

---

# 5 On the Losing Side of Economic Growth

In the United States and most of the world, people today live longer, more comfortable lives than their ancestors. They have many more possessions, they enjoy more leisure, and they experience more variety.

These gains have come about because of increases in productivity. An hour worked yields more—and more valuable—output today than in the past. The advances in productivity are due, in turn, to improvements in technology, including changes in the way work is organized; to investments in equipment, factories, and public works projects; to the acquisition of new skills and information; and to increased opportunities for trade.

The changes that have accompanied these developments have often been disruptive. Many people have benefited, but some have not. Some have experienced suffering and loss. This essay highlights some of the suffering that has accompanied New England's economic advances. Awareness of past injustices and losses may help us reduce the painful consequences of change in the present.

## Native Americans

The arrival of Europeans in the Americas was a disaster for Native Americans. European fishermen visited what became New England, even before the Pilgrims arrived. Contacts with these fishermen exposed the Indians to new diseases. Many Indians died, particularly along the coast. When the Pilgrims and subsequent permanent settlers arrived, they found many areas with fields that had been cultivated in recent years but no inhabitants. The availability of this recently cleared, vacant land made the settlement process easier.<sup>1</sup> The surviving Indian population continued to experience substantial losses from periodic episodes of smallpox and other diseases to which they did not have immunity.

For roughly 50 years, the Indians and English colonists traded and lived together in relatively close proximity.<sup>2</sup> But as the English population grew and dispersed throughout the region, tensions built. Increasingly frequent land disputes, the colonies' exercise of political authority over the Indians, and the colonies' apparent favoring of some Indian groups relative to others fueled resentment.<sup>3</sup> Tensions culminated in the King Philip's War in 1675 and 1676. The English settlers lost about 800 out of a population of



Settler and Native American.  
(Federal Reserve Bank of Boston archives)

---

roughly 50,000, approximately double the ratio of deaths to population in the Civil War. The Indians lost about 3,000 out of a population of 20,000.<sup>4</sup> Many of the survivors were driven into Maine, New York, and Canada. In Maine, sporadic conflicts between Indians and the settlers continued for another 100 years; eventually, many of Maine's Indians fled to Canada.

Conflicts between Indians and settlers were repeated again and again in other parts of the country, as the pattern of settlement spread westward. In some cases, the resolution of these later conflicts resulted in the Indians' being permitted to live in certain large tracts of land, or reservations, where they could exercise some self-government. These reservations were often poor quality land that no one else wanted, however. Today, Indians are one of the most economically disadvantaged segments of the U.S. population. Nationwide, Indians make up just 0.9 percent of the population; in New England, they compose just 0.5 percent.<sup>5</sup>

## Slavery<sup>6</sup>

Roughly 10 million people were brought from Africa to work as slaves in the Americas during the 17th, 18th, and 19th centuries. Most were taken to Brazil and the West Indies. About 500,000 were brought to the United States.<sup>7</sup> Slaves provided the labor force for the tobacco, sugar, and cotton plantations that were key elements of these economies.

New England's climate did not favor plantation crops. Family farms were the norm. So, while New Englanders owned slaves in the 17th and 18th centuries, these slaves were more likely to be household help and skilled workers than farm laborers. Large-scale slave-holding was not economically advantageous. Moreover, the Revolutionary War and the emphasis on the rights of individuals that the War inspired turned public opinion in New England against slavery. Vermont led in abolishing slavery—in 1777, but the number of slaves dwindled rapidly throughout the region.<sup>8</sup>

While slave ownership was limited in New England before 1800 and very rare thereafter, the region's growth was nevertheless closely linked through trade to the practice of slavery. Some New Englanders participated in the slave trade itself, acquiring slaves in Africa and selling them in the West Indies. Rhode Islanders were especially active in this regard.<sup>9</sup>

Of greater economic significance in the colonies' early years was the sale of foodstuffs and other products to the sugar producing islands of the West Indies. So lucrative was the growing of sugar that these islands produced little else.<sup>10</sup> Accordingly, they purchased fish to feed the slaves, as well as lumber and horses, from far away New England. By exporting to



Trade merchants at work.  
(Federal Reserve Bank of Boston archives)



---

The first successful textile mills in New England were developed by Samuel Slater in Rhode Island. These employed entire families, including children—much as did the larger mills in Britain.



Child laborers, Massachusetts. (Photo courtesy of Library of Congress)

When Francis Cabot Lowell and his colleagues set out to build their own textile mills, they did not want to re-create the squalid conditions Lowell had seen in the big mill cities of Britain. At the same time, they wanted to keep labor costs down. They took the ingenious approach of recruiting young women from New England farms. Women could be paid less than men, and a tradition already existed of women working on their farms braiding palm leaf hats or sewing shoes for sale to others.<sup>13</sup>

The Boston Associates, as Lowell and his colleagues came to be called, tried to offer a good working and living environment.<sup>14</sup> They wished to maintain their high standing in their communities and their own estimation, and they wanted farmers to allow their daughters to come to the mills. While hours were long, and work and social life were highly regimented, work in the mills was better than the alternatives. Mill workers earned cash wages and had some independence. Moreover, most of the early mill girls did not stay long. After several years in which they accumulated some savings, they left to marry.

Over time, immigrants replaced the native-born mill girls. These women had limited alternatives and tended to stay. At first they came from Ireland and French Canada; later in the century, they came from eastern and southern Europe. As New England's mills grew in number and size, competitive pressures were intense, and financial downturns were common. Wages were cut, and conditions in the mills were allowed to deteriorate.<sup>15</sup> At the turn of the 20th century, the newest mills were vast structures devoid of ornamentation, staffed by armies of immigrants from many countries.

A factory worker's life was precarious. Conditions in the factories were dangerous, and death and injuries on the job were common. Dependence on wage income meant vulnerability to economic downturns and seasonal layoffs. Whereas the farmer could eke out an existence in bad times, the factory worker without a job had no income and had to rely on the support of family and friends. Workers increasingly looked to labor organizations to represent their interests. In 1911, Massachusetts and New Hampshire adopted workers' compensation plans, and most states quickly followed. Unemployment insurance did not come until the 1930s.<sup>16</sup>

---

The denser population concentrations that accompanied industrialization led to crowded and unsanitary living conditions. Life expectancy in the second half of the 19th century was below that in colonial days.<sup>17</sup>



Despite the long hours and dangerous conditions in the factories and the crowded and dirty quarters in which many factory workers lived, people continued to migrate from the rural parts of New England to the cities. Immigrants also flowed into the region. The concentration of manufacturing jobs and their relatively high pay meant that per capita incomes in southern New England were roughly 50 percent above the national average, after adjusting for living costs.<sup>18</sup>

Sister and three brothers in their tenement, Massachusetts. (Photo courtesy of Library of Congress)

## Dislocations

While competition creates powerful incentives to boost productivity, either through improving the production process or by developing new and better products, it can also lead to dislocations. Consumers may enjoy the benefit of lower prices, but workers may experience downward pressure on compensation, demands for higher levels of effort, fewer workplace amenities, layoffs, and plant closings. These pressures are not associated solely with industrialization. The opening of the Erie Canal in 1825 exposed New England farmers to increased competition from the more easily cultivated lands of upstate New York and the Midwest. Many left their farms in New England, often taking the Erie Canal to farm the less rocky soils farther west. Others migrated to the cities.

The greatest dislocations in New England were associated with the decline of the textile industry. For roughly a century, the textile industry was the engine that drove much of the New England economy. As noted above, conditions in the mills deteriorated from those initially envisioned by Francis Cabot Lowell and his associates. But the industry grew strongly. Entire cities were built largely around textile mills. The Amoskeag mill complex in Manchester, New Hampshire, at one time employed 17,000 workers.<sup>19</sup> At its peak, Fall River had 30,000 textile workers in over 100 mills.<sup>20</sup> According to economic historian Walter Licht, New England was unusual in having so many one-industry towns; in other industrial areas, cities were more diversified.<sup>21</sup>

While New York and New Jersey also produced textiles, the real challenge to New England mills eventually came from the southern states. In the 1880s, textile mills began to appear in the South. The first mills were developed by southerners, but later northern investors began to build mills

---

Consumers may enjoy the benefit of lower prices, but workers may experience downward pressure on compensation, demands for higher levels of effort, fewer workplace amenities, layoffs, and plant closings.

---

---

there as well. The technology of the industry had stabilized by then. Previously, a steady stream of improvements to textile machinery had tied the mills to the shops that were developing the new equipment. With many skilled activities now automated, skill requirements were generally low. The South offered a large supply of low-wage, unskilled labor, and the number of textile mills in the South grew rapidly.

For a time, the industry continued to expand in New England as well. New Bedford is said to have had 10,000 mill workers in 1900 and 40,000 in 1925.<sup>22</sup> Inflows of immigrants kept wages down, and New England still had an advantage in producing higher quality cloth requiring more skilled labor.<sup>23</sup> The 1920s, however, brought the first in a series of collapses. The first mills to be closed were generally older mills in which the owners had not reinvested; but with the Depression of the 1930s, newer and larger mills were shut down. The Amoskeag mill closed in 1935. New Bedford mill workers fell to 21,000 in 1938, from almost double that 13 years earlier.<sup>24</sup>

World War II brought a temporary revival for some of the surviving mills, but then the decline resumed. Today, textiles is a very minor industry in New England, but the legacy of its prolonged death throes remains.<sup>25</sup> A number of the communities in which it was once dominant, including New Bedford, Fall River, and Lawrence, continue to have some of the region's highest unemployment and poverty rates. Providence, which also had a very large textile industry, has only recently begun to emerge from a lengthy economic slump. The loss of large numbers of textile jobs spilled over to local businesses and supporting activities. Private buildings and public infrastructure fell into disrepair. Spending on public services, including education, suffered. To the degree that replacement industries moved into these communities, they were generally very low wage.

There were exceptions. Nashua, New Hampshire, was successful in attracting new businesses, including budding high technology companies, after a third of its workers lost their jobs in a large mill closing in the late 1940s.<sup>26</sup> Later, the closing of the mill was seen as a positive force that shifted Nashua from a low-skill, low-wage economy to a high-skill, high-wage one. And New England's losses were the South's gain. The growth of textile mills in the South began that region's industrialization and offered greater opportunity to the largely rural, largely white southerners who worked in them.



Looking for work. (Library of Congress LC-USF34-6322-D, photo by Carl Mydans.)

---

World War II brought a temporary revival for some of the surviving mills, but then the decline resumed. Today, textiles is a very minor industry in New England, but the legacy of its prolonged death throes remains.

---

---

In a growing economy, those displaced will likely find jobs, but the wages may not match their previous experience. Today, more public and private resources exist to assist people in coping with these transitions than in the past.

---

While the decline of the New England textile industry is one of the most dramatic examples, the rapid changes of the 19th and 20th centuries produced many disruptions. The rise of large-scale manufacturing put many small craft operations out of business. Small local shops lost out to large retail chains. If the economy happened to be growing, the persons displaced would likely find employment, but their skills often did not command the wages they had formerly enjoyed.

These forces are still present. Research on job creation and destruction in manufacturing shows that manufacturing employment in New England declined by an average of 4 percent every 5 years from 1963 to 1992, but the total number of jobs destroyed every 5 years was almost 30 percent. Most of this job destruction was offset by new job creation of roughly 25 percent.<sup>27</sup> Such changes are inherent in a dynamic, growing economy. A firm's adoption of more efficient production processes may mean that some workers become surplus. The creation of new and better products often renders some activities obsolete. In a growing economy, those displaced will usually find jobs, but the wages may not match previous experience. Today, more public and private resources exist to assist people in coping with these transitions than was the case in the past. Workers themselves have more financial assets and more education. But they may also have higher expectations and aspirations, so such disruptions can still be very painful.

## Conclusion

Over the past 200 years, New England has responded to competitive pressures by reinventing itself and developing new industries and activities to replace those that are losing ground. For most of this period, it has been on the forefront of economic advance. Most people have seen life become more comfortable, more plentiful, and more varied. But not everyone. The changes that have accompanied these advances have imposed severe hardship and loss on some members of society. Awareness of past injustices and losses may help us recognize the needs of those whose lives are disrupted by change in the future. We cannot and should not stop the change that drives economic advance, but we can try to mitigate the more unfortunate consequences.

---

Written by Lynn Browne, Executive Vice President and Economic Advisor,  
Federal Reserve Bank of Boston, July 2003

---

---

## Endnotes

<sup>1</sup> Margaret Ellen Newell, "The Birth of New England in the Atlantic Economy," in *Engines of Enterprise*, edited by Peter Temin (Harvard University Press, 2000), pp. 28-32.

<sup>2</sup> A major exception to the relative civility was the Pequot War of 1636 and 1637. English colonists, assisted by Narragansett and Mohegan Indians, largely destroyed the Pequot tribe. James D. Drake, *King Philip's War* (The University of Massachusetts Press, 1999), pp. 27-28.

<sup>3</sup> Drake, Chapter 3.

<sup>4</sup> From Eric Schultz and Michael Tougias, *King Philip's War* (The Countryman Press) as found in <http://www.geocities.com/Heartland/Hills/1094/king.htm>

<sup>5</sup> U.S. Department of Commerce, *Statistical Abstract of the United States: 2002*, Table No. 22, p. 26.

<sup>6</sup> The general discussion in this section draws heavily on Bernard Bailyn, "Slavery and Population Growth in Colonial New England," and Margaret Ellen Newell, "Birth of New England in the Atlantic Economy: From Its Beginning to 1770," as well as Winnifred Barr Rothenberg, "The Invention of American Capitalism: The Economy of New England in the Federal Period," all in *Engines of Enterprise*. Also, C. Knickerbocker Harley, background paper on "New England Trade in a Changing World" for New England Economic History Museum Schematic Design Report, prepared for the Federal Reserve Bank of Boston by Jeff Kennedy Associates, Inc. and The Center for History Now, December 31, 1999.

<sup>7</sup> Data from Hugh Thomas, *The Slave Trade*, (Simon and Schuster, 1997) as presented in *African History: The TransAtlantic Slave Trade*. <http://africanhistory.about.com/library/weekly/aa080601a.htm>

<sup>8</sup> <http://www.etymonline.com/cw/northstate.htm>.

<sup>9</sup> James A. Rawley, "III. Slave Trade," in *The Reader's Companion to American History*, edited by Eric Foner and John A. Garraty, Houghton Mifflin Company, 1991 ([http://college.hmco.com/history/readerscomp/rcah/html/ah\\_079303\\_iiislavetrade.htm](http://college.hmco.com/history/readerscomp/rcah/html/ah_079303_iiislavetrade.htm)); and Jay Coughtry, "Introduction," *Papers of the American Slave Trade*, University Publications of America, 1996 ([http://www.lexisnexis.com/academic/guides/african\\_american/slavetrade.asp](http://www.lexisnexis.com/academic/guides/african_american/slavetrade.asp))

<sup>10</sup> For a fascinating, and appalling, description of life in the West Indies, see chapter 10 in Alan Taylor, *American Colonies (The Penguin History of the United States)*, edited by Eric Foner.

<sup>11</sup> Winnifred Rothenberg, *Engines of Enterprise*, p. 95.

<sup>12</sup> A brief but lively summary of Whitney's invention is found on the web site of the Eli Whitney museum; it is based on Mitchell Wilson, *American Science and Invention: A Pictorial History* (Simon and Schuster, 1954). (<http://www.eliwhitney.org/ew.htm>)

<sup>13</sup> For a description of the rise of textiles in New England, see Winnifred Rothenberg, pp. 96-102, and Peter Temin, "The Industrialization of New England, 1830-1880," pp. 121-124, both in *Engines of Enterprise*.

<sup>14</sup> Robert F. Dalzell, Jr. "The Waltham-Lowell System: Motivation, Location and Structure," background paper, New England Economic History Museum Schematic Design Report.

<sup>15</sup> See the National Park Service web site on Lowell and the sections on working conditions and decline and recovery. [http://nps.gov/lowe/loweweb/Lowell\\_History/working\\_conditions.htm](http://nps.gov/lowe/loweweb/Lowell_History/working_conditions.htm). Also, see

---

Nathan Appleton biography at

<http://www.uua.org/uuhs/duub/artciles/nathanappleton.html>.

<sup>16</sup> Joshua L. Rosenbloom, "The Challenges of Economic Maturity: New England, 1880-1940," *Engines of Enterprise*, pp. 182-183.

<sup>17</sup> Rosenbloom, p. 175.

<sup>18</sup> Kris James Mitchener and Ian W. McLean, "U.S. Regional Growth and Convergence, 1880-1980," in Rosenbloom, *Engines of Enterprise*, p.158.

<sup>19</sup> Katie Helm, "Amoskeag Boss's Legacy Disputed," *The Concord Monitor*, Friday, April 2, 1999

([www.concordmonitor.com/stories/top100kh\\_amoskeag\\_10y58y45.shtml](http://www.concordmonitor.com/stories/top100kh_amoskeag_10y58y45.shtml))

<sup>20</sup> [www.fariverchamber.com/region/region\\_history.asp](http://www.fariverchamber.com/region/region_history.asp)

<sup>21</sup> Walter Licht, "An Industrial Heartland," in *Industrializing America: the Nineteenth Century* (1995). ([www.utoronto.ca/csus/271/licht1.htm](http://www.utoronto.ca/csus/271/licht1.htm))

<sup>22</sup> Robert Santos, "New England," [www.library.cuustan.edu/bsantos/neweng.htm](http://www.library.cuustan.edu/bsantos/neweng.htm)

<sup>23</sup> Rosenbloom, p. 164.

<sup>24</sup> Santos.

<sup>25</sup> Lynn Elaine Browne and Steven Sass, "The Transition from a Mill-Based to a Knowledge-Based Economy: New England 1940-2000," *Engines of Enterprise*, pp. 244-246.

<sup>26</sup> *Nashua Culture: From Mills to Microchips*. [www.nhcentury.com/nashua/fromilto/index/shtml](http://www.nhcentury.com/nashua/fromilto/index/shtml)

<sup>27</sup> Scott Schuh and Robert K. Triest, "The Evolution of Regional Manufacturing Employment: Gross Job Flows Within and Between Firms and Industries," Federal Reserve Bank of Boston, *New England Economic Review*, Third Quarter 2002, p. 42.