

# The Civil War, the Supply Chain, and Creative Destruction in the U.S. South

“Through Destruction Capitalism Creates Anew” - Schumpeter

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*The Civil War raises numerous historical questions. Why did it happen? What if it had not? Who was at fault? Was the Civil War just? Though these are relevant questions, economic and business researchers have yet to address and solidify the impact of overall socio/political effects of the Civil War on industrialization in the U.S. South. For effective analysis, the Civil War should be taken as a component of U.S. history, not as an ethical tennis match. Here the pre, concurrent, and post war effects of the Civil War on the supply chain in the South are discussed in terms of entrepreneurship and industrialization created by wartime destruction.*

*This manuscript analyzes changes in the supply chain in the U.S. South using ARCVIEW GIS 3.2. ARCVIEW is a geographic information system program allowing researchers to incorporate sophisticated databases into cartographic form. Thus, the methodology allows for advanced and explicit visualization of the data. The purpose of this manuscript is to: 1) survey the impact of destruction in the U.S. South caused by the Civil War; 2) explore the role of the supply chain in the development of industry in the U.S. South; and 3) offer marketing researchers a new/alternative methodology for graphically analyzing (time series) data.*

It certainly is no coincidence that Adam Smith's *Wealth of Nations* and the Declaration of Independence were published in the same year, 1776. These two revolutionary documents defined what would become the framework for a society endeared to freedom, equality, and economic opportunity. Adam Smith and the writers of the Declaration of Independence had ideas to sell. Ideas, marketed by separatist politicians/revolutionaries to the people of the British colonies that were instrumental in initiating the building of today's strongest market economy.

The early U.S. economy was powered by industrialization. Maritime distribution from Europe facilitated the beginning of and sustained the fledgling economy. The first revolution of 1776 was the development and sale of the first steam engine (Wren

1994). The incorporation of the steam engine into the U.S. economy assisted the maritime industry in supplying the distant U.S. South with a myriad of goods at lower transactions costs than traditional land carriers, such as the horse and buggy (Williamson 1985). While ocean-going vessels serviced Charlotte, Savannah, Mobile, and New Orleans, the steam engine supplied Chattanooga, Atlanta, Birmingham, Greenville (SC), and Charleston.

Upon these rails and seas, the U.S. expanded early commerce into a region of unparalleled resources. The U.S. southern states offered the U.S. an opportunity to build a raw material support system and solidify the country's economic infrastructure. Growth opportunities were vast in this emerging region that was traditionally agrarian. Unfortunately, at the beginning of Southern industrial momentum, through supply chain development, the Civil War turned the clock back to pre-industrialization, and the South was forced to retool.

## CONCEPTUALIZATION

To discuss industrial changes in the southern U.S., the South is defined here as the most distant agrarian region. For this reason, this analysis will focus on Alabama (Birmingham & Mobile), Georgia (Atlanta & Savannah), and Tennessee (Chattanooga & Nashville). This is not to say that the other former Confederate states were more industrialized or less reliant on agriculture. Simply that, the distance between these states and the industrial powerhouses of New York, Boston, Hartford, Philadelphia, and Pittsburgh complicated the supply chain that was the focus of early maritime and rail infrastructure development.

Understanding the reliance on agrarian industry in the South, parallels can be drawn to the economy of pre-industrial England. Plantation owners and port merchants were the aristocracy in control of Southern commerce and politics. Although some cities, such as Charleston and New Orleans, bolstered an early-industrialized infrastructure in production and transportation, most of the region relied on cotton, sugar cane, and other crops to derive capital. On the strength of Daniel McCallum's transaction and information

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oriented railway management system and Samuel F. B. Morse's communication system, supply chain management became more efficient and effective (Wren 1994). These advanced systems minimized guesswork, reduced waste through managerial accountability, and moved the delivery lead times closer to their deadlines. Early transportation systems in the South were developed to deliver products to the North where the majority of the most powerful factories and retailers were located, and to England where cotton was needed for the many textile mills. In short, the system was a function of the nearness of those retailers to the largest populations, the density and buying patterns of Northern consumers, as well as, the overall industry structure.

Before the Civil War, the combined efforts of the U.S. North and U.S. South resulted in the development of a skeletal land based supply chain in the South. In Table 1, evidence is displayed of enormous pre-Civil War growth in railroads. This early system was the conduit through which much of early U.S. commerce would rely. The eventual destruction of this early system would force the southern U.S. to redefine commerce and distribution.

**TABLE 1**  
**RAIL GROWTH EAST OF THE MISSISSIPPI RIVER**  
(Miles)

Year	1840	1850	1860
Rail Growth	2,818	5,000	30,000

NOTE: Wren 1998

The Civil War brought on death and destruction to both society and industry in the South. Creative destruction is both an economic and social process by which old structures (often still effective) are replaced by new (often innovative) structures (Dixon 2000). This destruction could be deemed "creative destruction" in that without the Civil War, Southern integration into industry may have been an arduous task (Schumpeter 1952; Stevenson 1985). The Civil War caused Southern society to close ranks and the resulting isolation caused cities to focus on the factors of production typically supplied by the North. Secession prompted the South to shorten the land based supply chain and internalize production. This internalization caused Southerners to become industrial entrepreneurs and thus propelled many of the Southern cities of yesterday to become the modern industrial powerhouses of today. Schumpeter explains:

Things economic and social move by their own momentum and the ensuing situations compel individuals and groups to behave in certain ways whatever they may wish to do -- not indeed by destroying their freedom of choice but by shaping the choosing mentalities and by narrowing the list of possibilities to choose. (Shionoya and Perlman 1994)

Applying Schumpeter's theory of creative destruction and entrepreneurship to the socio/economics of the South allows us to view the Civil War as a antecedent of economic growth: Schumpeter calls the entrepreneur an innovator.

The function of the entrepreneur is to reform or revolutionize the pattern of production by exploiting an invention or, more generally, an untied technological possibility for producing a new commodity or producing an old one in a new way, opening a new source of supply of materials or a new outlet for products, by reorganizing a new industry..." (Schumpeter 1952)

Schumpeter used firm level analysis to draw his conclusions and develop his theory. This analysis will employ his logic at the industry level, as information on the internal workings of firms in the 1800's is sparse and inconsistent.

In Coulter's 1947 text on reconstruction he postulates: "The Civil War was not worth its cost. It freed the slaves, (and) upset a social and an economic order..." (Coulter 1947). Coulter neglects to access the economic value of change caused by the Civil War. The slaves were freed increasing the supply of industrial labor and thus changing the standard of living. The break up of order, both social and economic, created a "New South" and propelled the region into a new age starting the day the Civil War ended. The agrarian nature of the South had contributed to its demise. Low industrial capacity, a small-scattered population, and weak alliances are the downfall of many contenders (Stam 1996). It is thus proposed that the long-term benefits of the Civil War may outweigh the fiscal costs.

Isolationism may have initiated the South's self reliance, but there is little doubt that the Civil War itself forced the South to, at least for a time, develop its own supply routes, build its own industrial infrastructure, and initiate its own retailing marketplaces thus creating an echo-industrial era in the U.S.. Thus, the proposition that, as a result of the Civil War, the South experienced an era of creative destruction causing the region to be propelled into its own industrial revolution, an echo-industrial revolution in the U.S. South, is developed. This proposition initiates the following questions: What changes did the Civil War bring to the supply chain, thus driving Southern commerce and industry? How do dramatic changes in the environment affect industrial entrepreneurship? Who was responsible for the rebirth of industry in the South? Where would the South be had the Civil War not taken place?

## AN INTRODUCTION TO THE METHODOLOGY

This manuscript uses a geographic information system (GIS) to cartographically represent/analyze data. A GIS is a

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spatial analysis methodology that allows for the input, storage, manipulation and graphical/cartographical representation of raw and spatial data (DeMers 2000). This methodology allowed for the simultaneous analysis of (1) population and industry data from the Census of the United States 1810 to 1900; (2) spatial latitude, longitude and polygon data from the USGS online database; (3) digitized railway vectors from John Stover's- The Routledge Historical Atlas of the American Railroads; and (4) raw attribute data from the Bass Business History Collection. Using this method, map projections are presented throughout the manuscript.

Although this is a very rigorous collection of historical information, the reader should remember that the data is subject to some limitations. These limitations are discussed here due to the newness of the technique for most readers. Though kept to a minimum, errors may have occurred in the entry and digitizing of data, distorting graphic representations. Additionally, the analysis is only as good as the historic data sources, forcing the non-random selection of cities and some discontinuous, missing data. Finally, a basic assumption is made that populations follow industry. This may not be the case, for example, immigration may be driven by other factors. Despite these limitations, the lengthy period and multiple data sources make the analysis robust. The reader should realize the benefit of graphical representation and be able to consider the technique for future research.

### THE ANTEBELLUM SOUTH: CITIES AND INDUSTRY

During the fledgling years of the U.S., the South supplied material support to the North in battling Britain (Gardner 1998). The northern U.S. was experiencing unparalleled industrial growth before the Civil War. By 1846 in Pennsylvania, companies such as the Delaware Coal Company and the North American Coal Company were producing more than 1.2 million tons of coal annually compared to 325,000 tons mined in Virginia, the South's most industrialized state (Adams 1998).

The disparity that existed between industrialization in the U.S. North and the U.S. South can be discussed using population figures. Table 2 presents census data recorded in the third through seventh Census of the United States. As can be seen, before the Civil War the regions that would become some of the South's industrial leaders, Atlanta, Birmingham, and Chattanooga, were not important enough to U.S. commerce to be considered cities. In these regions, county-recorded populations were the norm. Mobile and Nashville were not recognized until 1830. In comparing these cities, the northern industrial powerhouses show huge disparity. Take note that Pittsburgh, a city gaining prominence in the same years as Nashville and Mobile, grew by nearly 100% every ten years prior to the Civil War. Pittsburgh's growth can be directly attributed to the strength of the supply chain and industrialization, while Southern

slow growth can be attributed to agrarian lifestyle and limited industrial infrastructure.

**TABLE 2**  
**POPULATIONS OF SELECTED U.S. CITIES**  
**1810 to 1850**

	1810	1820	1830	1840	1850
Mobile	0	0	3194	12672	12977
Atlanta	0	0	0	0	0
Birmingham	0	0	0	0	0
Chattanooga	0	0	0	0	0
Nashville	0	0	5566	6929	10165
Savannah	13540	7523	No Data	11214	22292
Hartford	6003	6901	7074	9468	17351
Pittsburgh	0	0	12586	21115	46601
Philadelphia	0	63802	80462	93665	121376
Boston	33250	43940	61392	93383	134882
New York	96373	123706	197112	312710	501732

NOTE: Census of the U.S.

The South was a heavily agrarian society. Due to economic and social differences, the North and South grew into two distinct "civilizations" developing different norms and beliefs (Gardner 1998; Warner 1960). Industrialists in the South, such as William Greg, advocated building cotton mills and factories, while northern companies encouraged the people of Chattanooga to industrialize. Southern society rejected this lifestyle change and embraced primitive agrarian methods (Coulter 1947; Govan & Goodlwin 1952; Unknown 1887).

Exhibits One and Two are cartographic representations of Table 2 using the GIS methodology. In Exhibit One it is interesting to note, that in 1810 only one southern city is classified as a city by the Census of the U.S.. Additionally, inland cities seem to be unclassified more frequently. Cities in the U.S. North are displaying urban status ahead of their southern counterparts. The exhibit also displays a disparity in distances from ports for the selected cities, making rail transportation more important to Southern industrialization. Exhibit Two displays that all of the northern cities have been classified as cities by 1840, while three of the selected inland southern cities have not. Ironically, these inland cities will later be classified as industrial distribution hubs for the U.S. South (See Appendix: Exhibits One and Two). Table 3 examines the differences in commercial focus between the North and South in 1840. The selected Southern cities accounted for only 3,571 manufacturing entities to the northern cities' 81,295 entities. This also presents evidence that a more agrarian reliant group populated Southern cities. Comparing Chattanooga and Pittsburgh, two future steel powers in the U.S., note 1,841 farm-related entities in Chattanooga to Pittsburgh's four.

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This is also interesting because Chattanooga is a mountainous region difficult to farm. Thus, there is clear evidence that a sizable commercial difference existed between the two regions before the Civil War.

**TABLE 3  
BUSINESS ENTITIES OF SELECTED U.S. CITIES  
BEFORE THE CIVIL WAR**

Business Entities		
1840	Manufacturing	Agriculture
Mobile	2,038	104
Birmingham	-	-
Atlanta	-	-
Savannah	1,311	46
Chattanooga	222	1,841
Nashville	-	-
Hartford	1,656	40
Boston	7,373	152
New York	54,755	2,772
Philadelphia	14,577	382
Pittsburgh	2,934	4

NOTE: Census of the U.S.

Exhibit Three presents an overlay using the GIS methodology of the fragmented railway system from 1850 as discussed by Stover (1999). These rails are proposed to have initiated growth in the inland cities of the U.S. South, but due to poor conditions and eventual destruction, these supply routes initially hindered industrial development (See Appendix: Exhibit Three).

### INDUSTRY IN THE SOUTH 1861-1865

The importance of the South in terms of cotton production is widely accepted. Evidence of this exists in Britain's inability to control the cotton famine during the Civil War (Pomeranz 1999). Britain held its alliance with the Confederate States at arm length, struggling with avoiding war or supporting the separatists. Eventually, Britain would attempt to produce replacement cotton during the blockade of Southern port towns. Britain possessed neither the expertise nor the supply system to fill the needs of Europe and the northern U.S. The result was a world wide cotton famine (Pomeranz 1999).

Early in the war, Southern commerce nearly came to a standstill. Early union blockades of Southern ports were so effective that maritime supply was shut off (Fleming 1905). Cities like Mobile were crippled financially and would have to start from scratch when the war ended. Railroad connections were incomplete and communications

poor (Fleming 1905). The early Southern supply chain had been a patchwork system that was disintegrating and would eventually cost the South the war. Out of necessity, military industries began to evolve as the Union closed supply lines. New factories across the state of Alabama produced rifles and ironclad gunboats (Fleming 1905). New factories and foundries in Alabama encouraged the government to employ D. H. Kenny to expand the Alabama Florida Railway and Mobile Ohio among others (Fleming 1905). The Nashville Plow Works developed technology to smelt plowshares into cavalry officer swords and scrap metals into fine brass spurs (Woodhead 1991). This was a major change from the original strictly agrarian village of Nashborough (Unknown 1887).

Exhibit Four is a graphic representation of the importance of manufacturing and agriculture on industry in the cities selected. Northern cities show a reliance on manufacturing while Southern cities seem to rely on agriculture. Looking at two future steel cities, Pittsburgh and Chattanooga, the exhibit displays Chattanooga as predominately agrarian while Pittsburgh is predominately industrialized. Nashville's weak rail supply network certainly influenced it's industrial makeup prior to reconstruction (See Appendix: Exhibit Four).

### CREATIVE DESTRUCTION

With the emancipation of slaves, agriculture ceases to be the all absorbing pursuit. Manufactures must take their proper position, and, this fact once thoroughly comprehended, let the grand Anvil Chorus of a thousand sturdy hammers awaken the highway and the by-way with resounding clamor - Unknown, Augusta Weekly Constitutionalist, December 6, 1865.

Although there was some success in changing the antebellum South into a more industrial region, the true revolution did not come until after the Civil War. The antebellum strengths of the state of Georgia were agriculture and arguably the South's best rail system, the Central Line, running from the port of Savannah to Tennessee and the North (Arthur 1852). It was destroyed during the Civil War. Atlanta, not yet a city, took the brunt of several attacks by both sides. Hardee (CSA) and Cheatham (U.S.) ripped through the settlement on attack and counter attack (Woodhead 1991). Eventually, their role in the destruction of Atlanta would be outdone by General Sherman's famous conquest on the road to Savanna.

General Sherman's vigorous offensive included cutting all possible telegraph lines to the North and heating and twisting Central Line railroad track making repair nearly impossible (Woodhead 1991; Somers 1871). He was not alone, Confederates such as John Bell Hood would stop at nothing to destroy existing supply lines used by the Union in the region (Woodhead 1991).

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With all the supply lines cut, the men were expected to feed themselves on whatever foraging parties could find from Georgia's farms. Scourge they did, stripping the countryside... (Woodhead 1991).

Sherman's viscous march destroyed much of internal Georgia. Surprisingly, Sherman spared Savannah. Legend claims that he was overcome by Southern charm, but the true destruction to Savannah had occurred some 10 miles out of town where every possible rail route and telegraph line had been destroyed.

Although the U.S. did not consider Chattanooga a city in 1863, the Union Army had already marked it as an important transportation hub. On September 6<sup>th</sup>, 1863, the Union overtook the settlement without much resistance, cutting off supply routes to hundreds of Confederate cities (Woodhead 1991). Two thirds of all the South's railroads were destroyed during the Civil War (Coulter 1947). On December 1, 1863, Union cavalry, infantry, and heavy garrison artillery descended on Nashville and destroyed bridges, the settlement and the remainder of the Army of Tennessee (Woodhead 1991). Chattanooga's lines were spared by the Union only to be destroyed by the Confederacy. Probably the most damaging effect on Tennessee commerce was the wide spread destruction of bridges across the middle and western portions of the state (Patton 1934).

For over three years, contending armies battled across the state of Alabama. In the eyes of General Wilson, the armies burned and destroyed out of both necessity and malice, leaving the entire region destitute (Fleming 1905). Wilson was party to the destruction, including several Alabama war created foundries and factories considered state of the art for the period (Fleming 1905). The region was in such devastation that crop production would be impossible for years. Steamboats were destroyed on rivers clogging passage and all nine-state railroads were left in complete ruin (Fleming 1905).

In the summer of 1864, the Union approached Mobile Bay with the goal of securing safe harbor and access to the City of Mobile for a land assault. The Ironclads battled traditional sea going vessels eventually concluding in Union control of the bay and Confederate control of the city (Woodhead 1991). With the supply routes cut and the bay unfit for navigation due to excessive mining, Mobile would eventually fall in April of 1865.

## RECONSTRUCTION AND THE NEW SOUTH

After the destruction of the war, populations in Southern cities slowly started to boom (See Table 4). Reconstruction became a tool for the South to use in redefining its commercial focus and the people responded by moving away from the war torn farms and into these new cities. Reconstruction was a difficult time for the

South, but forced the people to change their view of the future because of the limits placed on agrarian production. Adding to the rapid growth of the South was the choice of many Union soldiers to remain after the Civil War. These emigrants brought numbers and new ideas to the emerging industrial region.

TABLE 4  
POPULATION OF SELECTED U.S. CITIES  
1870 to 1900

	1870	1880	1890	1900
Chattanooga	6,093	12,892	29,100	30,154
Birmingham	-	3,086	26,178	38,415
Mobile	27,795	29,132	31,076	38,469
Savannah	28,235	30,709	43,189	54,244
Nashville	25,865	43,350	76,168	80,865
Atlanta	21,789	37,409	65,533	89,872
Hartford	37,180	42,551	53,230	79,850
Pittsburgh	86,076	156,389	238,617	321,616
Boston	250,526	362,839	448,447	560,892
Philadelphia	674,022	847,170	1,046,964	1,293,697
New York	942,292	1,206,299	1,515,301	3,437,202

NOTE: Census of the U.S.

## Port Cities

Port towns were in chaos for years due to both Confederate and Union mining of bays and harbors. Anchor fixed torpedoes such as the Rains Keg, constructed of a small beer keg and all the powder it could hold, floated just below the surface of the water (Woodhead 1991). Ironically, Admiral Farragut's famed exclamation "Damn the Torpedoes..." would be exactly what the maritime industry of Mobile would do for years to come.

Mobile is the common point where all of the state of Alabama's rivers meet the Gulf of Mexico. With the port and rivers obstructed, rail was the only viable travel option. Destruction of the inbound lines forced rail travelers to venture twenty-two miles via steamboat on the Tensaw River (Somers 1871). The vessels were forced to zigzag to avoid visible and invisible objects. The city itself would need the bay and harbor dredged if industry was to survive. City officials had developed plan to both repair the harbor and expand rail lines from the city center as early as 1870. The new rail routes would connect Mobile to Savannah, New Orleans and the Pacific complementing three existing lines under repair (Somers 1871).

It would take years for Mobile to recover. With the bay filled with war obstructions, other towns took the city's once proud retail and wholesale trade (Coulter 1947). In the early 1870's, Mobile developed trade alliances in South

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America and became the nations leading importer of Brazilian Coffee (Coulter 1947). Import trade hit \$1,350,000 annually in the early 1870's with the development of paper, textile, and cotton oil mills (Somers 1871).

Savannah had been Georgia's most important city since 1744 in terms of trade (Coulter 1933). The port of Savannah entered reconstruction in better shape than Mobile. Savannah capitalized on Mobile and New Orleans's misfortune and became the South's leading exporter of cotton. Maritime marketers used savings in freight distance, insurance, and interest to make larger profits than before the Civil War (Somers 1871). Savannah focused on distribution and would be complemented by new rail improvements.

With the Port of Mobile in disarray and the Port of Savannah in operation without a solid land based supply line, the southern U.S. turned inward to improve rail transportation. By late 1871, 1496 miles of rail valued at nearly \$26 million had been rebuilt (Fleming 1905). New lines connected the cities of Atlanta, Birmingham, Chattanooga, Nashville, Mobile, and Savannah and opened a supply conduit to New Orleans, Ohio and the northwestern states (Brewer 1872).

### Distribution Cities

Atlanta and Nashville came through the furnace of war rejuvenated and made prosperous in a new day... Towns with Yankee stamped as boldly as Atlanta were Chattanooga (and) Birmingham... (Coulter 1947).

The reconstruction of Atlanta was a major undertaking. The town was destroyed and its replacement was an industrial "northern financed and looking" city that was loved by the U.S. and hated by Georgians (Coulter 1947). By 1880 the city that was hardly a city before the Civil War contained 196 industrial establishments and 100 new citizens a day drawn to the city by railroad improvements (Somers 1871; Coulter 1947). The city rapidly developed a retail fashion trade and became a popular vacation destination thanks to hotels such as the H. I. Kimball and recreation such as sport hunting (Somers 1871).

In 1860, Chattanooga could be considered no more than a village, but the Union soldiers fell in love with the countryside and stayed. The improved rail infrastructure, demographic change, and nearness to raw materials spurred industrialization. Within ten years Chattanooga developed an iron and steel infrastructure by developing companies such as The Empire State Iron and Coal Company and earned the name "Pittsburgh of the South" (Somers 1871; Coulter 1947). Individual furnaces in Chattanooga produced up to 20 tons more pig iron a day than similar facilities in Pennsylvania. The rapid rebuilding of the northbound rail lines and the completion of the Alabama Chattanooga rail enhanced Chattanooga's industrialization.

By 1870, iron rails from Chattanooga were produced and delivered to Pittsburgh at a price cheaper than those produced locally in the Pennsylvania steel capital (Somers 1871).

Much of the success in Tennessee is reflected in the state's use of the land based supply chain. Table 5 presents the changes in railroad usage in Tennessee. Rail receipts in the fifteen years before the Civil War were only 33% of what the state would transport in the twelve years following the war. Southern industry was flourishing and the supply chain was assisting in and responding to that growth.

**TABLE 5**  
**A PRE & POST CIVIL WAR ANALYSIS**  
**TENNESSEE RAILROAD RECEIPTS**

Pre Civil War		Post Civil War	
Year	Rail Receipts	Year	Rail Receipts
1845	576,942	1866	1,098,970
1847	710,907	1867	3,508,586
1849	790,695	1869	5,386,537
1851	1,004,004	1871	3,590,926
1853	1,202,047	1873	2,420,091
1855	1,035,715	1874	3,618,703
1857	1,451,175	1876	4,526,422
1859	1,848,094	1878	2,000,883
Total	8,619,579	Total	26,151,118

NOTE: Unknown, 1887

Exhibit Five is a graphical representation of reconstructed rail systems as of 1870, using the GIS methodology. The exhibit shows classifications of all the selected U.S. cities with the exception of Birmingham. Here the rail system can be linked to the growth of city population and expansion of Southern industry (See Appendix: Exhibit Five).

Birmingham followed Chattanooga's lead and was rapidly developed by land companies interested in taking advantage of the coal and iron rich Red Mountain. Overnight, Birmingham magically grew to over 4000 citizens (Coulter 1947). Eventually, Birmingham would supplant Chattanooga as the "Pittsburgh of the South." The shift from agrarian business to industrial business is also evident in Alabama's cotton production. Table 6 shows the dramatic change in industrial focus in Birmingham and Mobile. Overall, the state of Alabama reduced cotton production some 57% led by the Birmingham industrialization.

As Chattanooga began flexing its industrial muscle, Nashville exploded as the commercial hub for Tennessee (Govan and Livingood 1952). Navigation in and around Nashville was easier than the Chattanooga mountain region.

**TABLE 6**  
**COTTON PRODUCTION IN SELECTED CITIES**  
**ALABAMA 1860 AND 1870**

	1860	1870	
Mobile	440	317	-28%
Jefferson Co. (Birmingham)	4940	1470	-70%
State of AL	989,955	429,482	-57%

NOTE: Brewer, W (1872)

Nashville became an important distribution hub and limestone supplier. Nashville's strategic location proved fruitful for rail, steamboat, and three-keel boat distribution to the north and to western Tennessee (Unknown 1887; Williams 1930). These modes of transportation were extremely important, as roads in the region were often impassible. Nashville evolved into a transportation hub for New Orleans, Philadelphia, Cincinnati, and St Louis (Williams 1930).

### EVOLUTION OF THE NEW SOUTH & ENTREPRENEURISM

In terms of economics, the New South began at the end of the Civil War (Dunning 1914). Much of the old southern aristocracy were left penniless by the destruction of the Civil War, the transfer of labor to industry, and, most importantly, emancipation, which totally changed life. The once strong agrarian economy supported by one core product (cotton), shifted to industrial, as large powerful plantations became small powerless independent farms. Manufacturing grew into an industrial rivalry and production quantities increased demanding more factory workers and trade unions evolved (Dunning 1914).

Southern towns developed every form of industry represented in North America. Additionally, a few monopolies were created, including the manufacture of cottonseed oil (Coulter 1947). Table 7 displays the rapid growth of Southern rail lines. Recall that by 1865 many of the lines were in complete ruin. Industrialization demanded that new supply lines be constructed and the New South responded.

The antebellum culture embraced independence, and encouraged individuals to enter the business world despite lofty capital requirements (Balleisen 1996). This was an antecedent to a new age of entrepreneurship in the South. Confederate legislation, such as a law passed in 1861, encouraged and protected industrial entrepreneurs and their employees. Industrial employees were exempt from military duties and enjoyed state financed fringe benefits (Fleming 1905). The result was a boom in factories (cotton, wool, shoe, harness), foundries, iron mills, salt refineries, banks, tanneries, and machine shops. The transfer of iron ore from civil to military production moved many traditionally agrarian workers to industry as the quality of

**TABLE 7**  
**TONNAGE OF SELECTED SOUTHERN RAILWAYS**  
**IN 1890**

1890 Southern Railway Tonnage	
Railway Company	Tons.
Georgia, Carolina & Northern	38,104
Norfolk Southern	197,384
Louisville Nashville	17,686,789
Mobile Ohio	822,097
Tennessee Midland	105,885
Birmingham, Sheffield & Tennessee River	301,060
Gainesville, Jefferson and Southern	17,307
Louisville, St Louis, & Texas	357,842
Savannah, Americus & Montgomery	144,690

NOTE: Census of the U.S.

farming implements declined (Fleming 1905). This coupled with the high cost of transportation transformed the South into an industrial region (Dunning 1914).

Creative destruction bred a new attitude among Southerners and the result was a boom in business entities. Table 8 shows the progress made in five southern U.S. cities. The cities of Atlanta, Birmingham, and Nashville had little industry before the war. Just 25 years after the war these three cities accounted for 3633 industrial establishments.

**TABLE 8**  
**BUSINESS ENTITIES IN SELECTED SOUTHERN**  
**CITIES: 1890**

1890	Industrial Establishments
Atlanta	410
Birmingham	2803
Chattanooga	No Report
Mobile	261
Nashville	420
Savannah	244

NOTE: Census of the U.S.

The New South boasted many entrepreneurs and inventors. Clement and Mendhall advanced textiles. Lewis Clement invented and patented the Clement Attachment to streamline cotton spinning. Mendhall developed the Improved Self-Acting Hand and Power Loom.

Ethnic minorities also played a major role in the evolution of entrepreneurship in the South. A. D. Matloff, a Lebanese immigrant, started a retailing business by selling clothing from a backpack to people living all across Georgia (Kalifeh 1988). Matloff soon developed a powerful retail establishment that still exists today.

Two Jewish families, the Lehmans and the Seligmans, flourished in the New South (Ashkenazi 1991). Both families were industrially focused before the war and returned to the South to capture success after the war. The Seligmans changed their focus from merchandising to banking and helped finance change in the New South. The Seligmans would also help rebuild the cotton trade in the South. Emanuel and Mayer Lehman avoided the highly competitive cotton and sugar trade and entered warehousing. Eventually the Lehmans entered manufacturing and by 1870 they owned \$1.5 million in assets (Ashkenazi 1991).

The Civil War also created a group of "Vulture Capitalists" (Balleisen 1996). Good and bad, these industrialists advanced trade in the southern U.S. Carpetbaggers took control of banks, political positions, and retailing, and were often supported by power hungry politicians (Fleming 1905; Patton 1934). Blockade-runners were endorsed by the Confederate states, creating a Machiavellian approach to supply chain strategy. One such blockade-runner was Samuel P. Richards. Richards had his paper business burned by Sherman, but refused to surrender. Richards ran paper and supplies through enemy lines and eventually rebuilt his business as a wholesaler in Atlanta during reconstruction. S. P. Richards Co., now owned by Genuine Parts Co., is considered the oldest continual business in the city of Atlanta.

Exhibit Six displays a final graphical representation of the data for 1900 from Table 4. Major growth of both internal and port cities can be assessed. This is due to the development of a contiguous supply chain/rail system (See Appendix: Exhibit Six).

## CONCLUSION

Scholars have emphasized the significance of vastly improved transportation links and the consequent creation of integrated regions and then national markets (Balleisen 1996).

The destruction of the supply chain and industry during the Civil War forced the people of the South to change their normative beliefs about lifestyle and industry. The destruction of the supply chain forced the South to internalize and build new industry and industrial transport systems. It is possible that the South would have evolved into an industrial region over time, but for the change to take place, the people of the South would have had to make a conscious lifestyle change. It seems unlikely that a unified effort would have started in the 1800's without the creative destruction of the Civil War.

The author hopes that the use of GIS has helped inform other researchers of the power available in using geographic methods. GIS should be used in future historical research, as well as contemporary issues. Using their existing data, researchers may be able to suggest retail site selection, assess product adoption patterns, study consumer mobility,

segment cities, regions and nations, develop Venn Diagrams, and perform path analysis. GIS is an extremely useful tool that marketing researchers should not overlook.

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## APPENDIX

**EXHIBIT 1: Population of Selected Cities in 1810**

**EXHIBIT 2: Population of Selected Cities in 1840**

**EXHIBIT 3: Population of Selected Cities in 1850**

**EXHIBIT 4: Manufacturing vs Agriculture in 1840**

**EXHIBIT 5: Population of Selected Cities in 1870**

**EXHIBIT 6: Population of Selected Cities in 1900**

Exhibits available from author upon request:

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