (for more detail, see Bronfenbrenner and Luce 2004):

For each case where we were able to confirm a planned or actual production shift, we conducted follow-up research for additional or corroborating information. This research sought descriptive information on the company, parent company, and parent company's country and financials, as well as on the location of the city and country to which the production was shifted.²

There are limitations to using media-tracking for this work. Although a growing amount of information is available through electronic sources, we found that companies are increasingly reluctant to make public announcements about production shifts because of the sensitivity that surrounds outsourcing and globalization, and they are also increasingly effective at covering up production shifts where they occur. For this, among other reasons, we estimate that we were able to capture only a portion of the shifts out of the state.³ Additionally, our research has measured only Massachusetts-based employers that are outsourcing work overseas. It does not capture firms that are currently expanding in overseas locations but not necessarily laying off workers in the United States. In some cases, this expansion may result in job growth in both countries. In other cases, the overseas expansion lays the groundwork for slowly shifting production abroad over time by no longer hiring in Massachusetts and hiring only in the new locales. Finally, these data do not include all cases of plant closings and job loss due to foreign competition (increased imports). Although such job losses are just as significant to workers and their families, and just as relevant for deliberation on industrial policy and job creation, for the purposes of this study we focus solely on those instances when corporations move production across national borders. Despite these limitations, we believe our data provide the most concrete and best available analysis of actual outsourcing trends.

Companies Shifting Production Out of Massachusetts

Table 3.1 describes the companies shifting production out of the country from Massachusetts and compares them with what we found in our national database for 2004.⁴ In total, we found thirty-four companies that had announced plans for relocation or had relocated work out of Massachusetts to other countries. Companies were remarkably similar to other countries nations. As in the rest of the country Massachusetts tended to be large, that had been in operation for, Massachusetts companies, however, the sector than their national comparison, thus, were likely time (137 versus 292), since many than those in the nonmanufacturing out of Massachusetts: finance, bus information technology (IT).

Massachusetts firms tended to and to be slightly less likely to beference is that Massachusetts firm with only 55 percent having been compared with the national rate of average years under the current owner (18 versus 24), eighteen for the United States overing production out of Massachusetts only five years or less.
Massachusetts to other countries in 2004. Although in many ways these companies were remarkably similar to the companies that were shifting production to other countries nationally, we found some important exceptions. As in the rest of the country, companies shifting production out of Massachusetts tended to be large, publicly held, U.S.-based multinationals that had been in operation for, on average, more than forty-five years. Massachusetts companies, however, were less likely to be in the manufacturing sector than their national counterparts (71 versus 83 percent) and thus, not surprisingly, were likely to shift, on average, fewer jobs at one time (137 versus 292), since manufacturing employers tend to be larger than those in the nonmanufacturing industries that are shifting production out of Massachusetts: finance, business services, and communications and information technology (IT).

Massachusetts firms tended to have slightly smaller parent companies and to be slightly less likely to be foreign-owned. The other notable difference is that Massachusetts firms tended to be somewhat "younger," with only 55 percent having been in operation more than twenty years, compared with the national rate of 76 percent; similarly, they had fewer average years under the current owner (eleven for Massachusetts versus eighteen for the United States overall). In fact, half of the companies shifting production out of Massachusetts had been under the same owner for only five years or less.

<table>
<thead>
<tr>
<th>Company characteristics</th>
<th>From Massachusetts</th>
<th>From all U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>percent in manufacturing sector</td>
<td>71%</td>
<td>83%</td>
</tr>
<tr>
<td>percent in nonmanufacturing sector</td>
<td>29%</td>
<td>17%</td>
</tr>
<tr>
<td>average number of jobs shifted</td>
<td>137</td>
<td>292</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parent company characteristics</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>average total employees</td>
<td>24,012</td>
<td>38,316</td>
</tr>
<tr>
<td>average annual revenue (US$millions)</td>
<td>$7,358</td>
<td>$9,922.6</td>
</tr>
<tr>
<td>average net income (US$millions)</td>
<td>$548</td>
<td>$654.6</td>
</tr>
<tr>
<td>subsidiary</td>
<td>62%</td>
<td>58%</td>
</tr>
<tr>
<td>publicly held</td>
<td>79%</td>
<td>74%</td>
</tr>
<tr>
<td>privately held</td>
<td>21%</td>
<td>26%</td>
</tr>
<tr>
<td>U.S.-based multinational</td>
<td>88%</td>
<td>75%</td>
</tr>
<tr>
<td>foreign-based multinational</td>
<td>12%</td>
<td>25%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company ownership history</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>average years in operation</td>
<td>47</td>
<td>45</td>
</tr>
<tr>
<td>percent more than 20 years in operation</td>
<td>55%</td>
<td>76%</td>
</tr>
<tr>
<td>average years under current owner</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>percent 10 years or less under current owner</td>
<td>76%</td>
<td>55%</td>
</tr>
</tbody>
</table>
These differences in parent companies can be best explained through examining production shifts by industry. Table 3.2 provides a breakdown by industry, comparing Massachusetts firms with the firms in our national study. The most striking aspect of the data is the high concentration of firms leaving Massachusetts that are in the electronics and electrical equipment industry. These, after all, were the new high-tech firms that were supposed to rebuild the Massachusetts economy after the deindustrialization of the preceding generation. Yet 38 percent of all firms shifting production out of Massachusetts to foreign countries and 63 percent of all jobs leaving Massachusetts for foreign countries were in the electronics and electrical equipment industry (including well-known companies such as Sanmina SCI, Texas Instruments, ITT, and AGFA and newer entries such as Medtronics, Medsource Technologies, and Juniper Networks), in contrast to the national picture, where only 16 percent of firms shifting production out of the country and 13 percent of all jobs shifted offshore or nearshore were in the electronics or electrical equipment industry.

At the same time, Massachusetts had a higher concentration of production shifts in one of its oldest industries, industrial equipment and machinery, reflecting the long tradition of skilled toolmaking that still has a foothold in the state (Juravich 2005). Twelve percent of the firms with shifts and 11 percent of jobs lost in the state were in industrial equipment and machinery manufacturing, compared with 9 percent of the firms and 5 percent of the jobs lost nationwide. The remaining Massachusetts manufacturing job losses ranged from 6 percent in apparel, textile, and footwear to 1 percent in chemicals and petroleum to 2 percent each in aerospace, metal fabrication, and plastics, glass, and rubber.

As mentioned above, the Massachusetts firms are much less likely to be in manufacturing and much more likely to be in nonmanufacturing industries than firms shifting production nationwide. As presented in Table 3.2, 15 percent of Massachusetts firms shifting production out of the country were in communications and IT, and 15 percent were in finance, insurance, and real estate. Shifts in communications and IT were comparable to the national average (14 percent), though the percentage of jobs lost in that industry was lower (4 percent for Massachusetts compared with 9 percent nationally). As with our national research, we estimate that media-tracking captures only a fraction of the job losses in this industry, since outsourcing in communications and IT tends to be a two-stage process, where work goes first to a U.S.-based outsourcing firm prior to being outsourced overseas, so it is virtually impossible to get an accurate count of the total number of jobs lost (Bronfenbrenner and Luce 2004). Also, compared with those affected by manufacturing-sector production shifts, workers in these industries are likely to be notified by TAA or the WARN Act, so it is rare for these workers to be notified or for confirmation of a production shift to be made public. In contrast, we found a high concentration of production shifts in the finance sector in Massachusetts. In that sector, 9 percent of firms shifting production out of the country and 8 percent of jobs leaving Massachusetts (compared with only 2 percent nationwide) were in the finance sector. We believe that, because the media tend to cover the industry, the actual number of job losses in the finance sector is actually higher than we found through our media-tracking efforts.

In contrast, we found a high concentration of production shifts in the manufacturing industry. In Massachusetts, 38 percent of firms shifting production out of the country and 63 percent of all jobs leaving Massachusetts for foreign countries were in the electronics and electrical equipment industry (including well-known companies such as Sanmina SCI, Texas Instruments, ITT, and AGFA and newer entries such as Medtronics, Medsource Technologies, and Juniper Networks), in contrast to the national picture, where only 16 percent of firms shifting production out of the country and 13 percent of all jobs shifted offshore or nearshore were in the electronics or electrical equipment industry.
ies can be best explained through 

Table 3.2 provides a breakdown 
firms with the firms in our national 
data is the high concentration of 
the electronics and electrical equip-
new high-tech firms that were 
economy after the deindustrializa-
8 percent of all firms shifting pro-
countries and 63 percent of all 
countries were in the electronics 
cluding well-known companies such 
ologies, and Juniper Networks), in 
only 16 percent of firms shifting 
percent of all jobs shifted offshore or 
ection of the electronics and electrical equipment industry.

a higher concentration of produc-
industrial equipment and ma-
skilled toolmaking that still has . Twelve percent of the firms with 
state were in industrial equipment 
ed with 9 percent of the firms and 
Massachusetts manu-
apparel, textile, and footwear 
1 to 2 percent each in aero-
lss, and rubber.6

setts firms are much less likely to likely to be in nonmanufacturing 
nationwide. As presented in Ta-
rms shifting production out of the 
T, and 15 percent were in finance, 
communications and IT were compa-
nt), though the percentage of jobs 
cent for Massachusetts compared 
our national research, we estimate 
ion of the job losses in this indus-
s and IT tends to be a two-stage 
s-based outsourcing firm prior to 
ially impossible to get an accurate 
Bronfenbrenner and Luce 2004). 
manufacturing-sector production 
shifts, workers in these industries are much less likely to be covered under 
TAA or the WARN Act, so it is more difficult to obtain initial information 
about or confirmation of a production shift. Thus, given our experience 
with the national data, we would assume that in a state like Massachu-
setts, which has a high level of employment in communications and IT, the 
actual number of job losses in this industry is at least triple the number we 
found through our media-tracking research.

In contrast, we found a higher percentage of firms shifting jobs in the 
finance sector in Massachusetts than nationally: 15 percent of firms shift-
ning jobs and 8 percent of jobs lost in Massachusetts were in the finance in-
dustry, compared with only 2 percent of all firms and 1 percent of jobs lost 
nationwide.7 We believe that, because Boston is a U.S. financial center, the 
media tend to cover the industry there much more heavily than elsewhere.

In addition, unlike many financial-sector job losses, which tended to be in 
large anonymous firms in large cities, the job losses in Massachusetts oc-
curred in small communities such as Quincy, Everett, and Malden, where 
the layoff of even 30 workers is considered a major local news story, and 
the potential loss of 300 jobs at Mellon Financial Services would be all but 
impossible to keep out of the press.

Production Shifts, Unionization, and TAA Claims

One dramatic consequence of the very different kinds of industries shifting 
jobs out of Massachusetts versus those shifting jobs nationwide is that the
Stephanie Luce and Kate Bronfenbrenner

state lost many fewer union jobs, proportionately, than did the country as a whole. In our national sample we found that 39 percent of all jobs being shifted overseas were union jobs; in contrast, only 8 percent of Massachusetts jobs lost were in unionized firms. This difference was likely due to a combination of factors. First, many of the unionized manufacturing jobs had already left the state in earlier decades: heavily unionized jobs in textiles, machine tooling, automobiles, metal fabrication, and the previous generation of the electronics industry (General Electric). Second, in the national data the highest percentage of union job losses were in metal fabrication, appliances, auto parts, food processing, household goods, and wood and paper products, industries not present in Massachusetts. In contrast, the kinds of manufacturing firms leaving Massachusetts in 2004 tended to be the newer, high-tech electronics companies, which unions have found extremely difficult to organize (Bronfenbrenner 2006).

One of our most striking findings was that, on average, Massachusetts firms were more than twice as likely to file TAA petitions as the national average. Our national study found TAA claims filed in only 31 percent of all production shifts out of the United States, and much more commonly in unionized than in nonunion firms. Three-quarters of the TAA petitions nationally were in manufacturing, and 99 percent of manufacturing petitions were certified, whereas none of the petitions in nonmanufacturing industries—such as call centers or research and design IT companies—were certified, on the grounds that they were not producing a product and therefore were not covered under the TAA.

Yet in Massachusetts we found that TAA claims were filed in 74 percent of all cases. If there was no union, then the company or the workers themselves filed the claim. Eighty-four percent were filed in manufacturing firms, and 100 percent of these were certified. In nonmanufacturing industries, two cases were certified: one was pending as of spring 2005, and one, a software design firm, was denied, consistent with the national pattern. This may in part reflect the Bay State’s long experience with capital flight and the active community involvement in supporting and educating workers who have experienced job loss as a result of capital mobility and in holding employers accountable for that job loss. The Massachusetts media are so filled with stories about workers getting TAA benefits that even unorganized workers have become familiar with their rights to these benefits and may be more likely to put pressure on the employer and the state to ensure that they receive financial and training benefits available to them. Yet the most likely reason for the higher number of TAA claims filed in Massachusetts than in other states is the active role played by the state AFL-CIO and local labor councils in educating workers, community employers about their rights and reing process, thereby making it mu ng employer laying off significant without having a TAA claim filed.

Destination of Jobs Being Out

Table 3.3 breaks down the shifts by destination region and country. There were more than seventeen countries on the list, with one-third of jobs being shifted overseas. Asia received the most shifts (50 percent). Fifty-six percent of Massachusetts jobs were going to Mexico and 24 percent of all production shifts were going to Mexico. Yet despite the attention the media regarding outsourcing, Mexico's destination for global relocation of jobs is more engaging than other countries'.

The national data, too, found the United States in both manufacturing and nonmanufacturing industries to be a key destination for global relocation of jobs. In Massachusetts, there were 20 percent of the shifts going to Mexico and 119 for Canada, and only 37 for Europe. The Massachusetts economy is heavily concentrated in Mexico. For example, shifts out of the U.S. in electronics, communications, and finance industries, search that those industries have b to than Latin America, whereas it processing, and metal fabrication concentrated in Mexico. For exam...
opportunely, than did the country 
we found that 39 percent of all jobs 
in contrast, only 8 percent of Mas-
ther. This difference was likely due 
any of the unionized manufacturing 
for decades: heavily unionized jobs in 
s, metal fabrication, and the previ-
ustry (General Electric). Second, in 
ge of union job losses were in metal 
ood processing, household goods, 
is not present in Massachusetts. In 
irms leaving Massachusetts in 2004 
tronics companies, which unions 
ize (Bronfenbrenner 2006).
that, on average, Massachusetts 
ile TAA petitions as the national 
a claims filed in only 31 percent of 
ates, and much more commonly 
hree-quarters of the TAA petitions 
99 percent of manufacturing peti-
ions in nonmanufacturing 
ach and design IT companies— 
ere not producing a product and 
AA.
TAA claims were filed in 74 per-
hen the company or the workers ercent were filed in manufacturing 
ertified. In nonmanufacturing in-
as pending as of spring 2005, and 
, consistent with the national pat-
ate’s long experience with capital 
ent in supporting and educating 
as a result of capital mobility and 
hat job loss. The Massachusetts 
kers getting TAA benefits that 
familiar with their rights to these 
ressure on the employer and the 
el and training benefits available 
e higher number of TAA claims 
 is the active role played by the 
state AFL-CIO and local labor councils on Workforce Investment Boards 
in educating workers, community groups, local government officials, and 
ey employers about their rights and responsibilities in the workforce retrain-
ing process, thereby making it much less likely that a major manufactur-
ing employer laying off significant numbers of employees would get away 
without having a TAA claim filed.

Destination of Jobs Being Outsourced by Massachusetts Firms

Table 3.3 breaks down the shifts and the jobs leaving Massachusetts by 
destination region and country. Thirty-four U.S. firms shifted work to 
more than seventeen countries on five continents. In total, some 4,320 
jobs were shifted overseas. Asia remained the primary target for U.S. pro-
duction shifts (50 percent). Fifty-two percent of Massachusetts shifts and 
56 percent of Massachusetts jobs moved to Asian countries, and nearly a 
quarter (24 percent) of all production shifts from Massachusetts moved to 
China. Yet despite the attention that China and India have received in the 
media regarding outsourcing, Mexico continued to be the largest single 
destination for global relocation of jobs leaving the state: 29 percent of the 
total jobs leaving Massachusetts went to Mexico.

The national data, too, found Mexico the primary destination for jobs 
leaving the United States in both our 2001 and 2004 studies. The differ-
ence between Massachusetts and the national data is that, nationally, 41 
percent of production shifts went nearshore, with 27 percent of all pro-
duction shifts going to Mexico and 14 percent going elsewhere in Latin 
America. In Massachusetts there was only one production shift to Costa 
Rica; 20 percent of the shifts went to Mexico. A much higher percentage 
of Massachusetts jobs shifted to European countries—15 percent—com-
pared with only 2 percent nationally. The higher percentage of jobs mov-
ing to Mexico than to other countries occurred in part because the average 
job loss in shifts to Mexico was much higher than in shifts to other coun-
tries, averaging 143 compared with an average of 105 for Asian countries, 
119 for Canada, and only 37 for European countries.

The Massachusetts economy is dominated by electronics, commu-
nications, and finance industries, and we know from our previous re-
search that those industries have been likely to shift work to Asia rather 
than Latin America, whereas shifts in the auto parts, appliance, food 
processing, and metal fabrication industries have continued to be more 
concentrated in Mexico. For example, in our national data, 71 percent 
of shifts out of the U.S. in electronics and electrical equipment industries,
Table 3.3 Production Shifts Out of Massachusetts and the United States, Announced or Reported, 2004

<table>
<thead>
<tr>
<th>Destination</th>
<th>Number of production shifts</th>
<th>% of all production shifts from Mass.</th>
<th>% of all production shifts from the U.S.</th>
<th>Number of jobs shifted from Mass.</th>
<th>% of all jobs shifted from Mass.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td>24</td>
<td>52</td>
<td>50</td>
<td>2,521</td>
<td>56</td>
</tr>
<tr>
<td>China</td>
<td>11</td>
<td>24</td>
<td>23</td>
<td>1,177</td>
<td>26</td>
</tr>
<tr>
<td>India</td>
<td>6</td>
<td>13</td>
<td>12</td>
<td>377</td>
<td>8</td>
</tr>
<tr>
<td>Korea</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>262</td>
<td>6</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3</td>
<td>7</td>
<td>2</td>
<td>450</td>
<td>10</td>
</tr>
<tr>
<td>Singapore</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>200</td>
<td>4</td>
</tr>
<tr>
<td>Taiwan</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>55</td>
<td>1</td>
</tr>
<tr>
<td>Latin America</td>
<td>10</td>
<td>22</td>
<td>41</td>
<td>1,295</td>
<td>29</td>
</tr>
<tr>
<td>Mexico</td>
<td>9</td>
<td>20</td>
<td>27</td>
<td>1,286</td>
<td>29</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Other Latin America</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Europe (including, Eastern Europe)</td>
<td>7</td>
<td>15</td>
<td>4</td>
<td>261</td>
<td>6</td>
</tr>
<tr>
<td>Belgium</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>France</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>33</td>
<td>1</td>
</tr>
<tr>
<td>Germany</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>33</td>
<td>1</td>
</tr>
<tr>
<td>Ireland</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>100</td>
<td>2</td>
</tr>
<tr>
<td>Slovakia</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>45</td>
<td>1</td>
</tr>
<tr>
<td>Other Eastern Europe</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Canada</td>
<td>3</td>
<td>7</td>
<td>3</td>
<td>359</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>6</td>
<td>0</td>
<td>68</td>
<td>1</td>
</tr>
<tr>
<td>South Africa</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>60</td>
<td>1</td>
</tr>
<tr>
<td>Israel</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Total destinations</td>
<td>47</td>
<td></td>
<td></td>
<td>4,504</td>
<td>100</td>
</tr>
<tr>
<td>Total U.S. firms making shifts</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total shifts with multiple destination countries</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Because of rounding, percentages may not add exactly.

62 percent of shifts in communications and IT, and 100 percent of shifts in finance, insurance, and real estate went to Asia. In contrast, only 18 percent of shifts in electronics and electrical equipment went to Mexico (and none to other Latin American countries), 32 percent of shifts in communications and IT went to Latin America, and none of the shifts in the finance, insurance, and real estate industry went to either Mexico or elsewhere in Latin America.

Although production shifts out of Massachusetts were dominated by the electronics, communications and IT, and finance industries, unlike results in the national data, not as many of these sectors were bound for Asia as was the case in the national data. The announcement of some jobs moving to Costa Rica at the same time as moving to other Latin American countries suggests that these moves may have been driven by lower-wage markets or closer to the source of supply.

One example in our Massachusetts data was the shift of manufacturing processes to a plant in Costa Rica. This move was driven by the desire to access lower-wage markets and to reduce transportation costs. The move was successful and resulted in increased production efficiency and reduced costs.

Although production shifts out of Massachusetts were dominated by the electronics, communications and IT, and finance industries, unlike results in the national data, not as many of these sectors were bound for Asia as was the case in the national data. The announcement of some jobs moving to Costa Rica at the same time as moving to other Latin American countries suggests that these moves may have been driven by lower-wage markets or closer to the source of supply.

One example in our Massachusetts data was the shift of manufacturing processes to a plant in Costa Rica. This move was driven by the desire to access lower-wage markets and to reduce transportation costs. The move was successful and resulted in increased production efficiency and reduced costs.
in the national data, not as many of the shifts out of Massachusetts in these sectors were bound for Asia. In fact, in the electronics industry, following a trend in the national data, many employers tended to be simultaneously shifting some jobs nearshore to Mexico or Canada (or in one case to Costa Rica) at the same time as they were shifting other jobs to Europe or Asia. As suggested in our national study, the primary reason for this simultaneous shifting to multiple global destinations is most likely to keep some production cross-border so that it can still be quickly and cheaply accessed through ground transportation, while shifting other production to lower-wage markets or closer to other links in a company's global supply chain.

One example in our Massachusetts data is electronics component manufacturer Vishay BLH in Canton, Massachusetts. Vishay is a subsidiary of Vishay Intertechnology, which for 2003–4 was in the throes of major global restructuring, shifting production from higher-cost areas to China, Israel, Mexico, India, and the Czech Republic. In an October 2003 conference call, Vishay referred to several moves, including transducers from France to the Czech Republic, PTC resistor finishing and film capacitors from Belgium to China, and finishing operations from Taiwan to China (Fair Disclosure Wire 2003). In subsequent calls, the company announced further job shifts to various countries, along with plant closures in the United States and Europe (Fair Disclosure Wire 2004a; 2004b; French News Digest 2004).

The Canton, Massachusetts, plant became part of this global restructuring story in August 2002 when Vishay Intertechnology purchased the fifty-year-old facility from Thermo Electron Corp. (Goodison 2002). Five months later Vishay announced that seventy employees would lose their jobs by March 2003. In fact the process took much longer, and the final fifty workers did not lose their jobs until 2004. But as part of the TAA investigation, it became apparent that those seventy jobs (only fifty of which we count in the 2004 data) went far and wide—to Vishay facilities in Costa Rica, Israel, and India (TAA 53985). This result reflects a pattern in the Massachusetts electronics and electrical equipment industry production shifts, where seven of thirteen shifts involved multiple destinations. Outside of electronics and electronics equipment, we found only one firm with multiple destinations, Bird Machine Company, an industrial equipment and machinery manufacturer based in South Walpole, which shifted production out of the country in 2004. The national database, however, shows 48 percent of all production shifts having multiple destination countries, a trend that crossed all industries.
Regional Impact of Global Outsourcing within Massachusetts

Although production shifts in 2004 were spread throughout the state, we found them to be clustered in particular communities and regions. In total, twenty-six cities and towns in Massachusetts had jobs leave the country in 2004. Figure 3.1 shows that certain communities were particularly hard hit. In Wilmington, three major employers combined—Ametek Aerospace, Sanmina SCI, and Agfa Corporation—lost 613 jobs in 2004. Nearby Mel­lon Financial Services in Everett lost 12 jobs in 2004 and announced that another 300 jobs would be going in 2005. Attleboro lost 1,180 jobs from its major employer, Texas Instruments, alone.

The ripple effects on these communities went well beyond the individual workers who lost jobs in the plant. Texas Instruments had been in operation in Attleboro since the 1920s, manufacturing leadframes, sensors, and controls—including the control panel switches for Apollo 11 in 1965. In April 2003, when it announced layoffs of more than a thousand workers at the plant, the company said it had made the decision to send work to China, Malaysia, South Korea, and Mexico, where it already had established plants, “to take advantage of lower labor costs and proximity to customers” (McPherson 2004). According to the Boston Business Journal (2005), at its peak in 2000 the company employed more than 4,000 people in Massachusetts, but, as part of a national restructuring plan, had already begun to outsource work in the 1990s (Rankin 2005). In Attleboro, work was contracted out in 2000 through a spin-off company, Engineered Materials Solutions, Inc. By early 2005, slightly more than 1,000 employees remained at Texas Instruments (Boston Business Journal 2005).

After laying off many of its workers, the company decided to sell its property. Although state economic development officials said that they hoped to develop the biotechnology manufacturing industry in the area, the site was eventually sold to Preferred Real Estate Investments, Inc., of Conshohocken, Pennsylvania, to redevelop into a “mixed use community of retail, residential, manufacturing and office spaces” (Patriot Ledger 2005). Texas Instruments leased back some of the property in a twenty-year lease, with plans to consolidate and move from manufacturing into marketing and research work (Blanton 2004). It is a promising sign that the site won’t be empty, but the kinds of jobs that Attleboro-area residents will have access to will likely change significantly, from the higher-wage Texas Instruments jobs to primarily low-wage retail work.

Despite its succession of layoffs at Attleboro and other plants across the country over the previous four years, Texas Instruments was named in April 2005 to the “100 Best C ness Ethics magazine. The list “r to higher standards and best pra and rates companies on how they ployees.” According to the comp and compliance, “To be recogni: tenet of good corporate citizeafterthought, they are part of ou instruments Incorporated 2005).

The departure of an entirely lon Financial, from Everett will (2005) describes itself as “one of services for corporations, institu
ing within Massachusetts

cut throughout the state, we
communities and regions. In total,
setts had jobs leave the country
munities were particularly hard
rs combined—Ametek Aerospace,
ost 613 jobs in 2004. Nearby Mel-
jobs in 2004 and announced that
Attleboro lost 1,180 jobs from
alone.
es went well beyond the individual
as Instruments had been in opera-
factoring leadframes, sensors, and
itches for Apollo 11 in 1965. In
of more than a thousand workers
ade the decision to send work to
ico, where it already had estab-
er labor costs and proximity to
ng to the Boston Business Journal
ployed more than 4,000 people
nal restructuring plan, had already
Rankin 2005). In Attleboro, work
pin-off company, Engineered Ma-
ghtly more than 1,000 employees
s, the company decided to sell its
velopment officials said that they
ufacturing industry in the area,
 Real Estate Investments, Inc., of
lop into a “mixed use community
ce and office spaces” (Patriot Ledger
ome of the property in a twenty-
move from manufacturing into
4). It is a promising sign that
jobs that Attleboro-area residents
ificantly, from the higher-wage
-wage retail work.
Attleboro and other plants across
rs, Texas Instruments was named

Figure 3.1 Massachusetts Global Production Shifts by Location and Number of Jobs Lost, 2004

in April 2005 to the “100 Best Corporate Citizens” list produced by Business Ethics magazine. The list “recognizes companies with a commitment to higher standards and best practices in corporate social responsibility” and rates companies on how they “serve stakeholder groups including employees.” According to the company’s vice president and director of ethics and compliance, “To be recognized at this level is validation of our basic tenet of good corporate citizenship. For TI, strong ethics are not just an afterthought, they are part of our every day business strategy” (Texas Instruments Incorporated 2005).

The departure of an entirely different industry and workforce, Mellon Financial, from Everett will have a similar impact. Mellon Financial (2005) describes itself as “one of the world’s leading providers of financial services for corporations, institutions, and affluent individuals around the
globe.” In 1999 the company chose Everett, Massachusetts, as the site for a new transactions processing center. It redeveloped and expanded an existing manufacturing site in Everett and moved in 1,350 jobs from nearby Medford. The company also promised to create 100 new jobs and to bring in $50 million in private investment for a new building. In exchange, the city and state granted Mellon a nine-year tax increment financing (TIF) incentive (Boston Office of Business Development 2004). At the building’s opening, U.S. Representative Edward Markey declared, “These are exciting times for the City of Everett and Mayor David Ragucci and his economic team. Without question, this new facility will be a beacon for the people of Everett and neighboring communities—providing hundreds of job opportunities and cutting-edge amenities to make the workplace efficient, productive, and pleasant” (Mellon Financial Bank 1999).

Unfortunately for the city, Mellon Financial decided to start outsourcing information technology jobs to India and the Philippines in 2002. According to company officials, outsourcing its IT work would allow the company to reduce costs, control the number of workers it employs at any one time, and obtain “supplemental business skills,” although it did not clarify just what those skills would entail (News India-Times 2002). Mellon announced that it planned to have 20 to 25 percent of its development functions performed offshore by the end of 2004. In 2003-4 the company sent twenty-four jobs from Everett to India, and in March 2004 it informed Mayor Ragucci that it would offshore another 300 jobs in 2005.

Currently, city residents are exploring options to pursue legal action against Mellon Financial. Although the terms of the TIF do not prevent the company from outsourcing jobs, the mayor says the agreement does “stipulate that Mellon employ ‘a pretty good percentage’ of residents from Everett, Malden, and Medford” (Santoro 2004). One proposal on the table is to assess Mellon Financial $1 million to be used for retraining Mellon employees who lose their jobs to outsourcing. City leaders asked the company to send a representative to meet with the Board of Alders. James Palermo, president of Mellon’s New England operations, wrote back saying that he was unable to come to a meeting and defending the company’s decision. “We recognize the value of our staff,” wrote Palermo. “But as a global company, we also recognize the changes that accompany economic globalization. Every day we face the competitive pressures that have induced 80 percent of the Fortune 500 to transfer some work to lower-cost providers in such places as India, China, and Russia. Our employees understand this and they know that unless Mellon remains a strong and profitable company, there ultimately will be fewer jobs to go around” (qtd. in Santoro 2004). A

options to hold Mellon Financial to has acknowledged that he has few place like Mellon, because you want to generate tax revenue and employ have to respect the fact that they have they can’t run the business profitabl

Santoro 2004).

There has been considerable deb munity about the real force behin and benefits to American workers has focused on the need to be close of supply chains that have become less talk that globalization is creat taking away dirty old jobs. But in opportunity to get at the heart of t of CEOs, investors, and boards of work out of one country and in reports, strategic plans, and inter phrases repeat themselves over and production from high-cost to low shore. In Massachusetts it may be with new kinds of workers, but it in industries that helped build the

Even though the overall numb seas outsourcing is not huge, it is our previous research, we estim one-third of the jobs lost to outs created only 24,000 jobs in 2004 portion. If we assume that the pa the past several years, then outso than one-quarter of the total jobs began. Perhaps even more signi workers’ sense of security. Union use the threat of offshoring to sq in bargaining (Cohen 2005; Carn in the trends that we see in the Co threats of relocation to keep wo for a banker or a toolmaker. Th
Everett, Massachusetts, as the site for. It redeveloped and expanded an ex-

In exchange, the

Markey declared, “These are

Financial decided to start outsourc-

2002. Ac-

of 2004. In 2003–4 the company

offshore another 300 jobs in 2005.

the mayor says the agreement does

(News India-Times

2002). Mel-

20 to 25 percent of its development

tative to meet with the Board of

writes, “We do recognize the changes that ac-

Fortune 500 to transfer some

aaces as India, China, and Russia.

know that unless Mellon remains

ultimately will be fewer jobs to go

around” (qtd. in Santoro 2004). Although city leaders continue to pursue

options to hold Mellon Financial to the spirit of its agreements, the mayor

has acknowledged that he has few options. “I tread very carefully with a

place like Mellon, because you want to encourage businesses to locate here
to generate tax revenue and employ our residents, yet at the same time you have
to respect the fact that they have a business to run,” said Ragucci. “If they can’t run the business profitably, there won’t be a business” (qtd. in Santoro 2004).

There has been considerable debate in the business and economics com-
munity about the real force behind global outsourcing and the true costs and benefits to American workers and consumers. Much of the discussion has focused on the need to be closer to global markets or to meet the needs of supply chains that have become stretched thin. There has also been endless talk that globalization is creating just as many good new jobs as it is taking away dirty old jobs. But in the course of our research, we had the opportunity to get at the heart of the global restructuring decision-making of CEOs, investors, and boards of directors which results in the shifting of work out of one country and into another. In quarterly conference-call reports, strategic plans, and interviews with top corporate leaders, key phrases repeat themselves over and over again: global restructuring to shift production from high-cost to low-cost countries both nearshore and offshore. In Massachusetts it may be that the story is told in new industries with new kinds of workers, but it is also a story that continues to be told in industries that helped build the Commonwealth a century ago.

Even though the overall number of Massachusetts jobs lost to over-

seas outsourcing is not huge, it is extremely significant. On the basis of our previous research, we estimate that our data capture approximately one-third of the jobs lost to outsourcing. If so, given that Massachusetts created only 24,000 jobs in 2004, 4,520 jobs lost is a noteworthy proportion. If we assume that the pace of outsourcing has been steady over the past several years, then outsourcing would actually account for more than one-quarter of the total jobs lost in the state since the 2001 recession began.10 Perhaps even more significant is the impact of globalization on workers’ sense of security. Union organizers tell stories of employers who use the threat of offshoring to squelch union drives or to win concessions in bargaining (Cohen 2005; Carney 2005). In this regard, nothing is new in the trends that we see in the Commonwealth: employers have long used threats of relocation to keep workers insecure. The impact is the same for a banker or a toolmaker. The threat of relocation creates economic
insecurity, and real job loss can have devastating impacts on workers, families, and communities.

In our national data we believed that media-tracking greatly underestimated the actual number of jobs lost, particularly in nonmanufacturing industries and in firms shifting to China and India, because these are the industries where there had been the most public outcry against outsourcing of jobs and where, therefore, companies had gone to the greatest lengths to keep stories regarding the outsourcing of jobs in white-collar occupations, or to Asian countries, out of the media. It was also harder to find news stories on production shifts to Asia, because firms shifting to those countries were more likely to be in industries that were nonunion and, therefore, less likely to file TAA claims.

We believe that media-tracking also greatly underestimates the number of jobs lost in Massachusetts through outsourcing, but for different reasons. Although TAA claims were much more common than in other states, increasing numbers of workers in Massachusetts are in industries such as business services, communications and IT, and finance, insurance, and real estate—industries at the center of the new wave of outsourcing, about which much has been written in general terms but which is nearly impossible to track on a firm-by-firm basis. Call-center workers, claims adjusters in any of hundreds of small insurance companies in the John Hancock or Prudential Towers, software designers in the IT firms outside of Boston—these workers may very well have had their jobs shifted out of Massachusetts in 2004. But because they were not represented by any union and not covered by TAA, they did not have their story told in any newspaper.

We also must not forget that 2004 was marked by a presidential election, which may have led employers to hold off on global outsourcing decisions or to keep them especially quiet so as not to become a campaign story. Despite a slightly more stable state economy in 2004, a number of companies pursued layoffs and plant closings that resulted in production shifts out of the country in 2005, announcements that they may have delayed until the election returns were in.

Without question, the data confirm that Massachusetts is part of a global phenomenon. First, multinational companies in almost every sector of the economy are engaged in an international race to the bottom, shifting jobs from high-wage to low-wage countries; second, as the topic of outsourcing becomes more politically sensitive, these same multinational companies are taking greater pains to keep data on their production shifts out of the media and out of the public record. We found numerous cases in which companies denied to the media that work was going overseas.

In our national study we argued that mandated reporting requirements of the country so that the impact and tax revenues can be tracked. The U.S. government. As the state of the political trends, it could be the first to set up a reporting mechanism to track all companies shifting jobs out of the country, how many jobs are being lost and also be the first to establish a database that benefit from tax waivers going overseas. These would be important indicators of the rapid and complex shifting of capital and employment to other communities in the United States.

1. The Trade Adjustment Assistance Act authorizes and amends the Trade Adjustment Act of 2007. It is administered by the U.S. Department of Labor. For more information, see https://www.dol.gov/trade/act/determinations.ch.
2. Each job shift to a country was estimated to be equal to one job loss. If it was not possible to confirm the exact number of jobs, we simply took an average. Even the underestimation of the jobs moving to offshoring should be corrected for no more than the reported job loss countries combined.
3. See Bronfenbrenner and Luce (2005) for more details on media-tracking.
4. We are using the national data between the Massachusetts and national data for all tables. U.S. data cover all states data cover the entire year of 2004.
5. The foreign-owned had parent units and the UK.
in which companies denied to the media that they were shifting production out of the country, but then the TAA investigation proved that indeed the work was going overseas.

In our national study we argue that there should be government-mandated reporting requirements for companies shifting production out of the country so that the impact on wages, employment, social services, and tax revenues can be tracked. But Massachusetts need not wait for the U.S. government. As the state that has been first in so many economic trends, it could be the first to set up a tracking system that would require all companies shifting jobs out of the state to report to the government how many jobs are being lost and exactly where they are going. It could also be the first state to establish a tax policy that would penalize companies that benefit from tax waivers, only to abandon communities by moving overseas. These would be important first steps in breaking the endless chain of devastation that is the inevitable consequence of the ever more rapid and complex shifting of capital and jobs from Massachusetts and other communities in the United States and around the globe.

Notes


2. Each job shift to a country was entered as a single record. In cases where companies shifted to more than one country we entered a separate record for each one. If it was not possible to confirm the actual number of jobs moving to each country, we simply took an average. Even though this may result in an overestimation or underestimation of the jobs moving to a specific country in a specific shift, in the aggregate these estimations should balance out and ensure that we accurately account for no more than the reported job loss for an individual company for all destination countries combined.

3. See Bronfenbrenner and Luce (2004) for more discussion about the challenges of media-tracking.

4. We are using the national data to compare the nature of production shifts between the Massachusetts and national data rather than the actual number of cases, since for all tables, U.S. data cover only the first quarter of 2004, whereas Massachusetts data cover the entire year of 2004.

5. The foreign-owned had parent companies based in Austria, Belgium, Canada, and the UK.
6. It is also worth noting the manufacturing industries that are entirely missing from the Massachusetts landscape. As shown in Table 3.2 under the national data, 26 percent of firms with production shifts out of the country and 29 percent of jobs lost were listed under manufacturing industries that were not even covered in the Massachusetts data but made up a significant portion of the job losses nationally, such as auto and auto parts (12 percent of firms and 11 percent of job losses), food processing (3 and 11 percent), and appliances (4 and 9 percent).

7. The job loss percentage for the finance sector actually undercounts jobs lost in that industry, since for one Massachusetts firm we were able to confirm only that the company had moved jobs overseas but were never able to ascertain how many.

8. It is worth noting, however, that with a small state such as Massachusetts—as opposed to our national research where, because of a large number of states and the short time frame allotted, we concentrated on Asian and Latin American destination countries—we were able to open our search string to look for all production shifts out of the state and therefore may have captured more of the shifts to Europe than we would have in the national data.

9. A TIF allows a company to continue paying a base property tax rate even after redevelopment increases the assessed value. Mellon Financial was given a 100 percent TIF for nine years. According to Middlesex County property records, the building and land went up in value from $2,376,600 when it was purchased to $9,990,600 in 2004, which means that for nine years the company was not required to pay taxes on an increased value of $7,614,000.

10. This comes from 4,520 multiplied by three to account for undercounting, then multiplied by four years (2001-4), which accounts for 54,240 jobs—approximately 27 percent of the estimated 200,000 jobs lost in this period.

References
using industries that are entirely missing in Table 3.2 under the national data, but of the country and 29 percent of job tries that were not even covered in the portion of the job losses nationally, firms and 11 percent of job losses, food es (4 and 9 percent).

sector actually undercounts jobs lost in the small state such as Massachusetts—as use of a large number of states and the Asian and Latin American destination string to look for all production shifts are more of the shifts to Europe than paying a base property tax rate even home. Mellon Financial was given a 100 Middlesex County property records, the $376,600 when it was purchased to e years the company was not required to account for undercounting, accounts for 54,240 jobs—approximately lost in this period.


Stephanie Luce and Kate Bronfenbrenner


The December 2004 fire at the Chicopee-Springfield line and the other Tool, are part of the passing of the Connecticut River Valley. When attending a good friend’s wake, Vi Bosch returned. Then, workmates and pots, argued about sports and politics. People sold doughnuts and newspapers and college tuition or some local charity. Athletic Association supported tea and organized trips to Red Sox, Knicks games. Every year the Athletic Association sponsored a wonderful outing and sponsored a wonderful local amusement park in nearby town.

The same pernicious job loss—that Connecticut River in Springfield, Vermont, where, riding down the front of Pratt & Whitney, one cannot help noticing industrial decline: empty and vacated triple-deckers that were once factories, that were once grand stores. A short drive to the other side of town, one cannot help noticing a stunning dichotomies between East Hartford...