

Disproving the Weber Theory, New England from 1850 to 1890

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Religion and economic development are two ancient elements that created the foundation that our present societies are based off of. Depending on the influence of a religious group in a state, it created long-lasting cultural and at times even legal norms. While the economy developed to accommodate the ever-expanding trade systems, leading to the maturing of capitalism, and eventually an interconnected globalist system that we have right now. But can these elements influence each other when they are combined?

That is a question that Max Weber posed in 1905 with his famous *Die protestantische Ethik und der Geist des Kapitalismus* (The Protestant Ethic and the Spirit of Capitalism), mainly asking if the religious groups that emerged from the protestant reformation, ignited the conceptual and physical idea of capitalism. Weber's title suggests that the whole specter of Protestantism led to the realization of capitalism. Even though Weber covers the major branches of Protestantism, these being Lutheranism and Calvinism. He wrote at length and placed a specific emphasis on the Calvinistic branch of protestant belief. Calvinism according to Weber was the protestant branch that displayed the development of capitalism the clearest, through its inherent beliefs and outlook towards the world.¹ The main traits of Calvinism that Weber identified that supposedly led to the creation of capitalist thought, were the beliefs of predestination and asceticism.² Predestination is the belief that Calvinist followers are predestined to be rejected or accepted into heaven after they are born. While asceticism is the rejection of worldly affairs and indulgence, most apparent in the Puritan view towards the world. With these beliefs in mind, Weber argued that Calvinist followers, since they adhered to predestination created a communal attitude towards money spending, as the best way to know that you are predestined is by contributing to their community, through their work. Also because of their ascetic belief, Calvinists were more likely to share their wealth in their community instead of spending their collected capital for their own self-interests.³ Thus, Weber argued that when all of these beliefs that are a part of Calvinist thought are combined, create a synthesis of religious and economic principles, lay the foundation and the eventual development of the capitalist market that we are quite familiar with ourselves in the present day.

State of the Art

As soon as Weber's book came off the press, his proposed thoughts on the possible influence that religious beliefs could have on the economy started a fierce debate among academics wanting to either deny or confirm Weber's proposed theory. However, the

¹ Max Weber, *The Protestant Ethic and the Spirit of Capitalism*, trans. Talcott Parsons (1930) 56.

² Max Weber, *The Protestant Ethic*, 53-54.

³ Max Weber, *The Protestant Ethic*, 64.

state of the art can also be discussed with more of the influential authors of the day underpinning the discussion at the time. One of the first notable critics of the Protestant Ethic and the Spirit of Capitalism was by British economic historian H. M. Robertson, who wrote his doctoral dissertation in 1933 rejecting Weber's theory. His main approach towards disproving the theory of the Protestant ethic, was by saying that as early as the fourteenth-century we could already see signs of an established capitalist environment in the area of modern-day Italy. He essentially argued, that through the banking systems adopted across the city-states of the Italian peninsula, but more specifically focusing on the republic of Florence, a capitalistic environment already existed, so the argument that the Protestant Reformation "created" capitalism cannot be claimed.⁴

Around the same time in 1934, we also had Polish historian Henryk Grossman trying to disprove the Protestant ethic. Since Grossman was a Marxist, it is understandable why he would criticize Weber's capitalist-oriented work. But Grossman makes some legitimate critiques on how Weber actually conducted his research. By focusing on the core group that supposedly enabled capitalism i.e., the working-class craftsmen, Grossman argued that Calvinist values by themselves could not instill the capitalist mindset by just religious beliefs in the local community.⁵ Instead, capitalistic tendencies actually appeared from the craftsmen that were actively involved in the trade and production of goods, instead of some religious beliefs.⁶

Thirty years later British historian Hugh Trevor-Roper had his own interpretation on the Protestant ethic. His claim was similar to that of Robertson, there were already developed capitalist societies since the late medieval period, pointing out already mentioned examples of Italy, and the new example of Flanders and the Low Countries which were already established trade centers at the time.⁷ Additionally, capitalism already existed, but at a smaller scale than imagined, and the supposed Calvinist innovators of the practice of capitalism simply adopted older pre-reformation capitalistic techniques.⁸ In recent years though, the debate around Weber's theory has calmed down quite a bit, but an interesting employment of a quantitative approach to the theory has created more concrete conclusions, than simple qualitative guesses on how Weber's theory rings true. This was done by American sociologist Stephen Sanderson and his group, who looked at religious and economic census data and drew correlations between the two variables across multiple countries across Europe.

⁴ H. M. Robertson, *Aspects of the Rise of Economic Individualism: A Criticism of Max Weber and His School* (1933) 49-50.

⁵ Rick Kuhn, 'Introduction to Henryk Grossman's critique of Franz Borkenau and Max Weber' *Journal of Classical Sociology* 6:2 (2006) 2.

⁶ Rick Kuhn, 'Introduction to Henryk Grossman's critique' 3.

⁷ Hugh Trevor-Roper, *The Crisis of the Seventeenth Century: Religion, the Reformation and Social Change* (2001) 20.

⁸ Hugh Trevor-Roper, *The Crisis of the Seventeenth Century* 20.

Through the use of data, the group could not find a correlation between GDP growth and the religious identifications of the population, thus disproving Weber's theory.⁹

On the other side of the discussion of whether or not Weber's theory is in fact applicable are the people who support his theory. In the timeline since the Protestant ethic was released, the support for the theory came a bit later, and with it came a bit more developed and wide-ranging arguments to counter-act the overwhelming criticism that Weber faced. One of the first authors to support the Protestant ethic, was American sociologist Gerhard Lenski, where he conducted an actual study in 1958, on how the religious background among certain groups in Michigan's Detroit area impacted the economic wealth of individuals living in the area. He conducted his research through a survey starting in 1951, and had 656 respondents in the study overall, asking the participants everything from political, economic, family, and religious topics. From this survey Lenski found some inconclusive information in relation to certain variables, such as the attitude towards their religion and the communal role of religion, but he found an interesting correlation between the religious beliefs and economic situation of the surveyed families. He concluded that the Protestants in the Detroit area were more successful and more prone to look up towards "climbing up the social ladder", when compared to the Catholics in the same geographical region.¹⁰

Later on, we had Jere Cohen, an American sociologist who in 1985 conducted a similar study and methodology to what Stephen Sanderson and his group conducted. Cohen mainly looked at high school students at the time, and compared their GPA (grade point average) to their religious background. This might seem strange at first, but Cohen argued that a higher grade-point-average led to better educational and eventual economic positions in the future.¹¹ Jere Cohen concluded that there was a correlation between the person's Protestant beliefs, but as most of the studies that support the theory, the difference between Protestants and Catholics in terms of percentages is less than 10%.¹² However, Cohen did correctly attribute the lower accumulation of wealth in Catholic communities, saying it is due to their recent migration into the community.¹³

Lastly, and most recently we have American political scientists Samuel P. Huntington, who in 2004 published a book on America's national identity, where he included a chapter on the influence of the Protestant ethic on the concept of American identity.

⁹ Stephen K. Sanderson, et al., 'Testing the Protestant Ethic Thesis with Quantitative Historical Data: A Research Note' *Social Forces* 89:3 (2011) 908.

¹⁰ Peter L. Berger, 'Reviewed Work(s): The Religious Factor: A Sociological Study of Religion's Impact on Politics, Economics, and Family life by GERHARD LENSKI' *Social Research* 28:3 (1961) 371.

¹¹ Jere Cohen, 'Protestant Ethic and Status-Attainment' *Sociological Analysis* 46:1 (1985) 49.

¹² Jere Cohen, 'Protestant Ethic and Status-Attainment' 53.

¹³ Jere Cohen, 'Protestant Ethic and Status-Attainment' 56.

Huntington argued that the Protestant ethic and in turn the Protestant belief itself was an essential component in developing the national identity of the United States. The Protestant beliefs of “individual conscience and the responsibility of individuals to learn God’s truths directly from the Bible”, as Huntington puts it, is what created the supposedly essential American ideas of individualism, equality, and the rights to freedom of religion and opinion.¹⁴ And the work ethic of Protestantism is what eventually evolved into America’s work ethic, thus a part of its national identity, and at the same time making it hard to argue that Weber’s theory is false in America’s case.¹⁵

Since the release of Weber’s Protestant ethic, the passage of time has made it one of the most popular sociological books in the last century. Because of this it is difficult to mention every single individual that contributed to the debate on Weber’s proposed theory. Other notable academics that had their own views either supporting or opposing the theory, these are: Fernand Braudel, Martin Luther King Jr., Joseph Schumpeter, as opposing the theory, while authors like David Landes, Emil Kauder supporting it, with many other authors not mentioned being in one of these camps.

You might have noticed that most of the authors that support the Protestant work ethic, are Americans that argue for the theory’s applicability in the United States. As the authors had explained, since the United States was mainly a Protestant country, the wealth of the nation is interconnected with the values of Protestantism, and at the same time America itself. Essentially arguing that the historically “American” values of Protestantism is what made the country so powerful and economically wealthy.¹⁶ Meanwhile among most European scholars, as you might have noticed have generally disagreed with or disproven Weber’s theory.

Research Question, Methodology & Thesis Structure

With this academic European mindset towards the Protestant ethic in mind, this thesis will analyze if Weber’s theory is applicable to the American landscape, just with the previously mentioned state of the art, my hypothesis is that Weber’s theory is not applicable to the United States. Since the United States is mainly a Protestant country, a comparison between states will lead to inconclusive results. Instead, I will look at the religious make up on a county-by-county basis in several states. But which combination of states create an environment that we could test the theory presented by Weber? The most appropriate area where the study could be conducted, would be the region of New England, consisting of the following six states: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. There are several reasons why this region is a

¹⁴ Samuel P. Huntington, *Who Are We?: The Challenges to America’s National Identity* (2004) 68.

¹⁵ Samuel P. Huntington, *Who Are We?* 183.

¹⁶ Frank Chodorov, *Out of Step: The Autobiography of an Individualist* (1962) 187.

perfect place to test Weber's theory, but two reasons stand out the most. Before I list the reasons, I would like to notify that have posted a map bellow of New England during this period, which can be seen in Figure 1.

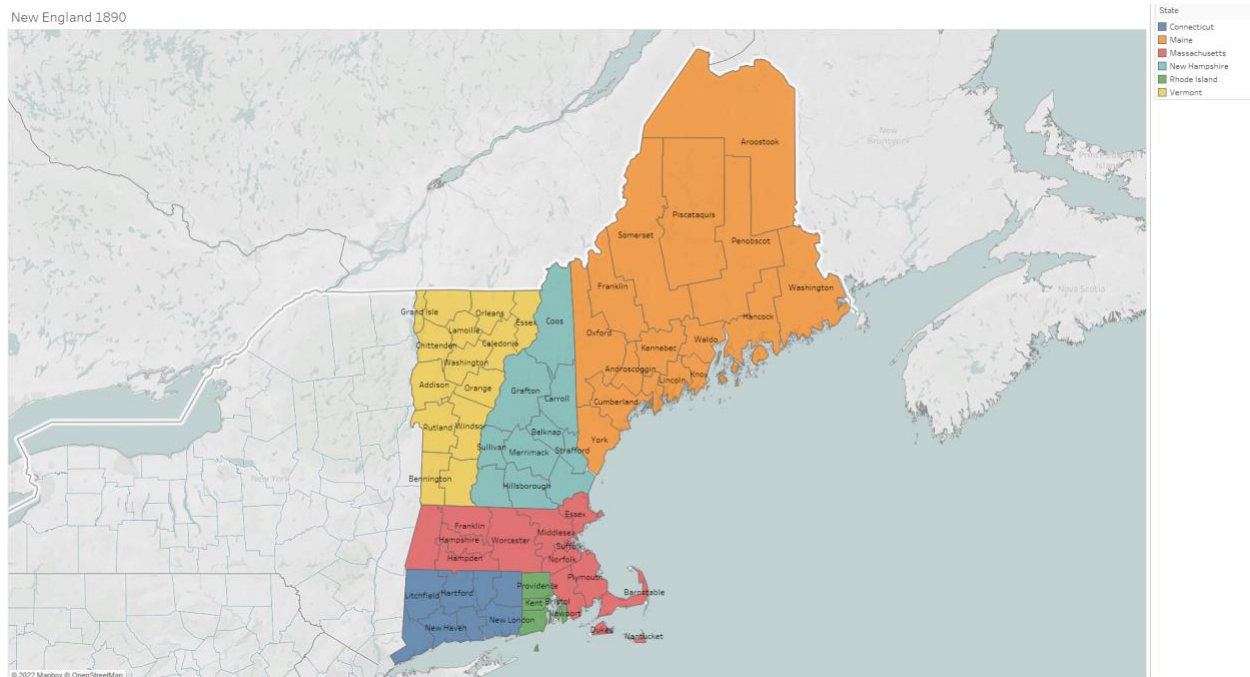


Figure 1. A map of New England in 1890.

First, is the fact that the area was the birthplace of the industrial revolution in the United States, where capitalism and industrialization go hand-in-hand.¹⁷ Second, over time the religious make-up of New England's population, especially around the south had drastically changed over a short forty-year period. Thus, we can look at how the economy existed with the large majority Protestant, more specifically the Calvinist population, and changed with the eventual introduction of other religious groups towards the end of the nineteenth century. With the geographical area defined and its reasonings, the research question in mind that will be used, is: How applicable is Max Weber's theory to mid-and-late nineteenth century New England? Some additional sub-questions will also be used to further specify the study: Is there actually a correlation between religion and economic investment? What other variable can more accurately correlate with economic investment? What economic impact do other non-Protestant and non-Calvinist religious groups show us? How does the relation between religion and economic investment change over time?

¹⁷ Joseph F. Cullon, 'A River Transformed, a Valley Remade', in Worcester Historical Museum eds., *Landscape of Industry an Industrial History of the Blackstone Valley* (2006) 3-5.

Additionally, how exactly the research will be conducted, will be done through several methods and primary sources. The methods used will be the comparative method, mainly to compare differences or similarities between religious and economic variables, with the inclusion of religious groups and the nativity of the population as well. Since the main primary source that will be used through the thesis, is the United States census data, and organized through an institute in the University of Minnesota, the IPUMS National Historical Geographic Information System, or more commonly known as IPUMS NHGIS, the method required to analyze this data will be done through a more quantitative perspective. In addition to the primary sources, secondary sources by other scholars in the field will complement our own research, and will give us a different perspective on what the census data is telling us.

The structure of this thesis will follow a chronological timeline, starting from 1850 to 1890. We will start in 1850 because that is the first time that any type of quantitative religious American census data is available to us, and is the earliest possible point that we can get to the industrialization of New England, and the Protestant Reformation.¹⁸ Then we will advance twenty years later to 1870 as a mid-point in our chronological timeline and see what changes and comparisons we can detect from the previous census. Lastly, we will look at the most in-depth and data-rich period, by advancing another twenty years to 1890 and seeing how the continuous variables since 1850 have changed over a forty-year timeline.

New England Before and During the 1850s

Before we analyze the religious and economic development of the specified period of 1850 in the region of New England, I would first like to take a look at the historical background of what the United States in relation to New England was going through up until the 1850s. Like most countries during the early nineteenth century, the United States had some eventful years during this period in time. At the start of the 1800s, we start with the end of the country's second ever president term limit, this being John Adams. The United States had just narrowly avoided a war with the French during a conflict known as the Quasi-War. The disagreement between the two countries started in the previous decade, where the United States and Britain signed the Jay Treaty, to de-escalate post-war disagreements by once again allowing trade between the two nations and fix other territorial disputes. The revolutionary French Republic being at war with almost every nation in Europe, including Britain, disregarded this treaty and confiscated British goods from American ships.¹⁹ Just before the dawn of the new century, Napoleon

¹⁸ Lincoln Mullen, 'Historical Religion Data in the NHGIS and What You Can Do with It' *Religion in American History* (2013).

¹⁹ George C. Herring, *From Colony to Superpower U.S. Foreign Relations Since 1776* (2008) 7.

Bonaparte took power and mediated relations between the two countries with the signing of the treaty of Mortefontaine, re-establishing formal relations.²⁰

Around the same time in southern New England, in an area between the states of Massachusetts and Rhode Island, had seen unprecedented manufacturing output when compared to the surrounding areas. This was because two decades earlier, the beforementioned area was known as the Blackstone River Valley stretching from Worcester in Massachusetts, and Pawtucket in Rhode Island. The villages along this river were one of the first locations to become home to the country's first textile mills. The textile mills along the Blackstone River essentially sparked the industrial revolution in the United States.²¹ As the United States transitioned into another presidency, the country had been offered an incredible deal in 1803 from the French. I am of course referring to the Louisiana purchase, which essentially gave the United States the last remnants of French colonial holdings in North America. But at the same time, it also gave the United States a taste for major territorial expansion.²² Later in 1812, the United States declared a controversial war on Britain, this time as an independent state. The reasons for this war, are similar to the Quasi-War, a century earlier, but this time negotiations failed and led to an outright declaration of war.²³ Incidentally, New Englanders did not agree with this conflict, as their main trade partner were the British. The most popular political party in New England, the Federalists even threatened secession from the United States, but these motives subsided once the war ended.²⁴ Once the war ended in 1815, the economy of New England recovered from the limited hardships of war, and continued increasing its manufacturing output. However, to keep increasing the manufacturing output, a large work force needed to be recruited. A similar trope as in industrializing regions in Europe, New England started to recruit women from the countryside as to fuel the increasing demand to fill the textile manufacturing mills, thus causing increased urbanization around Blackstone Valley and New England as a whole.²⁵

After 1815, there were a couple other notable events that took place relevant for New England. With the Louisiana purchase previously mentioned, a lot of land was gained for the United States. However, by 1820 new states were being created and integrated into the union, the issue of whether or not these new frontier states in the west would become one of the states that allowed or were against the institution of slavery occurred. The new area of Missouri was considered to be granted statehood, but the beforementioned issue occurred, and political disagreement stalled statehood for

²⁰ George C. Herring, *From Colony to Superpower* 84.

²¹ Joseph F. Cullon, 'A River Transformed, a Valley Remade' 3-5.

²² George C. Herring, *From Colony to Superpower* 102.

²³ Bradford Perkins, *Prologue to War England and the United States 1805-1812* (1963) 2-3.

²⁴ Joseph F. Cullon, 'A River Transformed, a Valley Remade' 52.

²⁵ Joseph F. Cullon, 'A River Transformed, a Valley Remade' 33.

Missouri.²⁶ Eventually a compromise was established known as the Missouri compromise of 1820, where Missouri would become a state that endorsed slavery, but as a consequence a new anti-slave state in New England would be established. This new state would be carved out of northern Massachusetts and be created as the state of Maine. In addition, any state established above the southern border of Missouri would not be a slave state.²⁷ Relevant for what we are going to discuss a bit later on, a Protestant revival called, the Second Great Awakening occurred in the 1830s. This was a religious movement across the United States that brought back more intense religious beliefs across Protestant denominations.²⁸ The Second Great Awakening mainly affected the revival of the Lutheran branch of Protestantism, but it also influenced a revival in the Presbyterian Baptist, and Congregationalist branches of Calvinism.²⁹

Going towards the 1840s, one of the first waves of mass immigration into the United States occurred. This was mainly due to the main groups of immigrants coming to New England and the eastern seaboard, were Europeans and French-Canadians fleeing from failed revolutions, wars, rebellions, famines and general instability in their respective regions.³⁰

We have now caught up with the historical background needed to understand the situation in 1850s New England. And we can finally look into the actual impact that religion and the economy of New England had, and whether it confirms Max Weber's theory. But first, I would like to explain the limits on how the study can be performed. As I have mentioned in the introduction, the main primary source that will be used, is US census data. But the way this data can be shown and manipulated for our purposes is quite limited, but at the same time abundant in what kind of information is included in the dataset. Therefore, I was careful in choosing the most appropriate variables that would show us the impact between religion and economic development in the populace of New England. For the 1850 census, we have a couple of economic variables to choose from, but unfortunately, we cannot get the exact types of jobs that people worked, or how much each county or state earned from engaging in trade, two essential variables outlined by Weber. Nonetheless, we can look at another economic variable that appears in the census, and corresponds with the Calvinist value of communal investment. Yet this variable also causes us a couple of issues, as we cannot look at the total communal investment per county. But we can look at the total investment in manufacturing per county, this might be an inconclusive variable if we conducted the experiment in the

²⁶ George C. Herring, *From Colony to Superpower* 137.

²⁷ George C. Herring, *From Colony to Superpower* 137.

²⁸ Nancy F. Cott, 'Young Women in the Second Great Awakening in New England' *Feminist Studies* 3:1 (1975) 1.

²⁹ Nancy F. Cott, 'Young Women in the Second Great Awakening'

³⁰ James M. O'Toole, 'Here and There: Looking at Catholicism in New England' *US Catholic Historian* 18:3 (2000) 14.

relatively agricultural-based southern United States. Fortunately for us, as mentioned in the historical background, New England was the birthplace of the industrial revolution, and up until the 1850s, the region had been going through continuous industrialization for almost seventy years now. Thus, considering the economic variable, this is the most accurate and reliable way we can track economic development for our purposes, with the use of the 1850 census.

Concurrently, we also have issues with the religious variable. As mentioned in the introduction, the United States government was quite skittish when trying to involve itself in the religious affairs of its population. This can be seen just by the fact that this 1850 decennial census, was the first census that asked any religious questions, and even then, the people who were questioned in the census were actually religious members.³¹ The term “member” also complicates the data quite a bit as well, as religious member could mean an actual priest or a worker for a church, or a registered member of the church. Thankfully, we don’t need to worry about this technicality until the later censuses, as the 1850 census is still quite simple and mainly concerns religious buildings. This begs the question; how do we calculate the religious denominations of individual counties in New England if we cannot get the individual religious beliefs of the population? Luckily, we once again have another variable that will save us from this dilemma, this variable being the approximate seating capacity of religious buildings. It might be unusual to use, essentially what are chairs to approximate the religious identifications in a single county. Be that as it may, the religious attendance of the populace during this time, by itself would mean that most of these seats would be filled and would give us a pretty accurate number of how many people attended their churches.³² With the addition of the previously mentioned Protestant Second Great Awakening, the likelihood of Protestants attending church services is increased and more accurate in representing their church attendance.

With the two contributing variables explained, we can finally start testing the influence of religion on the economic investment and how this affected the population of New England in 1850. Although, I have defined that we are going to look at the economic and religious variables, the religious variable still needs to be subdivided. The main religious groups that we are going to look at throughout this thesis, are going to be the largest Calvinist denomination in the New England region, these are going to be Congregationalists and compared against the non-Calvinist/Protestant Roman Catholics. The division between the two denominations is important, as the United States being a Protestant country, group all Calvinist or Lutherans together would

³¹ Roger Finke & Rodney Stark, ‘Turning Pews into People: Estimating 19th Century Church Membership’ *Journal for the Scientific Study of Religion* 25:2 (1986) 180.

³² J. David Jacker, ‘Child naming, religion, and the decline of marital fertility in nineteenth-century America’ *The History of the Family* 4:3 (1999) 347.

unfairly outnumber the Catholic population. Thus, the largest Calvinist group, i.e., Congregationalists are taken into consideration, and compared against the moderate Roman Catholic population in the region.

Let us begin by plotting all of the sixty-five counties of New England in 1850 on a scatterplot. We put the investment variable on the x-axis, and the religious variables of Catholic and Congregationalist seating capacity on a dual y-axis. In Figure 2 we can see what is visualized when the three variables are combined.

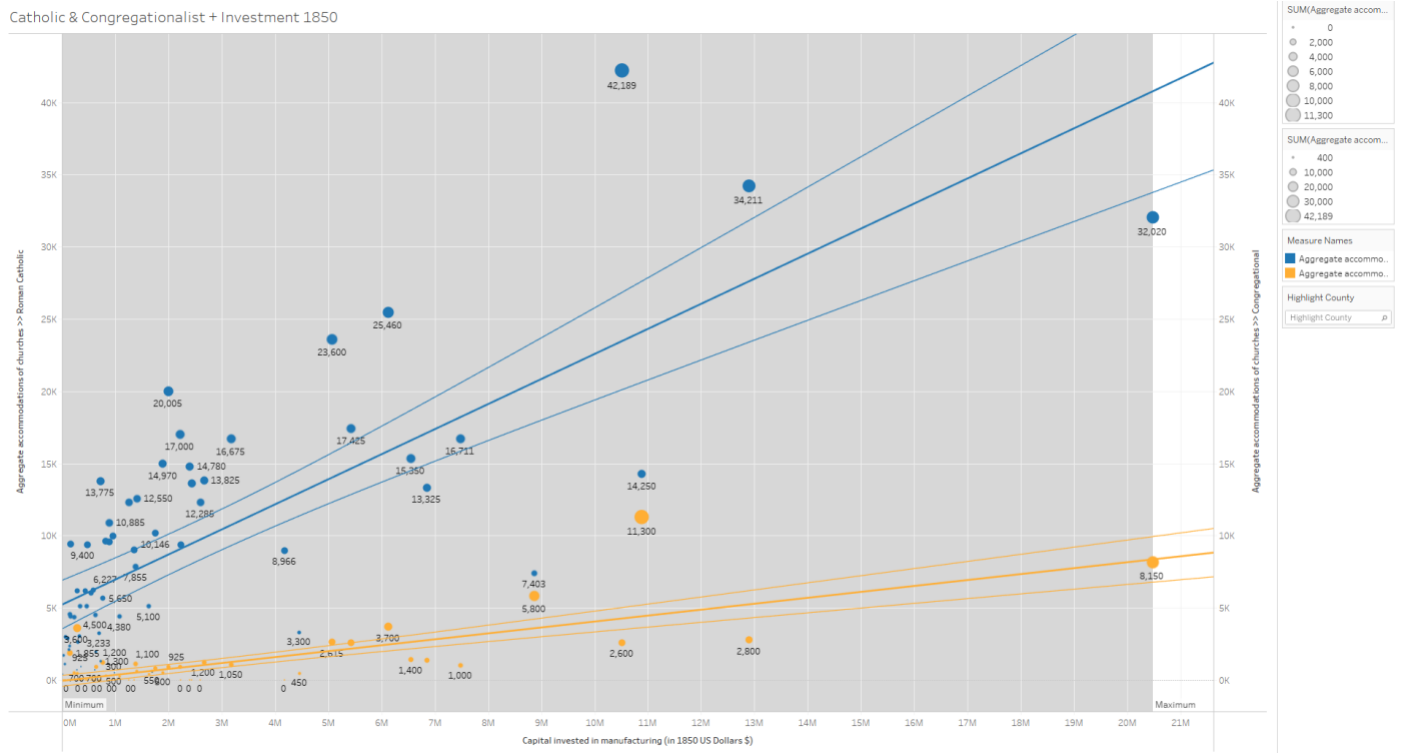


Figure 2. Shown here, is a comparative data visualization of the Catholic and Congregationalist religious groups, based on how many seating accommodations are available per the identified religious group in a county. This is further correlated with the amount of capital invested in manufacturing on the horizontal axis. The larger and the higher that the religious variables are on the vertical axis, the more accommodations are apparent in the county. Source: IPUMS NHGIS

One thing to point out while looking at this graph, is that the Catholic datapoints are colored in a orange shade, while the Congregationalist datapoints are blue in color. For consistency's sake, both of these religious groups are going to remain the same color when we also look at the 1870 and 1890 decennial censuses. Upon first look at this graph, we can see the striking differences on how few the Catholic population actually is, the highest being in Suffolk County, Massachusetts, with only a seating capacity of eleven thousand throughout the county. Just by looking at this scatterplot graph, it is hard to see if there is a pattern that we can detect. The Catholic population seems too

insignificant to get any valuable conclusions, with only the counties that receive large investments have a noticeable population increase. Meanwhile looking at the Congregationalist populations, we do see a slightly noticeable trend. The counties with a lower population of Congregationalists, do follow Weber's proposed theory that Calvinists tended to be more lenient towards investing in their own communities. Of course, a couple of outliers do appear such as the 7,403 datapoint, which is the small capital county of Providence, Rhode Island. Nevertheless, a pattern does emerge, although not as perfect as the indicated trendlines in the graph show, with a couple of the datapoints not even being within the confidence bands of the trendline itself.

That begs the question, is there a better way to find out the correlation between the capital invested in a county, and the two religious groups of Catholics and Congregationalists, rather than just vaguely guessing what the graph is showing us? Thankfully, there is a correlation test that we can utilize and calculate the correlation between two values. There are many variations of the forms of correlation coefficient tests that we can do, a few of them are: Pearson's r , Spearman's ρ , Point-biserial, Kendall's tau and some other infrequently used correlation tests as well. Even with the option of picking from multiple correlation tests to utilize, for this study I am going to utilize Pearson's r , as it is the most commonly used correlation test and has been used by academics who were mentioned in the introduction. Pearson's r works by having three values to indicate the level of correlation between two variables. When a correlation test shows a value of $r = -1$, it means that there is a negative correlation, which means that there is an opposing correlation between the variables. When the test shows $r = 0$, it means that there is no relationship between the variables. And when the test shows a correlation of $r = 1$, it means that there is a perfect and positive correlation between the two variables.³³

Now if we perform a Pearson's r correlation test on the two variables, these are the values that we get from the test. For the correlation between Congregationalists and capital invested, we get an R-value of 0.57, and the correlation between investment and Catholics, we get an R-value of 0.59. From the test we performed, we can see that the Catholic population correlates with capital invested in a single county, more than the Congregationalist population. This result by itself puts Weber's theory into question, as we have seen that, although small, the Catholic population tends to reside in counties that receive more investment than counties that don't. Why exactly this is happening we will investigate in the later chapters. However, as you might have noticed, the correlation difference between Catholics and Congregationalists is only by a meagre 0.02 when compared together. This inconclusive result might be because of the large population difference between the two religious groups. The large difference in

³³ Patrick Schober, et al., "Correlation Coefficients: Appropriate Use and Interpretation" *Anesthesia & Analgesia* 126:5 (2018) 1-2.

population might be because of the reasons explained in the historical background the start of the chapter. One of the first large migrant waves coming from Europe, and more Catholic-majority countries started in 1840, which means that in this census the new migrants only had a decade to settle.

With the correlation between total capital invested in manufacturing in a county, and the two religious groups of Roman Catholics and Calvinist Congregationalists, showing an inconclusive result, I would like to propose looking at a bit more secular and probably more accurate variable instead. This variable being the nativity of a populace, both people born in the United States, and people who currently reside in a county in New England, but are from another country. The proposal of this new migratory variable, stems from another theory that also asks questions about how wealthy or entrepreneurial a certain population group is. This migratory theory, specifically in the United States, claims that migrants are actually more prone at being entrepreneurial, and more likely to set up businesses of their own.³⁴ The argument goes that since migrants from Europe, Asia, Africa, et cetera. had taken the economic risk of leaving behind their relatively stable home countries, they are more prone at taking risks overall. And since setting up and investing in your own business entails risking your own financial situation, the next obvious set for migrant risk-takers was to set up their own businesses and properly settle in the United States.³⁵ Fortunately, the IPUMS conveniently provides us with this data as well, with the main variables recorded in the 1850 census being people identified as hailing from another state outside of New England, or outside of the United States itself. Why the contrasting variable of people outside the states of New England is used, is because on a county level, this is the only variable available to us in 1850. In turn the comparison here, is actually between two migratory groups, out of state Americans, and out of country non-Americans. The side effect of this, is that the “true” native population of New England is excluded from this analysis unfortunately.

Recreating the same type of methodology that we used when comparing the religious variables, we now take the native migrants and the foreign migrants, and keep the investment variable as it is. When the data is visualized on a scatterplot once again, we can see where the datapoints land on the graph in figure 3.

³⁴ Joseph P. Ferrie & Joel Mokyr, ‘Immigration and Entrepreneurship in the Nineteenth-Century U.S.’, in Herbert Giersch eds., *Economic Aspects of International Migration* (1994) 123.

³⁵ Joseph P. Ferrie & Joel Mokyr, ‘Immigration and Entrepreneurship’ 117.

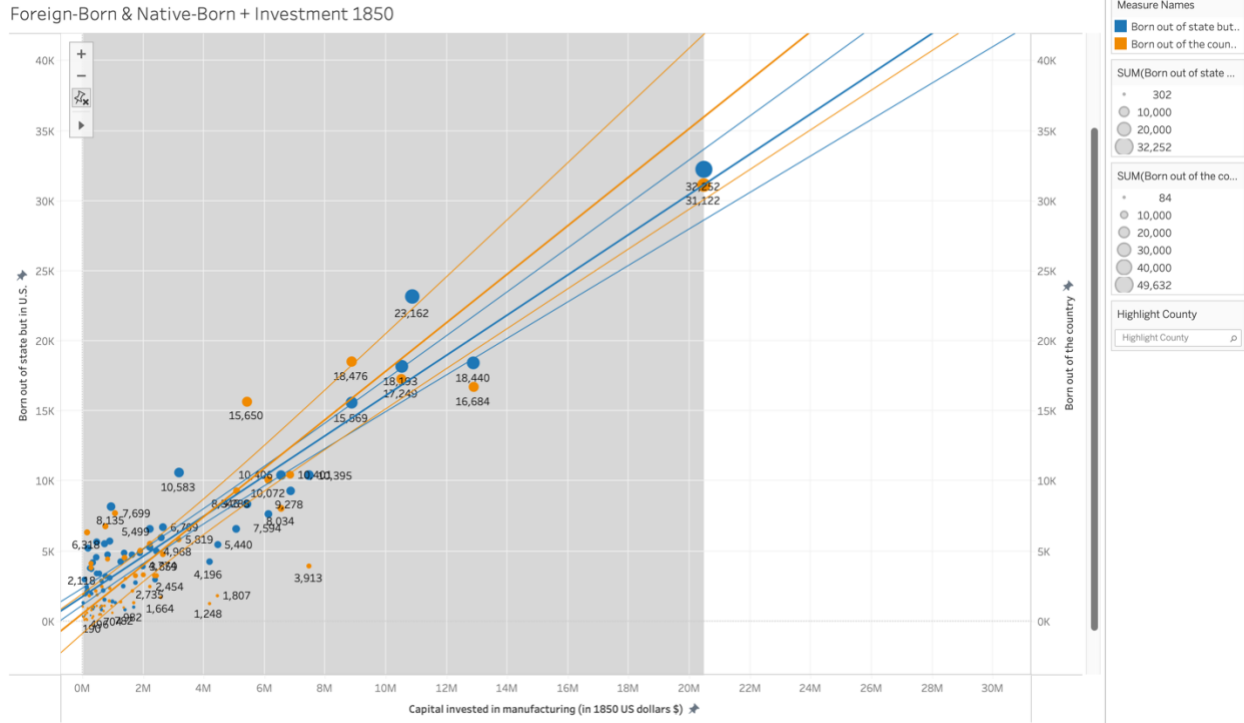


Figure 3. An illustrated comparison between the native and foreign born residents in the counties of New England on the vertical axis, and the amount of capital invested in manufacturing in millions of dollars is on the horizontal axis. The native-born population are blue in color, and the foreign-born population are orange. Source: IPUMS NHGIS

Upon looking at this visualization of our data, it might be easy to conclude that the correlation between capital invested and type of migratory background, are essentially the same. However, the answer lies in the confidence bands in the graph, you can see that the orange line which indicates the foreign-born population, the confidence bands on the line are more spread out when compared to the blue native-born line. This is further confirmed when we do a correlation test, foreign-born residents show an R-value of 0.65, and the native-born residents of New England show an R-value of 0.87, a much higher value when compared to the foreign-born migrants. With the historical background, of knowing that the one of the first large migrant wave came over in just a decade, and the R-values that we received from our tests. A possible explanation for this difference between these two migrant groups might be that the native-born migrants had already relatives, or other people that they knew before coming to reside in their respective counties. Meanwhile the foreign-born migrants came over to escape turmoil in their home country, to settle in a more stable area. But by doing so, they would not have the same benefit of having an established network in their new settled area, as the native-born migrants did.

New England 1870

We move onward twenty years later, to the next decennial census in 1870. Like in the last chapter, we need to catch up on the historical background since 1850 to see what other qualitative information that occurred between the decades to explain the data that we will see in 1870. Unlike the previous chapter, this time the historical background is going to cover a shorter period, as we only have to cover what happened in twenty years, instead of half a century.

Starting off where we left off in 1850, during these years in New England, a large abolitionist movement came into being as questions about the ethical justifications of slavery were being asked. This is in part due to New England included states that were vehemently against the concept of slavery since the formation of the states themselves, all of the states having completely abolished slavery in 1783.³⁶ Additionally, with this anti-slavery sentiment came political action from the region as well, most notably the creation of the abolitionist republican party originating in the region, eventually becoming a fiercely republican stronghold in only a couple of years.³⁷ Most notably these beliefs of abolition were spread, and put in action by a man from Connecticut. The famous John Brown spread his abolitionist message in the developing mid-west and down in Virginia where he eventually met his end in 1859 by trying to organize a slave rebellion at Harpers Ferry, and was summarily executed for his actions.³⁸ Concerning migration, being close to the border, around the same time French-Canadian migration to the region had a notable increase than before, numbering over 600 thousand migrants in 1850, and came in several other waves up until the end of the century.³⁹ With Brown's failed rebellion in Virginia, increased tensions between the pro-slavery states in the south, and the anti-slavery states in the north further incited disagreements between them. Thus, the beginning of the decade started with tense political turmoil between the two sides. The political tension did not fizzle out as the beliefs on both sides of the spectrum had been too opposing to come to a compromise. It also did not help the political situation, as 1860 was an election year as the country had to decide to vote for a new president. With the republican party originating in New England and sweeping the rest of the populous northern states, republican candidate Abraham Lincoln won the 1860 presidential election.⁴⁰ Upon his inauguration as president in 1861, the southern states felt threatened that having a president representing the abolitionist values of the republican party, would mean a certain end to new pro-slavery states from joining the union, and eventually the abolition of slavery from the slavery-reliant southern states

³⁶ Bernard Rosenthal, 'Puritan Conscience and New England Slavery' *The New England Quarterly* 46:1 (1973) 79-80.

³⁷ 'Birth of Republicanism' *The New York Times* (July 7, 1879) 1.

³⁸ John B. Floyd, 'Official Report of John Brown's Raid upon Harper's Ferry, Virginia, October 17-18, 1859' *The Quarterly of the Oregon Historical Society* 10:3 (1909) 315-316.

³⁹ Iris Saunders Podesa, 'Quebec to "Little Canada": The Coming of French Canadians to New England in the Nineteenth Century' *The New England Quarterly* 23:3 (1950) 365.

⁴⁰ David Herbert Donald, *Lincoln* (1995) 524.

themselves.⁴¹ As a consequence the southern pro-slavery advocates struck first at Fort Sumter in South Carolina, sparking the American civil war.⁴² Not mentioning the political influence, New England had a large part to play in the civil war. As mentioned previously in the previous chapter, southern New England had been constantly industrializing for almost a hundred years now, which meant that these few states had to switch some of their mainly civilian-based textile manufacturing factories, into munitions and arms manufactories to supply the union during the war. The most industrialized southern New England states of Massachusetts, Rhode Island, and Connecticut provided the most to the war effort. Massachusetts produced most of the northern states' weapons, providing over 800,000 rifles at the beginning of the conflict, only in Boston.⁴³ Rhode Island had clothed most of the army, as the old Blackstone River textile mills converged at Providence.⁴⁴ And Connecticut provided the regiments and men to fight in battle, as its developed railroad network could quickly reinforce and supply the states further south.⁴⁵ This increased industrial production not only provided most of the supplies needed to fight the civil war, it would also make the New England states prosperous as well.⁴⁶ With this prosperity, and an increased need for a large labor force to fill the factories to supply the troops, an increased migration flow ensued. Many of the new migrants, like in the previous migration waves were mainly Roman Catholics, these being the previously mentioned French Canadians, and a large wave of Irish migrants as well.⁴⁷ Even after the war ended in 1865, and the factories had decreased their manufacturing output for the war, and in turn its economic benefit that it could give to its workers, i.e., the newly arrived migrants. Many of the migrants gained an immense profit from the war, especially the Irish population, as many of them having served in the war gained the trust of the old New England residents and accepted them as their own, while some gained enough money to either go home or live a comfortable life in New England.⁴⁸

Caught up with the historical background, we can once again take a look at the census data, this time for the year 1870. The religious data we have for this year is similar to what we had in the previous chapter, so there are no major changes there. However, in the migration data that we will cover later in this chapter, the data is a bit different, but this will be explained later on. Let us begin visualizing the data that we get from the 1870 census on a on a similar scatterplot as before. Like last time we take two religious values of Congregationalists and Roman Catholics and how many seatings in a religious

⁴¹ Eric Foner, *Politics and Ideology in the Age of the Civil War* (1980) 50.

⁴² Ludwell H. Johnson, 'Fort Sumter and Confederate Diplomacy' *The Journal of Southern History* 26:4 (1960) 441-442.

⁴³ Spencer C. Tucker, *American Civil War A State-By-State Encyclopedia* (2015) 367.

⁴⁴ Spencer C. Tucker, *American Civil* 669.

⁴⁵ Spencer C. Tucker, *American Civil* 87.

⁴⁶ Spencer C. Tucker, *American Civil* 372.

⁴⁷ Spencer C. Tucker, *American Civil* 486.

⁴⁸ Spencer C. Tucker, *American Civil* 370.

building we have per county, we put this variable on the y-axis, while we also take the capital invested in manufacturing per county variable, and put it on the x-axis. Figure 4 shows the result we get upon entering and visualizing the data.

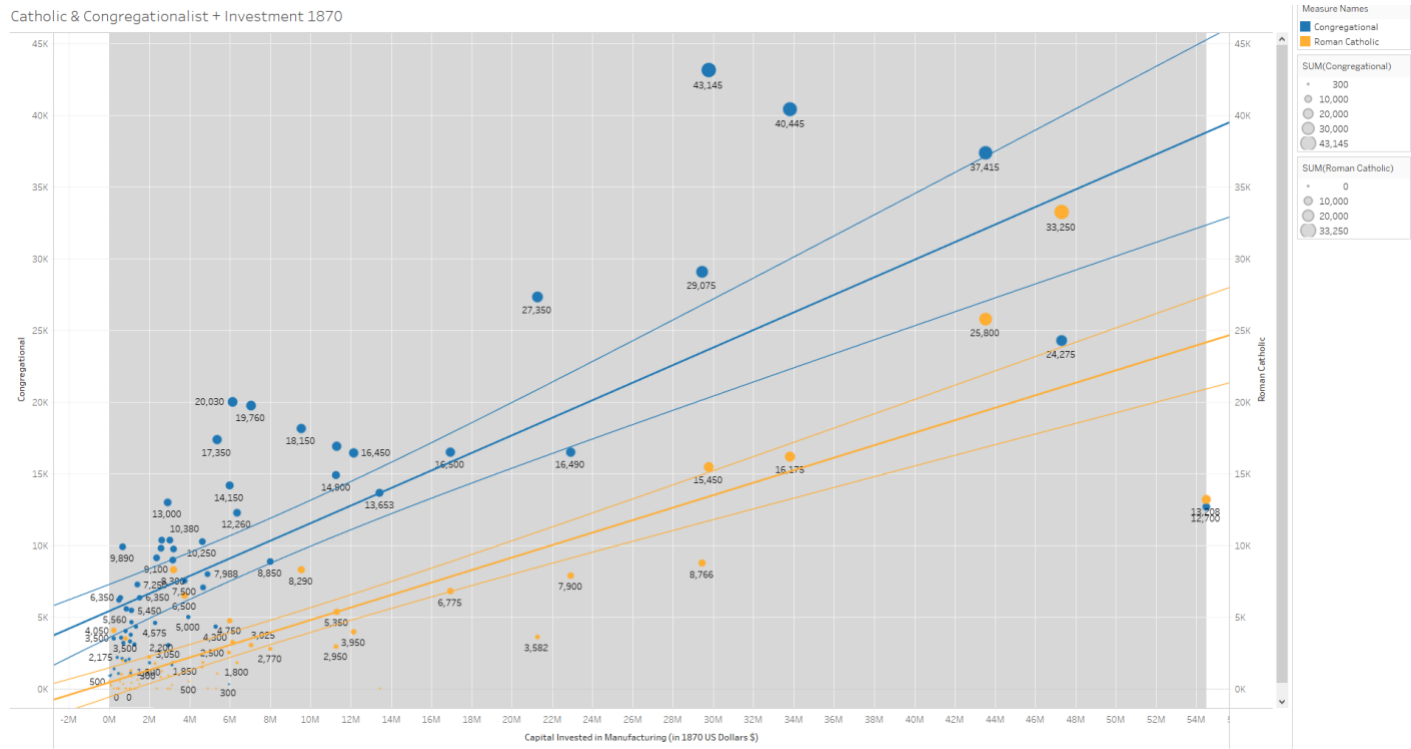


Figure 4. Displayed is a scatterplot graph that shows the two religious groups of Calvinist Congregationalists and Roman Catholic being correlated on the amount of capital invested in manufacturing in 1870. The blue datapoints and line signify the Congregationalists, while the orange signifies the Catholic data from the census. Source: IPUMS NHGIS

Upon comparison of this scatterplot to the one we got in 1850, we can see a couple of significant changes. The first and most obvious difference is how much the assumed Catholic population has increased, as they were at the bottom of the graph when we last saw the visualization in 1850. Meanwhile the Congregationalist population has stayed mostly the same, some population increasing by only a hundred, while some by a thousand in some counties. We also have the amount of capital invested variable which has seen some changes. In 1850 the highest value was just over 20 million dollars, while here we see a much higher increase, with the maximum value of 56 million dollars. Returning to Weber’s theory, and looking at the religious and economic data visualized, we can start coming up with solid conclusions about whether his theory rings true in the 1870 census of New England. Ignoring the trendlines for a bit, we cannot really see a clear pattern emerge with just the datapoints, they seemingly go along in waves, with a couple of cluster and outliers as we reach the furthest part of the graph. Upon the

acknowledgement of the trendlines, we can see a pattern emerge if we only follow these trendlines and their confidence bands. Unlike in 1850, the difference in the trendlines between the Congregationalists and Catholics is more clearly defined. The Congregationalist population seems inconsistently spread out, with some of the lower concentration of Congregationalists being in the lesser invested counties. While the Catholic population datapoints are captured more within the confidence bands of the trendline, with a couple of outliers when looking at the counties with more investment. This already indicates that the R-values of the two religious groups are going to be different when we actually attempt to conduct a correlation test. So, when we conduct the correlation test, we receive an R-value of 0.57 between the Congregationalists and capital invested in manufacturing, while for the Catholic population and investment we receive an R-value of 0.76, giving us a clear difference between correlation values of the two populations. Even though the Catholic population has significantly increased, shifting the data bias towards one side, it is not exactly a bad thing, as it actually makes our comparison more accurate with the two religious groups being put on a relatively equal footing. Since the populations have gotten more equal when compared to 1850 census, the conclusion that we got from this result, starts putting Weber's theory into question, as the Calvinist population does not seem to follow the investment variable that well. It is actually the reverse; the Catholic population actually starts following the investment variable more accurately.

The answer as to why the Catholic population seems to follow the investment variable more accurately than the Congregationalists, lies within the historical context that the data is collected. The civil war had a direct impact on how we reflect on the capital invested in manufacturing data, same with the religious and migratory variables as well, this was hinted in the historical background section at the start of this chapter. During the civil war, an increase in the amount of capital invested in manufacturing in order to fuel to war effort, lead to a surge in demand for labor. With that, many of the newly arrived migrants started working in these factories, in order to make a fortune in the newly settled home. And with most of the migrants being Catholic, either mainly Irish or French-Canadian, the Catholic and investment variables started to directly correlate. This information does not necessarily mean that migrants did not set up businesses, instead we do not have the required information to confirm this at the time. However, in the next chapter where we investigate the 1890 census, we do have the data to investigate this, and will be explored further in that chapter. Additionally, we are told from history that most of the migrants were Catholics, but how much of this is true in reality? We can actually answer this question as we still have migrant data for this census year as well.

Since the comparison is between two variables we will once again utilize a correlation test between Catholic and Congregationalists, being on the same axis as they were when

we looked at investment. While the foreign-born and native-born population, are going to replace the horizontal axis and see how the two religious groups correlate based on their nativity. A note before we actually visualize and conduct the correlation. First, the native and foreign born populations in this census are actually divided by country in the foreign-born population, and by state for the native-born census, so we actually get the “true” native population of New England in the native-born variable. But to keep the variables consistent to what we previously received from the data in 1850, each of these per country/state categories are going to be gathered together into native and foreign born variables.

Consequently, when we enter the census data provided to us, and then visualize it, we get two different, but comparable scatterplot graphs. In Figure 5.1 we can find the scatterplot with the foreign-born variable on the horizontal axis, and in Figure 5.2 we replace it with the native-born variable, while leaving the two religious variables in their spot.

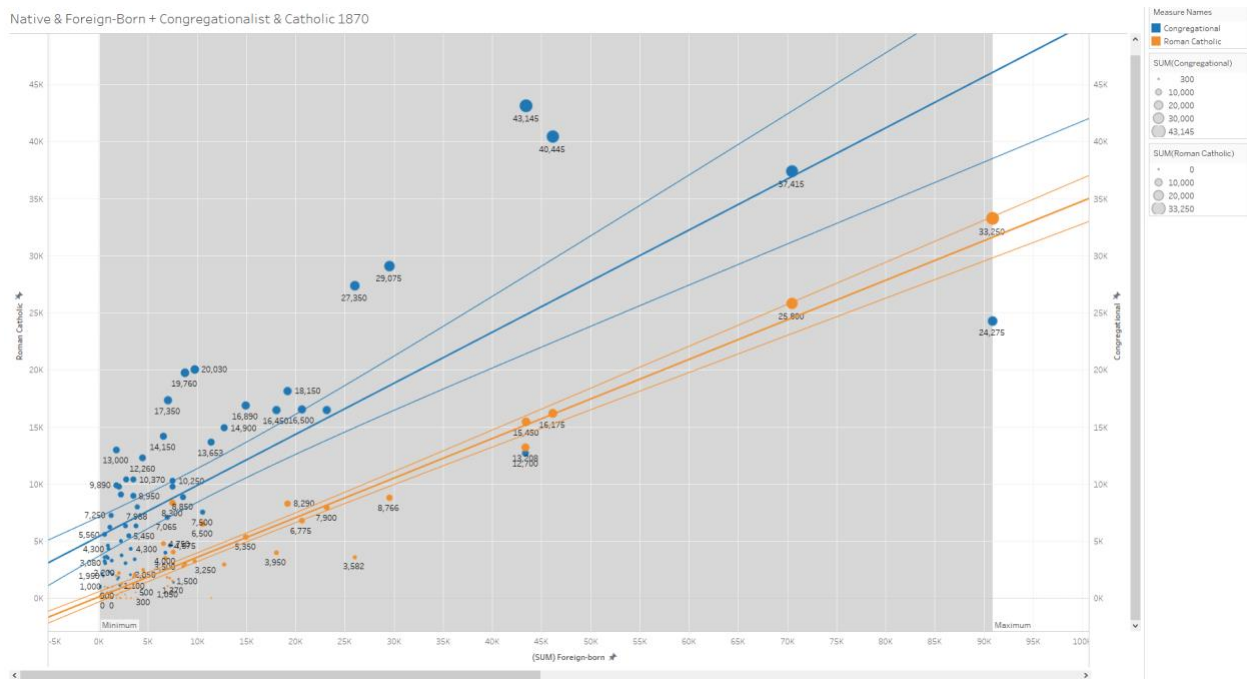


Figure 5.1. Like the previous visualizations, the blue datapoints and the subsequent trendline, represents the Congregationalists, while the orange color, with the inclusion of the datapoints and their trendline, represents the Catholic population. The horizontal axis represents the number of foreign-born persons in a county. Source: IPUMS NHGIS

Figure 5.1 confirms the historical hypothesis about foreign-born migrants correlating to Catholics. This is proven by the very close grouping of the confidence bands of the trendline, while the blue Congregationalists have a harder time correlating with the foreign-born population. Once we conduct the correlation test, it confirms out

assumptions that we got from just the trendlines. The Catholic population correlates with the foreign-born population with an astonishing R-value of 0.94, just 0.06 decimal points off of a perfect correlation. While the Congregationalist population shows the lesser R-value of 0.60. As we have calculated and visualized the correlation between foreign-born migrants and Catholic, there is little doubt about this statement. However, when we change out the foreign-born variable into the native-born variable, we get an interesting result, shown below.

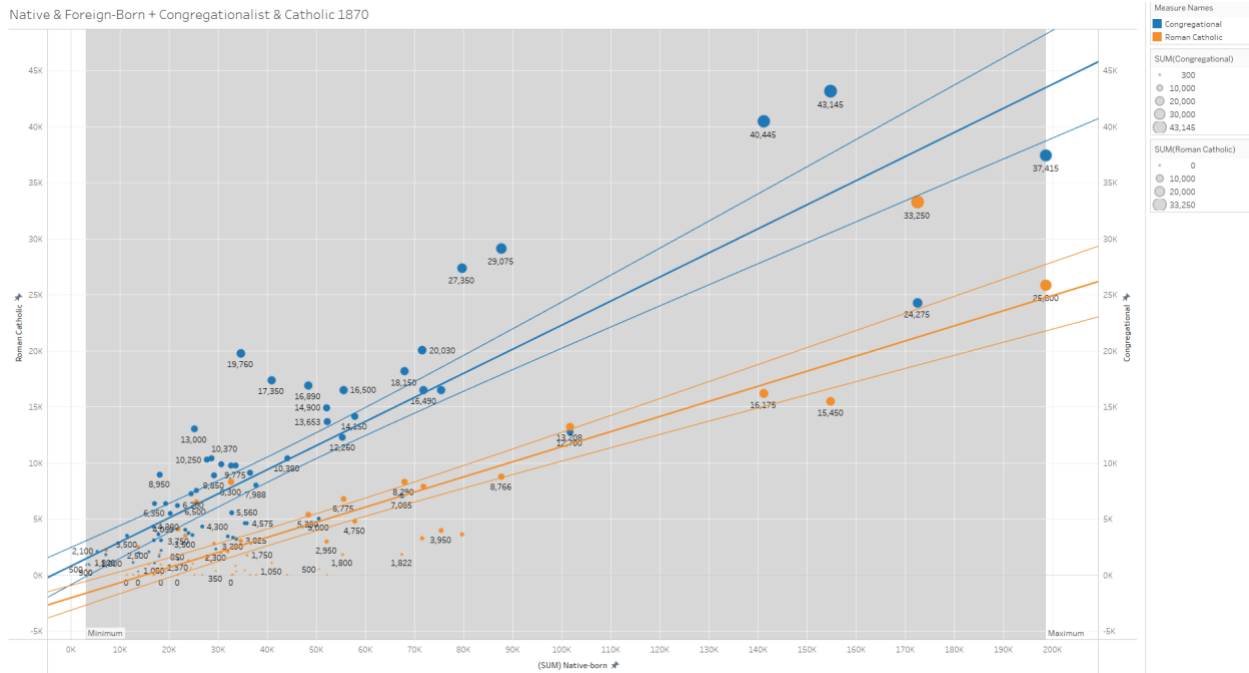


Figure 5.2. Shown here is a similar graph to figure 4.1, with the Y axis variables still remaining the same and the only difference is that the horizontal axis is changed from the foreign-born variable into the native-born variable instead. Source: IPUMS NHGIS

Unlike the previous graph where we looked at the foreign-born population and the two religious variables. This time we get an interesting new result, in figure 5.1. We saw that the Catholic population had a much clearer correlation unlike what we see here. Even though there is a difference in the population sizes, we can see a parallel conclusion from this graph as we did in 1850. Once again, we look at the trendlines to give us the answer, the confidence bands are similar in their spread capture a similar amount of data points, with no clear indication which side has a better correlation with the native-born variable. This is further confirmed when we conduct a correlation test and find that the two variables have only slight differences. For the Catholic population we get a R value of 0.79, while for the Congregationalist population we receive an R value of 0.76, the result is similar to the marginal result we got in 1850 in the last chapter.

A possible reason why we get this inconclusive result, is because the second-generation migrants who came from foreign born parents still identify themselves as Catholics. For this reason, the native-born population still shows a high correlation with the Catholic and native-born variable. Fortunately, in the next chapter in 1890 we do have data available to investigate the second-generation migrants and their impact on both the religious and economic variables.

New England 1890

We have finally arrived to the last chapter of this thesis, here we will hopefully at last answer, just how exactly Weber's theory is applicable to the period we have covered in this thesis. Just before we conduct our final census analysis, as in the previous two chapters, we are going to have to put our data within a historical context in order to explain striking changes in the previous two decennial censuses.

We start this historical background analysis at the start of the 1870 decade, with the civil war having just concluded five-years prior, cooperation between the states in the union could begin again. As many of the already agricultural, and economically feeble southern states joined the Confederate States of America, they had to pour in a lot of their economic output into maintaining and supplying the slave state. After losing in 1865, the Confederate States had dissolved, but had left the southern states in economic and physical turmoil.⁴⁹ Not only suffering from war-fatigue, once these previously confederate states were re-incorporated into the union, they were also required to change from their traditionally slave-run and dependent economy, into a free and accessible economy.⁵⁰ However, with the southern states relying on the plantations for most of its economic output, the plantation owners having also invested in the war effort, could not afford to pay their now free labor force.⁵¹ This created a dilemma for the union, as it had to now fund the rebuilding of the collapsed southern economy. This period is known as the Reconstruction era in US history. The more industrialized and economically powerful northern states of the union, had to contribute towards this reconstruction of the re-integrated southern states.⁵² It might seem that this investment towards the southern states came at the expense of the wealthier northern states. At first, this was of course the case, but as the southern states were able to get back on their feet, they "returned" their investment in another way. In a previous chapter, I

⁴⁹ R. Glenn Richey, 'The Civil War, the Supply Chain, and the Creative Destruction in the U.S. South' *Milestones in Marketing History* 10 (2001) 132.

⁵⁰ Claudia Goldin, 'The Economic Cost of the American Civil War Estimates and Implications' *The Journal of Economic History* 35:2 (1875) 314.

⁵¹ Jeffrey Hummel, *Emancipating Slaves, Enslaving Free Men: A History of the American Civil War* (2013) 296.

⁵² Joshua L. Rosenbloom, 'The Challenges of Economic Maturity' New England, 1880-1940' *National Bureau of Economic Research* (1999) 3.

mentioned that New England was home to some of the largest textile mills in the country, and many of the cotton plantations were still concentrated primarily in the southern states. With cotton being one of the main components in textile manufacturing, a collaborative loop occurred, where southern states provided the raw material needed for the production of textiles, and the northern states, being more industrialized focused on producing and selling the final product.⁵³ This cooperation between the north and south, helped New England maintain, and later increase its manufacturing output even after the war. Eventually though, towards the end of the 1870 decade, the reconstruction effort died down when opinions in government differed over whether or not to keep funding the reconstruction project, as politicians thought most of the goals of the project were completed.⁵⁴

Overlapping the reconstruction period, the United States was going through an era known as the Gilded Age, the term inspired by the writings of Mark Twain on the era. The Gilded Age spanned since the 1870s until the beginning of the 1900s, and was a conflicted period in time. The reason why the Gilded Age is seen as having this double-sided reputation, is because this period expressed immense and unrestricted economic growth for both poor and rich, while at the same time hidden under this veil of prosperity, were the underlying issues of corruption and social inequality.⁵⁵ During this period, we see two similar developments as seen in the historical background of the 1850 and 1870 chapters. The unregulated economic development of the United States, made many of the business people to accumulate wealth that was never seen before. Famous names like Andrew Carnegie, J.P Morgan, John Rockefeller, and many more set up their businesses and earned their fortune during this time. Without any regulatory intervention in these businesses from the federal government, the wages of these workers were able to skyrocket much higher than the amount the average worker in Europe could make.⁵⁶ With the promise of higher wages, many Europeans emigrated to the industrialized north of the United States. However, this time it wasn't Irish, French-Canadian, or other western European migrant groups that came to the region. Instead, it was a large immigration of eastern and southern Europeans, Italians, Poles, Russians, Greeks, Jews, etc. This migratory wave was so large, it had to be separated from the older immigrant waves, these people were known as "new immigrants".⁵⁷ These "new

⁵³ Joshua L. Rosenbloom, "The Challenges of Economic Maturity" 12.

⁵⁴ Nicolas Barreyre, 'The Politics of Economic Crises: The Panic of 1873, the End of Reconstruction, and the Realignment of American Politics' *The Journal of the Gilded Age and Progressive Era* 10:4 (2011) 411.

⁵⁵ Joseph E. Stiglitz, *The Price of Inequality: How Today's Divided Society Endangers Our Future* (2013) 34.

⁵⁶ Suresh Naidu & Noam Yuchtman, 'Labor Market Institutions in the Gilded Age of American Economic History' *National Bureau of Economic Research* (2016) 22.

⁵⁷ Thomas J. Archdeacon, *Becoming American: an ethnic history* (1983) 112.

immigrants” were the new generation of migrants that fueled the labor demand of the industrialized north.⁵⁸

With that the historical background before 1890 is concluded. We can now discuss some interesting developments in this 1890 decennial census. The 1890 census is one of a kind, it contains some of the most detailed information about the two most important variables, religion and economy. For the religious variables, the 1890 census is the last decennial US census that contained information about the religious make-up of the United States, but also one of the most accurate. In 1890 we get the “total number of communicants or members by type of church organization”, the reason why this is a significant advancement in the way the religious population is counted, is because we get the religious identification of a singular individual per church. Unfortunately, we cannot use this variable as the data seems inconsistent across different religious denominations. For example, Catholics count their membership by the amount of people take communion, communion occurs every single Sunday in Catholicism. Meanwhile, the Congregationalists being part of Protestantism only do communion at least two times per year. Upon further investigation of the data, the total amount of Catholics would come out to over one million, while the Congregationalists would only have two hundred thousand. These numbers don’t add up, as we have seen the Congregationalists have always outnumbered the Catholic population. Thus, this religious variable gives the Catholics an unfair advantage, so we will continue using our older approximate seating capacity as before to keep the analysis consistent. Meanwhile the economic variable also has changed. Instead of just having data for the manufacturing variable in the census, we now have an aggregate amount of capital invested in a county instead. This would mean that we are going to get a more accurate measurement of how much investment a single county received from other sources as well. Which would certainly increase the total amount of investment we have, but should still be comparable to the investment variables in both the 1850 and 1870 chapters.

With the data covered as well, we can now conduct our final comparison between the New England Calvinist Congregationalists, and the Roman Catholics and the amount of investment each county receives. Just like in the previous two chapters, when we compare the Catholic and Congregationalist populations, when we visualize the data, we have them on a dual y-axis, while the amount of capital invested is on the x-axis. We can see the data visualized below in Figure 6.

⁵⁸ Joshua L. Rosenbloom, “The Challenges of Economic Maturity” 21.

Catholic & Congregationalist + Investment 1890

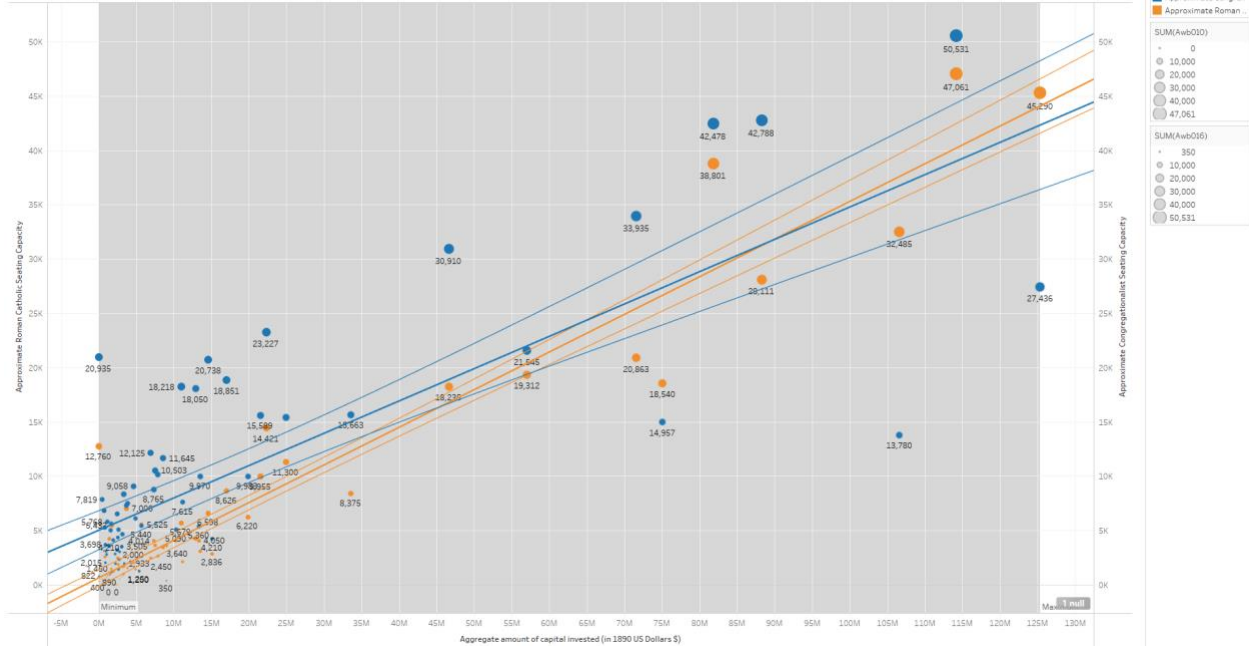


Figure 6. Shown is the visualized data from the 1890 decennial census. The approximate seating capacity of the Catholic and Congregationalist churches are on a dual y-axis, and the aggregate amount of capital invested in a New England county is on the x-axis. The blue datapoints and the subsequent represents the Congregationalist seating capacity in a county, while the orange datapoints and trendline represents the Catholic seating capacity. Source: IPUMS NHGIS

With the 1890 census data and our variables visualized, we can come to some interesting conclusions. Just to show how far we have come; I would like for you to go back and look at Figure 1 back in the 1850 chapter. The Catholic population has increased at a significant rate, at this point in 1890 the Catholics have essentially caught up to the Congregationalists, thus making this one of the most fair and comprehensive comparisons in the census data that we have available to us. I should also mention that the investment has significantly increased as well, from the 20.5 million maximum investment, to a staggering 125 million maximum investment value in just 40 years. Just like in the previous chapter, we can see a similar pattern for both the Catholic and Congregationalist populations. The orange Catholic trendline shows a tight grouping throughout the graph, while the blue Congregationalist trendline has disappointingly stayed pretty much the same for the past 40 years. But just to be sure, we can conduct a correlation test to see how much this difference has changed over the years. From this data we receive an R-value of 0.93 for the Catholic religious group, and an R-value of 0.66. It is the second time that we see that the Catholics correlate with investment by a higher margin than Congregationalists. Thus, we can already start questioning Weber's theory that Calvinists tended to invest more or tended to be wealthier than any other religious group, especially since the population of both of these groups are more or less the same in 1890. Just to see how much the correlation changed over the decades, the

shown in blue, and white native-born population of foreign-born parentage shown in orange. Source: IPUMS NHGIS

From this visualization we cannot get an exact answer to our question straight away. But if we were to conduct a correlation test, these are the R-values that we would get: 0.85 for native-born of native parentage, 0.95 for native-born of foreign parentage. A difference of 0.10 points, but a lot better than the 0.3 points that we had in 1870. This result might still put doubts whether many of the migrants were Catholic. So, we can conduct another test this time with the Catholic variable switched out into the Congregationalist variable instead. Figure 7.2 shows the data when it is visualized on a scatterplot.

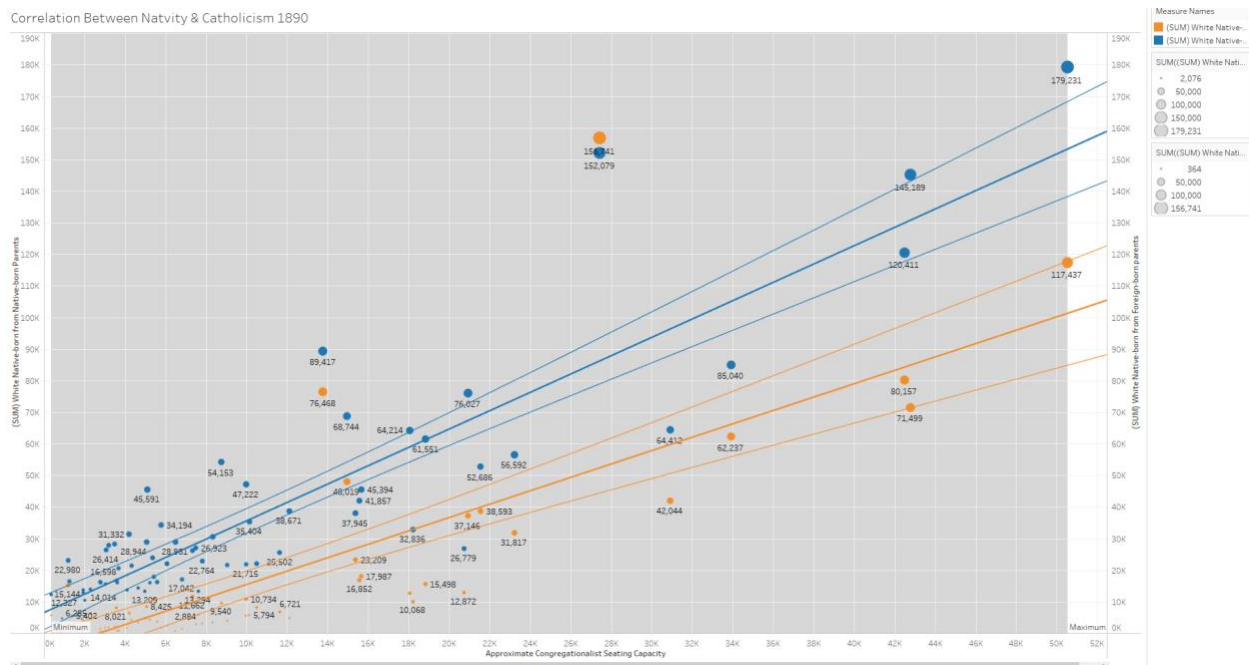


Figure 7.2. Similar to Figure 7.1, this visualization shows both same y-axis values, with only the x-axis changed out from the Catholic variable, into the Congregationalist variable. Source: IPUMS NHGIS

In this scatterplot we see a clearer difference when compared with Figure 6.1. The population of native parentage show an R-value of 0.80 between them and the Congregationalist variable, while the population of foreign-born parentage show an R-value of 0.63 between them and the Congregationalist variable. From the conclusions we received both figures 7.1, and 7.2 we can confidently say that migrants, and even parents of migrants were primarily Catholic. That is what would explain the increasing correlation between Catholics and the amount of capital invested in a certain county. Thus, it would be more sensible to attribute an increase in investment not to any specific religious group, but to the foreign migrants that helped fuel the local economies of New England.

Conclusion

In conclusion, I have looked at the theory proposed by Max Weber, that Calvinist religious groups are more likely to invest in their communities and in turn become wealthier in the region of New England. The research question of: How applicable is Max Weber's theory to mid-and-late nineteenth century New England? Was used to finally answer Max Weber's theory. With the help of the state of the art, using the methodology provided by Stephen Sanderson, and also Jere Cohen, I have found out that the correlation between the two values does not work. Which essentially boils down to that the Calvinist Congregationalist population in New England does not confirm Weber's theory that Calvinist populations were somehow more likely to invest and overall become wealthier than other religious groups around them. Instead, we saw the Catholic population overtake the Congregationalists in investment by a landslide when we got to 1890. Although disproving Weber's theory for New England, the reason for this increase in correlation between Catholics and investment was in reality due to migrants being more likely to reside and directly invest a higher amount of capital than places without migrants. As a consequence, upon researching economic growth, it would make more sense to track migratory patterns of people, instead of the preconceived notions about some religious groups showing a larger impact on the economy than any other non-religious variable. Coming to this conclusion after covering the 1850, 1870 and 1890 census years. In 1850 we came to an inconclusive conclusion at first, but in 1870 we started to question the feasibility and applicability of Weber's theory, but could not get to conclusive results still. Only in 1890 with new data did we find that the Calvinist population did not have a significant correlation between the investment and Congregationalist variable. Meanwhile for future research, hopefully the methodology I have shown in my thesis will be applied to look at other regions in the United States or somewhere else to either confirm or deny Weber's theory.

Bibliography

Primary Sources:

Max Weber, *The Protestant Ethic and the Spirit of Capitalism*, trans. Talcott Parsons (1930).

IPUMS NHGIS, University of Minnesota, www.nhgis.org

The New York Times, www.nytimes.com (consulted 15 June 2022).

United States Census, Statistics of Churches in the United States at the Censuses of 1870, 1860, 1850 (1850-1870).

United States Census, Eleventh Census of the United States: Report on the Statistics of Churches in the United States (1890).

Secondary Sources

Bernard Rosenthal, 'Puritan Conscience and New England Slavery' *The New England Quarterly* 46:1 (1973).

Bradford Perkins, *Prologue to War England and the United States 1805-1812* (1963).

Claudia Goldin, 'The Economic Cost of the American Civil War Estimates and Implications' *The Journal of Economic History* 35:2 (1975).

David Herbert Donald, *Lincoln* (1995).

Eric Foner, *Politics and Ideology in the Age of the Civil War* (1980).

Frank Chodorov, *Out of Step: The Autobiography of an Individualist* (1962) 187.

George C. Herring, *From Colony to Superpower U.S. Foreign Relations Since 1776* (2008).

Gerhard Lenski, *The Religious Factor: A Sociological Study of Religion's Impact on Politics, Economics, and Family Life* (1961).

H. M. Robertson, *Aspects of the Rise of Economic Individualism: A Criticism of Max Weber and His School* (1933).

Hugh Trevor-Roper, *The Crisis of the Seventeenth Century: Religion, the Reformation and Social Change* (2001).

Iris Saunders Podea, 'Quebec to "Little Canada": The Coming of French Canadians to New England in the Nineteenth Century' *The New England Quarterly* 23:3 (1950).

J. David Jacker, 'Child naming, religion, and the decline of marital fertility in nineteenth-century America' *The History of the Family* 4:3 (1999).

James M. O'Toole, 'Here and There: Looking at Catholicism in New England' *US Catholic Historian* 18:3 (2000).

Jeffrey Hummel, *Emancipating Slaves, Enslaving Free Men: A History of the American Civil War* (2013).

Jere Cohen, 'Protestant Ethic and Status-Attainment' *Sociological Analysis* 46:1 (1985).

John B. Floyd, 'Official Report of John Brown's Raid upon Harper's Ferry, Virginia, October 17-18, 1859' *The Quarterly of the Oregon Historical Society* 10:3 (1909).

Joseph E. Stiglitz, *The Price of Inequality: How Today's Divided Society Endangers Our Future* (2013).

Joseph F. Cullon, 'A River Transformed, a Valley Remade', in Worcester Historical Museum eds., *Landscape of Industry an Industrial History of the Blackstone Valley* (2006).

Joseph P. Ferrie & Joel Mokyr, 'Immigration and Entrepreneurship in the Nineteenth-Century U.S.', in Herbert Giersch eds., *Economic Aspects of International Migration* (1994).

Joshua L. Rosenbloom, 'The Challenges of Economic Maturity' New England, 1880-1940' *National Bureau of Economic Research* (1999).

Lincoln Mullen, 'Historical Religion Data in the NHGIS and What You Can Do with It' *Religion in American History* (2013).

Ludwell H. Johnson, 'Fort Sumter and Confederate Diplomacy' *The Journal of Southern History* 26:4 (1960).

Nancy F. Cott, 'Young Women in the Second Great Awakening in New England' *Feminist Studies* 3:1 (1975).

Nicolas Barreyre, 'The Politics of Economic Crises: The Panic of 1873, the End of Reconstruction, and the Realignment of American Politics' *The Journal of the Gilded Age and Progressive Era* 10:4 (2011).

Patrick Schober, et al., "Correlation Coefficients: Appropriate Use and Interpretation" *Anesthesia & Analgesia* 126:5 (2018).

Peter L. Berger, 'Reviewed Work(s): The Religious Factor: A Sociological Study of Religion's Impact on Politics, Economics, and Family life by GERHARD LENSKI' *Social Research* 28:3 (1961).

R. Glenn Richey, 'The Civil War, the Supply Chain, and the Creative Destruction in the U.S. South' *Milestones in Marketing History* 10 (2001).

Rick Kuhn, 'Introduction to Henryk Grossman's critique of Franz Borkenau and Max Weber' *Journal of Classical Sociology* 6:2 (2006).

Roger Finke & Rodney Stark, 'Turning Pews into People: Estimating 19th Century Church Membership' *Journal for the Scientific Study of Religion* 25:2 (1986).

Samuel P. Huntington, *Who Are We?: The Challenges to America's National Identity* (2004).

Spencer C. Tucker, *American Civil War A State-By-State Encyclopedia* (2015).

Stephen K. Sanderson, et al., 'Testing the Protestant Ethic Thesis with Quantitative Historical Data: A Research Note' *Social Forces* 89:3 (2011).

Suresh Naidu & Noam Yuchtman, 'Labor Market Institutions in the Gilded Age of American Economic History' *National Bureau of Economic Research* (2016).

Thomas J. Archdeacon, *Becoming American: an ethnic history* (1983).