

AP US History

Chapter 10 - America's Economic Revolution

Finn Frankis

Key Concepts

What are this chapter's key concepts?

- **4.2.I.A** - Entrepreneurs stimulated production and commerce revolutions with organized relations between producers and consumers
- **4.2.I.B** - Textile machinery, steam engines, interchangeable parts, telegraph, agricultural innovations led to greater efficiency
- **4.2.I.C** - Judicial systems -> transportation networks linking North/Midwest but still limited connections between those regions/South
- **4.2.II.A** - Americans began to support themselves w/ production (frequently working in factories rather than w/ agriculture)
- **4.2.II.B** - Manufacturing growth -> many more prosperous with larger middle class, but also larger poor class
- **4.2.II.C** - Market revolution changed gender/family roles w/ domestic ideals emphasizing domestic spheres (public v. private)
- **4.2.III.A** - International migrants -> industrial north while many Americans west of Appalachians -> OH/MS rivers
- **5.1.II.A** - International migrants from Europe/Asia (predom. Ireland/Germany) in ethnic communities preserving languages/customs
- **5.1.II.B** - Anti-Catholic activist movement developed to curb political power of new immigrants

The Changing American Population

How did American demographic changes serve to stimulate economic and social changes in American society?

The American population became increasingly characterized by immigration, particularly Irish Catholics and Germans; furthermore, free states began to shift to an increasingly urban lifestyle. However, accompanying this rise in immigration was the rise of a more sinister movement: **nativism**: the belief in the superiority of native American people over foreign immigrants, often fueled by racism but also economic competition. Nativism manifested itself in multiple covert societies.

What were the key characteristics of American population growth between 1820 and 1840?

- Population increased rapidly and many moved from countryside to cities, others westward
- Native population growth more rapid than in Europe due to public health
 - Fewer epidemics
 - High birth rate from white women, higher likelihood of surviving -> adulthood
- Immigration relatively insignificant through beginning of nineteenth century; returned in 1830s
 - Stimulated by reduced transportation costs, economic opportunities paired with deterioration in rest of Europe
 - * Irish Catholics were particularly large new group of migrants
 - Most traveled to cities of Northeast
 - * Complemented urban travel of agricultural New England inhabitants (some to west, but many to cities)
 - * NYC saw particular growth: largest US city by 1810 due to natural harbor, Erie Canal, liberal commercial state laws

The American population grew due to growing public health leading to higher birth rates and a greater child survival rate as well as significant immigration after the 1830s due to reduced transportation costs. The Northeast cities grew most significantly both from immigrants and arriving New England farmers, with New York City growing the most dramatically.

What were the key characteristics of American population growth between 1840 and 1860?

- Urban growth became even more rapid betw. 1840-1860
 - In east, particularly NYC, but also Philadelphia, Boston; 26% of free state population lived in towns by 1860
 - Western regions saw urban growth, too, like St. Louis, Pittsburgh, Cincinnati, Louisville due to MS river; connected New Orleans with Midwestern farmers and Northeastern merchants
 - Great Lakes to MS river saw growth of **Chicago**, Buffalo, Detroit, Milwaukee, Cleveland
- Urban growth remained stimulated by partly migration of New England farmers but mostly immigration from abroad
 - Over 1.5m Europeans betw. 1840-1850; rising numbers in 1850s w/ over half of NYC pop. immigrants; very few in South
 - Some newcomers from England/France/Italy/Scandinavia/Poland/Holland
 - Most from Ireland (oppressive GB rule, potato famine -> widespread death) and Germany (industrial revolution -> great poverty)
 - * Irish -> eastern cities as unskilled laborers due to low initial money, mostly young, single women (able to find factory/domestic work)
 - * Germans -> NW as farmers due to higher initial wealth, mostly either single men or families to whom farm life was more accessible
- National population grew rapidly, too, surpassing Britain by 1860 and nearing France/Germany

The American population became even more urban between 1840 and 1860, with eastern (like NYC/Philadelphia/Boston), western (like Pittsburgh/St. Louis), and Great Lake cities (like Chicago) growing most significantly. Immigration remained significant, mostly stimulated by the German single men and families, who became northwestern farmers, and the Irish young women, who took on unskilled jobs in factories.

What factors catalyzed the rise of nativism?

- Many Americans welcomed immigration: cheap labor -> low wages, land speculators saw potential for westward immigration, political leaders hoped to grow population and thus state influence (ex: WI allowed immediate voting to immigrants promising citizenship, inhabiting for 1 year)
- "Nativism," defense of native-born, grew significantly with hostility, desire to stop immigration
 - Often out of racism: comparable to views of natives/African Americans
 - Others felt immigrants were unfit for unique American society due to many originating from poor cities, assuming it was a choice
 - Workers feared low-wage foreigners would steal jobs from natives
 - Protestants feared greater Catholic influence, Whigs feared Democratic influence, many feared immigrants were bribed for votes, many older feared radical ideals
- Secret societies formed to combat immigration
 - Began in Northeast but soon spread to West/South
 - Native American association began in 1837 (w/ 1845 convention in Philadelphia)
 - Supreme Order of the Star-Spangled Banner in 1850 attempted to ban Catholics/foreigners from public office, require literacy tests to vote; code of secrecy w/ password "I know nothing" -> known as "Know-Nothings"
- Know-Nothings in particular turned to partisan politics -> created American Party after election of 1852 w/ very successful vote in 1854, winning MA state government; eventually declined

Although many Americans appreciated the cheap labor costs and population growth accompanied by immigration, many others feared the immigrants due to racism, a belief in civil superiority, low-wages potentially stealing jobs, as well as shifts in religious and partisan demographics. Nativism began to grow, manifested in parties like the Native American Association and the Know-Nothings, who even had a significant political influence.

The Changing American Population

What were the most significant transportation, technological, and communication booms?

Transportation innovations including canals traversed by steamboats and railroads linking distant parts of the North through consolidation began to greatly overshadow highways, with railroads ultimately becoming the most significant form of transportation. The telegraph, too, initially significant for its linking of railroad stations to allow for scheduling, allowed for significant communication and paired with Hoe's steam cylinder, allowed journalism to take off with the Associated Press.

What were the early forms of transportation?

- 1790s - 1820s: turnpike era, relying on roads
- MS/OH had been significant for years, but most traffic was from flat barges (little more than rafts) with cargo, which were torn up at end of journey (could only travel downstream); upstream vessels far more time-consuming
- By 1820s, steamboat industry had expanded significantly
 - Corn/wheat of NW farmers and cotton/tobacco of South carried to New Orleans far more rapidly
 - Passenger industry grew w/ countries building lavish ships
- Highways developed across mountains; though costs for overland transportation lowered, remained high

The predominant forms of travel were by steamboat over rivers, over roads (the turnpike era), and over the Mississippi and Ohio Rivers (these were expensive and circuitous).

How did canals become the dominant form of transportation for some time?

Western farmers and Eastern merchants were unsatisfied with the circuitous route based on existing rivers and roads due to its high price: they sought to send goods more directly.

- Canals extremely advantageous economically -> interest to expand to West; canals too expensive for companies -> states took burden
 - Began in NY due to existing land route making it easier to build; underestimated forestry between points -> many questioned viability, but governor De Witt Clinton advocated for it
 - * Erie Canal largest construction project to date w/ forty foot-wide ditch four feet deep; required difficult cuts and aqueducts to carry canal across streams, heavy masonry w/ wooden gates
 - * Instant financial success w/ extremely heavy traffic -> repaid entire cost w/in 7 years
 - * Route to Great Lakes provided direct access to Chicago from NYC -> NYC began to compete w/ New Orleans
 - Extended by OH and IN w/ connection betw. Lake Erie, Ohio River creating inland water route to NY
 - * Still required frequent transfer of goods betw. lake, river, and canal vessels
 - * New canal -> increased white settlement in NW due to ease of travel for migrants
 - Rival cities unable to catch up to NY: Boston blocked by Berkshire mountains, Philadelphia/Baltimore made effort to cross larger Allegheny Mountains but too expensive for PN and unable to cross mountains for MD

Canals soon overshadowed turnpikes for their great efficiency of transferring goods using steamboats. Almost entirely state-funded, the Erie Canal from New York City to Lake Erie was by far the most successful, establishing NYC as a city formidable to New Orleans. Ohio and Indiana followed with a water route between Lake Erie and the Ohio River, but most large cities were unable to compete with NYC remaining the most dominant.

What marked the early development of railroads?

- Railroads were combination of tracks, steam power, railroad cars as public carriers
 - Developed by both English and American inventors by 1804
 - John Stevens formed first in 1820 around NJ estate
 - Short Stockton/Darlington Railroad created in England in 1825
- American entrepreneurs intrigued by English experiment -> formed companies, first being Baltimore and Ohio creating thirteen-mile stretch in 1830; Mohawk and Hudson in NY in 1831; over 1k total miles by 1836
- Railroads remained small and insignificant
 - Mostly designed to connect water routes
 - Tracks often differed in width between connecting lines, preventing travel of one continuous train
 - Schedules inconsistent, frequent wrecks
- Saw advances of iron rails, redesigned passenger cars by 1830s and 1840s
- Competition between companies grew
 - ex: Chesapeake/Ohio Canal Company prevented Baltimore/Ohio Railroad from travelling through Potomac
 - NY prohibited from competing w/ Erie Canal

Railroads became truly significant in the 1830s, when mere experiments began to transform into genuinely lucrative industries; although they remained insignificant for some time, with frequent wrecks and inconsistent service, advances by the 1840s led to great competition between companies as well as from states.

How did railroads continue to expand?

- Northeast had most efficient system (more than NW and significantly more than South); began to reach west of MS River over iron bridges (St. Louis and Kansas City)
- Key trend: **consolidation** w/ shorter lines combining to form larger lines; 1853 saw connection of four tracks between Northeast and Northwest over Appalachians
 - NY Central / NY and Erie connected NYC w/ Lake Erie
 - PN railroad linked Philadelphia/Pittsburgh
 - OH connected Baltimore w/ OH River at Wheeling
 - Railroads into interior touched MS river at 8 points, predominantly Chicago as central western rail center
 - Trunk lines diverted traffic from primary water routes (like Erie Canal / MS River), reducing NW connection to South
- Railroads funded in part by private investors, with railroad companies receiving loans from abroad; assistance from local government and federal government as land grants
 - 1850: Stephen A. Douglas convinced Congress to grant federal lands to Illinois Central; other states soon followed, demanding privileges

The Northeast enjoyed the most efficient rail system, with multiple routes beginning to cross the MS River. Consolidation, or the combination of multiple shorter lines to form larger lines, became critical to expanding the rail system: four critical lines began to reach westward. Funding for railroads came from both private investors (local and abroad) as well as from state/federal governments.

How did the telegraph revolutionize communication in the United States?

- **Magnetic telegraph** created by Samuel F.B. Morse, after sending news of Polk's nomination from Baltimore to DC; low cost made Morse telegraph system seem ideal
 - Expanded rapidly: more than 50k miles by 1860; Pacific telegraph connected NYC and SFO
 - Joined in Western Union Telegraph Company
- Telegraphs had wide-reaching effects
 - Extended along railroad tracks to connect stations and coordinate train scheduling
 - Significant for communication between cities
 - Further aggravated schism betw. South and North, connecting Northeast and Northwest because lines were far more extensive (mostly followed railroad tracks)

The magnetic telegraph expanded rapidly in the late 1850s, with important effects of coordinating railroad scheduling, encouraging communication between distant cities, and ultimately further separating the North and the South.

How did journalism change in the United States?

- 1846: **Richard Hoe** invented steam cylinder rotary press, allowing rapid/cheap printing of newspapers; paired with telegraph to share news far more easily betw. cities, revolutionized communication w/ formation of Associated Press
- Northeast created early metropolitan newspapers: NY saw Horace Greeley's *Tribune*, James Gordon Bennett's *Herald*, Henry J. Raymond's *Times*; all detailed international events
- Journalism -> sectionalism in 1840s/1850s w/ most major magazines in North -> South felt subjugated due to smaller budgets for newspapers with little impact outside of communities

Journalism, revolutionized by the pairing of the telegraph and the steam cylinder rotary press, led to the formation of the Associated Press, dedicated to expanding communication throughout the nation. However, because the Northeast had the most significant and far-reaching newspapers, journalism further fueled sectionalism.

Commerce and Industry

What were the primary developments in commerce and industry during the market revolution?

During the market revolution, business began to be increasingly dominated by larger, freer corporations due to reduced legal restrictions. The factory system, too, became particularly significant, particularly in the Northeast, beginning in the textile and shoe industries. Finally, technology advanced greatly to meet the growing industry, particularly in armories sponsored by the federal government, spurred on by interchangeable parts, new energy sources, and brilliant inventors.

- Grew rapidly due to population growth, transportation, new entrepreneur class w/ growing wealth
- Retail grew significantly: larger cities saw stores specializing in groceries, hardware, etc.
 - Smaller towns still relied on "general stores"; some even performed business through barter
- Business organization changed: although most remained founded by individuals/limited partnerships dominated by merchant capitalists, larger business saw **corporation**
 - 1830s saw reduced legal restrictions for corporations (previously required special state charter to grow, replaced w/ general incorporation for small fee)
 - * Limited liability system meant that stockholders never liable for losses of corporation, only their own stock
 - Businesses could not survive on investment alone -> relied on credit
 - * Borrowing often -> instability due to weak credit system (govt. could only issue gold/silver, too little in quantity to meet credit demands)
 - * Banks began to issue bank notes but depended on reputation of bank -> known for insecurity, bank failure

Between 1820 and 1840, businesses grew rapidly, particularly those based around corporations, which had recently been freed of numerous legal shackles, now able to be formed easily with limited stockholder liability. Credit grew in significance for funding larger businesses, but the demand could not be satisfied by the government's stock of gold and silver, leading to great bank instability.

How did business expand between 1820 and 1840?

How did the factory system develop?

- Pre-War of 1812, most manufacturing done w/in household: hand-operated; improved technology -> growth of factory beginning in New England textile industry w/ larger water-powered machines by 1820s
- Factories also pervaded shoe industry (in eastern MA); although still hand-made, based around division of various tasks to form identical, consistent shoes
- 1840-1860 saw even larger growth of factory system with rapid expansion in manufactured goods, matching value of total agricultural goods by 1860
- Majority and largest of plants in Northeast

The factory system developed and began to replace homespun goods as technology expanded, beginning in the textile industry of New England in the 1820s and expanding to the shoe industry of MA. By 1860, factories had grown enormously (particularly in the Northeast), with manufactured goods finally equal in value to agricultural goods.

What were the main technological advances spurring the Industrial Revolution?

- Industry remained very rudimentary compared to modern times (ex: cotton still produced coarsely), but machinery grew in U.S. more rapidly than anywhere else
 - Reached point where GB and other European nations would travel to U.S. to study machines
- Machine tools manufacturing (supported by govt. to support military) particularly large
 - ex: armory in MA formed turret lathe (cutting screws/metal) and milling machine (replaced hand chiseling), precision grinding machine for construction of other machines (like sewing machines) but more significantly for rifles
 - Armories became known as hotbed for technological advancement, attracting craftsmen/factory owners to learn and share new ideas
- Interchangeable parts of Eli Whitney/Simeon North expanded beyond gun industry, including to watch/clock making, trains, farm tools
- New energy sources benefitted industrialization greatly, w/ coal (mostly from around Pittsburgh) replacing wood/water -> factories could be placed further from streams
 - Most factories remained dependent on water power, with largest factories close to natural waterfalls
 - Dependence -> often closed during winter w/ frozen rivers
- American industry spurred by American inventors including Charles Goodyear (rubber industry), Elias Howe (sewing machine in conjunction w/ Isaac Singer)

American industry grew at an unparalleled rate in the mid-19th century, rapidly surpassing even Britain in tool complexity, with military machine tools manufacturing plants (notably armories) representing the most significant hotbeds. Interchangeable parts and new energy sources were exploited by American inventors to develop advanced machinery and systematic methods of constructing parts.

How did the market revolution impact social conditions of men and women in the 19th century?

When recruitment for factories first began, it drew from the native population, with mid-Atlantic states taking in families and children and the Northeast taking in young women alone, who experienced comparatively comfortable conditions which slowly deteriorated. Immigrants then took their place, further diminishing wages and weakening working conditions due to the lack of a social pressure. A clash between skilled artisans and unskilled laborers quickly formed as cheaper goods threatened the livelihoods of these craftsmen, who were mostly displaced. Finally, workers began to push for freedom through political reform (reduced workday, child labor, and legal unions); although most workers felt they were free (in contrast to slavery in the South), the collective group of workers as a coalition paled in comparison to the British equivalent due to ethnic conflicts and a wide supply of immigrants to replace dissident workers.

What were the key early methods of native recruitment?

- Challenging: 90% of Americans lived/worked on farms, urban residents were skilled artisans unwilling to take on unskilled jobs
- Industrial labor supply change caused by change in American agriculture
 - Fertile NW farmlands, new machines, greater imports (particularly in New England) -> less labor required for cultivation -> more workers migrated to cities for factory work
- Recruitment performed through multiple distinct systems
 - Mid-Atlantic states often focused on transporting entire families, w/ parents working alongside children (some no more than 4 yrs. old)
 - MA known for recruiting young women (mostly farmers' daughters) in late teens: Lowell and Waltham System; allowed women to save up wages and eventually marry
 - * Lowell workers *far more comfortable* than women in England: received clean, maintained houses; well-fed (some New Englanders felt employing women immoral -> optimal conditions)
 - * Women received high wages but were expected to maintain moral behavior (church, curfew); had time to write *Lowell Offering* magazine
 - * Transition from farm to factory often challenging: surrounded by strangers, forced to work far more repetitive tasks in contrast to varied farm chore
 - * Few other options: most of society expected women not to expand to factory jobs or travel country looking for work
 - Labor conditions particularly favorable (compared to England); although some young children, misery far less great due to parent supervision

As changing agricultural conditions created a surplus of workers migrating to cities, regions adopted varying recruitment policies. In the Mid-Atlantic states, whole family were generally recruited and children encouraged to work alongside them; contrastingly, particularly in MA (notably Lowell, MA), young women were hired, but they initially received very comfortable treatment but occasionally struggled with the transition from farm to factory.

How did Lowell's factory system take a turn for the worse?

Lowell's factory system was unable to survive at such degrees of prosperity for long: the textile boom (followed by bust) -> ↓ wages/working conditions, ↑ working hours, and overcrowding.

- 1834: Lowell saw formation of union Factory Girls Association, holding strike against 25% wage cut, later against rent increase; both failed and destroyed by 1837 recession
- 1842: Sarah Bagley formed Female Labor Reform Association, demanding ten-hour day rather than twelve-hour, conditions improvement
 - Appealed to state govt.
 - Women had already begun -> teaching/domestic service

Increasingly poor conditions in the Lowell factory led the women to take action in multiple unions, appealing both to the factory and state government.

What characterized the growing immigrant workforce?

- Increasing # of immigrant workers post-1840 greatly benefitted manufacturers: cheap/large source of labor unable to easily protest -> poorer working conditions
- Irish immigrants formed construction gangs to perform unskilled work on turnpikes/canals/railroads
 - Racism -> unable to prove skills -> very low wages often unable to support families (lived in terrible conditions)
- Working conditions diminished in New England due to reduced pressure to provide well-kept environment; pushed for **piece wages** (based on amount produced)
 - Lowell had become near-slum (still not at levels of Europe), known for danger/noise/unsanitariness, long workday over 14 hours, reduced wages even for skilled workers and even lesser for women/children

The immigrant workforce, particularly the Irish, led to a deterioration in working conditions, wages, and lifestyles in industrial cities: reduced social pressure due to racism meant that wages were reduced to optimize productivity.

How did the growth of factories clash with existing artisan workforces?

- Artisan based on older U.S. vision of yeoman, independent farmers; stuck to ideals of independence, equality
- Most artisans unable to compete w/ cheap goods of factories -> formed labor unions to protect identities (including printers, shoemakers, carpenters, masons, shipbuilders)
 - Cities saw craft societies known as **trade unions** intended to join worker forces
 - Extremely poor results: law favored independent workers; feared that coalition represented conspiracy; weakened by Panic of 1837

Artisans, aligning with an antiquated ideal of yeoman farmers, mainly refused to forsake such ideas. However, most were unable to compete with factory cheap goods, forming labor unions to protect themselves and trade unions to join forces; however, these performed very poorly due to legal restrictions.

How did industrial workers fight for greater control?

- Workers tried to convince state legislatures to set maximum workday, but only NH and PN passed 10-hour workdays (unless a contract was formed, which most employers ended up doing as hiring conditions)
- Child labor restrictions were set by NH, PA, MA, but contracts were formed to counteract (once again!)
- Greatest legal victory: *Commonwealth v. Hunt* -> unions/strikes were legal
 - Unions remained ineffective as many workers feared permanent laboring force; unions rarely strong enough to stage impactful strikes
- Skilled workers had greater success: unions more akin to guilds of preindustrial times, designed to protect positions of members by admitting small #s to skilled trades
 - Revived in 1850s w/ National Typographical Union in 1852, Stone Cutters in 1853, Hat Finishers in 1854, Molders and Machinists in 1859
- Early craft unions excluded women -> established protective unions, but still lacked power; represented support force for women
- Unions remained relatively weak compared to England (where workers banded together to transform political structure) due to immigrant workers w/ low wages unable to show anger without risk of firing, ethnic divisions -> internal fights, strong industrial capitalists

Industrial workers pushed for control in state legislatures with failed attempts at a maximum workday and child labor restrictions; although unions and strikes were made legal and skilled workers were able to form relatively successful unions similar to preindustrial guilds, most unskilled workers struggled to form a powerful force due to internal divisions, a high labor supply leading to instant firing at any sign of discontent, and the power of the industrial capitalists.

How did workers fight for personal freedom?

- Most workers proud of hard work, believed themselves to be "sovereign individuals"
- Ideas of freedom far less organized than modern day: few men/no women could vote, workers were often bound to employers, and millions of slaves completely lacked freedom
- Some argued that a truly free individual should escape from capitalist society (ex: Thoreau lived in isolation on Walden Pond), appreciate nature
- Liberty remained strong particularly in the North w/ lack of slavery seen as true freedom
 - Able to change professions with ease, move throughout country
 - Material conditions at times worse than Southern slaves
 - Blacks in North still not considered true citizens; although they had arrived as skilled workers, often received worse conditions due to rivalry w/ white craftsmen -> domestic servants

Freedom remained a challenging subject in the United States due to the inability of the majority of the population to vote. Although some believed that capitalist society was antithetical to freedom, most Northern workers felt that their lack of slavery and ability to move at will represented true freedom. However, blacks in the North often experienced worse conditions than slavery in the South: they were not considered citizens and often worked less advanced professions.