

# The Northern Economy

by Sophia

## WHAT'S COVERED

Following the War of 1812, the development of internal improvements and manufacturing in northern states provided for the emergence of the North as a distinct section of the United States. In this tutorial, we'll examine how private corporations and state governments took part in a transportation revolution that was comprised of turnpikes, canals, and railroads. The development of this infrastructure occurred alongside continued innovation in the manufacturing sector, which contributed to the emergence of a diverse economy centered on factory work and agricultural production. To explain the changes occurring around them, northerners developed an ideology centered on the principle of free labor, or the notion that individuals could work hard and improve themselves to achieve economic independence.

Our examination of the northern economy breaks down as follows:

## 1. Transportation

Andrew Jackson may have been celebrated as the "hero of New Orleans," but the primary responsibility for the American victory at New Orleans during the Battle of New Orleans (1815) lay with American-made artillery, which was a product of northern manufacturing and innovation. The important role that the artillery played during the battle foreshadowed the growing role that infrastructure, innovation, and manufacturing would play in the emergence of the Northern economy.

Following the War of 1812, many Americans recognized the need for a better transportation system. Farmers who lived in the interior wanted to get their crops to local, national, and international markets as quickly as possible. Urban merchants, including those who traded with farmers, also wanted to facilitate commerce efficiently.

## ⑦ DID YOU KNOW

On average, it took three weeks for mail to travel between Washington, D.C., and New Orleans, Louisiana. The harsh winter of 1814-15 made travel even slower and, as a result, most residents in Washington, D.C. did not even hear of the American victory at the Battle of New Orleans until February 4, 1815—four weeks after the battle.

But the issue of constructing a national transportation infrastructure raised the political question of whether private enterprises, state governments, or the federal government should take the lead on such initiatives. While John Quincy Adams, Andrew Jackson, and ultimately the Democratic and Whig parties debated the

issue, the burden for constructing most internal improvements fell upon corporations and local or state governments, the overwhelming majority of which were located in the North.

The three most significant initiatives on behalf of internal improvements in the United States during the first half of the 19th century can be placed into three categories: turnpikes, canals, and railroads.

## Turnpikes

Typically, a state legislature chartered a corporation and granted it the exclusive opportunity to build roads — or turnpikes — and charge tolls for their use. To help raise the capital necessary for turnpike construction, local and state governments subscribed to company stock, as did a number of local boosters or other individuals who hoped to profit from the turnpike.

ightarrow EXAMPLE Under this model, New York chartered turnpike companies that constructed 4,000 miles of road by 1820.



Map of major roadways in the United States by 1825.

However, turnpike travel was slow. Stagecoaches averaged between six and eight miles per hour. While turnpike and road travel could suffice over short distances, the transportation of goods via turnpikes could not compete with transportation on riverboats or canal barges over long distances.

Canals—or artificial waterways that could connect natural bodies of water or parallel a stream so as to avoid obstructions—extended the advantages of water transport to areas throughout the northern United States during the first half of the 19th century.

## ⑦ DID YOU KNOW

Canals utilized animal power more efficiently than turnpikes. A horse capable of pulling a wagon that weighed two tons on a turnpike was capable of pulling a 50-ton barge along a canal. Canals were more expensive to build than turnpikes, so public funding was essential for raising sufficient capital. While Congress debated over whether it was constitutional for the federal government to be involved



Map of major canals in the United States by 1825. Note that most canals were located in the Northeast or Midwest.

→ EXAMPLE The Erie Canal, a 363-mile artificial waterway that connected the Hudson River—and

thus New York City and the Atlantic seaboard—to the Great Lakes, cost the state of New York \$7.1 million before it was completed in 1825. However, that cost was paid off within nine years, from the tolls that the canal collected.

The Erie Canal opened upstate New York and the Great Lakes region to commerce from New York City. The canal also stimulated agriculture, manufacturing, and population growth in upstate New York, as well as provided an avenue for many Americans to migrate westward. Between 1820 and 1850, Rochester, New York grew in population from 1,502 to 35,403 people; Syracuse from 1,814 to 22,271 people; and Buffalo from 2,095 to 42,261 people.

#### Railroads

Railroads represented the final significant transportation innovation of the period. Railroad construction got underway in the United States by the early 1830s. By the end of the 1830s, the



A view of the Erie Canal from Lockport, New York, 1839.

United States featured 450 steam locomotives and 3,200 miles of railroad track. This was as much as the total canal mileage in the country, and more than twice the amount of track in all of Europe.

Railroad construction proceeded more quickly in the United States because of the availability of land. Railway construction in Europe required spending a lot of time and money acquiring rights-of-way. In contrast, American railways often received free land grants from the states and, later on, from the federal government. Fuel was also inexpensive in the United States.

## OID YOU KNOW

During the first half of the 19th century, most American locomotives burned wood rather than coal, because wood was so plentiful.

Railroad construction also proceeded more quickly in the United States because of the demand. Railroads offered a new mode of transportation that fascinated citizens, buoying their optimistic view of the possibilities of technological progress, which included faster travel times and travel across longer distances. A trip that once took three weeks by stagecoach could be accomplished in four days by train. Railroads could also transport freight over long distances more efficiently, which reduced shipping and storage costs.

Similar to canals, railroad construction facilitated population growth and the development of other economic sectors along their routes. Railroads promoted settlement along their routes, and railroad hubs became important urban centers. Railroads also stimulated the mining, processing, and importing of iron and steel; created industries devoted to the manufacture of rails, locomotives, and cars; and created new jobs such as engineers, firemen, brakemen, conductors, and mechanics.

#### ⑦ DID YOU KNOW

In the 1850's, most American railroads were located in the Northeast and Midwest regions of the country. Additionally, the railroads had an east-west orientation. Most important, railroads (along with canals) solidified sectional differences between North and South. The majority of canal and railroad construction took place in the northern states. Such construction also reinforced connections between East and West, particularly between the Midwest and the Northeast. Prior to the advent of canals and railroads, most Midwestern producers shipped their goods southward, along the Ohio and Mississippi Rivers toward the Gulf of Mexico. By the 1840s and 1850s, however, canals and railroads that connected Midwestern towns to Northeastern markets such as New York City and Boston made traditional north-south trading routes obsolete.

## 2. Manufacturing

Better transportation helped facilitate the movement of people from the countryside to cities or factory towns. Such trends, which coincided with the rise of capitalism in the United States, significantly altered traditional modes of production. Alongside the production of cotton and woolen cloth, which formed the backbone of the industrialization of the northeastern United States, other crafts increasingly became mechanized and centralized in factories during the first half of the 19th century.

Many of these advances in northern manufacturing would not have been possible without the principle of **interchangeable parts**, credited to inventor **Eli Whitney**.

## TERM TO KNOW

## Interchangeable Parts

Use of tools or devices to cut and shape metal into standardized, interchangeable parts for other mechanical devices.

## 2 PEOPLE TO KNOW

## Eli Whitney

Massachusetts inventor best known for interchangeable parts, which transformed manufacturing methods throughout the North, and the cotton gin, which revolutionized the production of cotton and shaped the development of the Southern economy in the 19th century.

Prior to his death in 1825, Whitney succeeded in applying the principle of interchangeable parts while fulfilling a contract to supply muskets to the federal government. Whitney's goal was to create parts that would be interchangeable to the point that a soldier in the field could take two damaged muskets and reassemble them into a single musket that fired.

A number of individuals quickly applied Whitney's principle, which transformed manufacturing methods throughout the North, to create consumer goods for Americans.

→ EXAMPLE Eli Terry of Connecticut perfected the mass-production of inexpensive clocks, also known as "Connecticut clocks." Observers at the time noted that many rural homesteads might not have chairs or other furnishings, but "there was sure to be a Connecticut clock."

Other innovators applied the principles of interchangeable parts and mass production to farming implements, which increased agricultural production in northwestern states such as Indiana, Illinois, and Iowa.

→ EXAMPLE In 1831, Cyrus McCormick made his first mechanical reaper, which accelerated the process of harvesting wheat and other grains.

In 1837, John Deere of Illinois created a plow made of steel rather than of wood, which eased a farmer's burden during the spring planting season.

## 🔶 🛛 BIG IDEA

The above examples were part of the flourishing of inventions and manufacturing that occurred throughout the North by the 1830s and 1840s. Such processes enabled Americans to purchase cheaper consumer goods. McCormick and Deere's innovations, meanwhile, made northern farmers even more efficient in producing food for other Americans.

In addition to creating a variety of goods to consume, the emergence of northern manufacturing created more specialized jobs that could be less skilled and less well paid. As a result, the experiences of many northern works underwent significant changes. While artisans and craftsmen were able to control the pace of their labor and the order in which things were done, factory work required employees to report at certain times and, as was often the case, work all day.

Such trends provided the conditions in which profound social divisions could emerge, particularly between economic elites and factory workers. But the expansion of transportation infrastructure, inventions, and manufacturing also contributed to the creation of an ideology through which many northerners could understand such divisions and hope to transcend them. Such an ideology also allowed the North to distinguish itself from the South.

#### **Additional Resources**

Explore Eli Whitney's patent for the cotton gin, a machine that would alter the course of American history, at the **National Archives**.

## 3. Free Labor Ideology

When observing the emergence of an agricultural and manufacturing economy across the northern states, certain Americans expressed the hope that individuals could transcend social divisions by improving themselves through hard work, self-discipline, education, and innovation. Such ideals provided the foundations for **free labor ideology**.

## TERM TO KNOW

#### Free Labor Ideology

The ideal that each laborer should have the ability to climb up the economic ladder and receive a fair return for their labor, thus achieving economic independence.

#### OID YOU KNOW

Abraham Lincoln was among the most well-known advocates of free labor ideology and, at one point, defined it as "each individual is naturally entitled to do as he pleases with himself and the fruit of his labor."

Advocates of free labor ideology and improvement were everywhere in the North. Northern politicians, particularly Whigs, expressed the importance of self-improvement through education and hard work. Capitalists and manufacturers believed that recent transportation innovations, such as railroads and new

inventions, improved production and consumption practices throughout the region. Similarly, northern farmers believed they were improving upon nature by cultivating and harvesting its resources, turning them into commodities.

Free labor ideology also contained a harsh critique of the South. When they looked at the South, northern free labor ideologues saw a backward economic system that degraded enslaved people, provided no opportunities for poor White laborers, and privileged an elite, idle planter class. For these reasons, free labor ideologues saw slavery as a threat to the continued modernization and improvement of the United States.

The most significant threat that slavery posed to improvement and free labor ideology was the question of whether it would expand into western territories. Advocates of free labor believed that the expansion of slavery would destroy the republic. However, such fears stemmed primarily from their concern toward what slavery would do to White laborers. They believed that the expansion of slavery would allow slaveholders access to more land, thus depriving free laborers an opportunity to achieve economic independence. They also worried that increased reliance on enslaved labor would decrease wages for free laborers. Ultimately, the advocates of free labor argued that slavery corrupted the very principles of improvement, manufacturing, and development that the northern economy was founded upon.

Free labor ideology provided the means to explain the North's economic progress in transportation, manufacturing, and agricultural production. It also provided northerners the ability to distinguish themselves from the South. The majority of White northerners were not advocates of racial equality. Rather, free labor ideology provided them the ability to criticize slavery and oppose the institution's expansion for fear that it would undermine what was, in their eyes, a superior economic system.

## SUMMARY

For many northerners, the future of the American republic lay in the expansion of internal improvements, manufacturing, and agricultural production. Free labor—or the idea that individuals could work hard, improve themselves, and take advantage of the northern economy to achieve independence—provided northerners with an ideology to explain the transformations that occurred around them. Just as importantly, free labor ideology allowed northerners to distinguish their region's development from that of the South. While the North appeared to be on the cutting edge of innovation, improvement, and development, free labor ideologues interpreted the South as backward and undeveloped because of its continued reliance on racial slavery.

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## 🛗 🛛 DATES TO KNOW

#### 1798

Eli Whitney builds a firearms factory and experiments with interchangeable parts.

#### 1812

The War of 1812 stimulates domestic manufacturing.

#### 1825

The Erie Canal completed.

#### 1830–1840

The United States builds 3,200 miles of railroad track.

#### 1831

Cyrus McCormick invents a mechanical reaper.

#### 1837

John Deere invents a steel plow.