Economic Tendencies in Response to Cyclical Patterns

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Abstract

This paper analyzes the concept of business cycles in regards to transportation changes, depressions, speculative bubbles, and social concepts and movements leading up to the event of major depressions. Upon analyzing this, the paper provides discussion regarding the likelihood of a depression in the year 2030 and the social, political, and economic events that are likely to occur preceding this depression. The depression is generally discussed in terms of incoming and outgoing dominant countries, and includes associated cyclical activity in Spain, France, England, and the United States during each of their terms of dominance. This dominance cycle allows for the possibility that the depression acts as a catalyst for social, political, and even national dominance to change. For the sake of simplicity, the current incoming and outgoing power are defined as China and the United States respectively. The occurrence of market bubbles are then analyzed, followed by an explanation of the research behind social and political cycles. Presidents and their associated ideas are discussed in order to compare the nation's leaders and to better understand elections and presidential platforms in terms of cyclical activity. In explaining this, an analysis of Hoover's presidency and the plans that Trump has made as president is given. Lastly, this paper discusses underlying assumptions implicit within social policies and research and the implications of those assumptions. An explanation of the difficulties involved in the writing and understanding of this paper and a final conclusion ends this paper and aggregates the information into a comprehensive theory. Within the context of this paper, the main business cycle that is discussed in terms of modeling all of this data is the 50 year Kondratiev Cycle, though associated cycles are also mentioned. In doing this, this paper makes a general structure of current and previous events in which to better analyze and evaluate trends over time.

Introduction

In regards to the fifty year business cycle known as the Kondratiev Cycle, paired with other cycles such as the social-political cycle, each century's dominant power appears to experience the same general ebb and flow of recessions and booms. Many of these recessions and booms are caused by the same types of sources, such as the incoming dominant power going through a recession which may have been triggered by the previous dominant power, or some of the recessions may have been caused by a possible aligning of economic cycles with other cycles. With this in mind, in order to more fully understand the general structure of the upcoming dominant country over the next century, the recessions and booms of various dominant and non-dominant countries must be studied. In this way, the current and future state of affairs for the United States and China can be studied and understood based on recurring events.

One of the main types of economic events that will be studied here is the occurrence of a market bubble that appears to lead up to the aligning of the four main business cycles every hundred years in the incoming dominant country. This may or may not have been caused by the previous dominant power, which would have experienced its defining market bubble one hundred years earlier. This information may suggest a market bubble within the Chinese economy that may burst within the coming years, as they come to dominance. Many times, this bubble appears to occur in the financial and banking sector, and they also seem indirectly connected to the depressions that they precede. With this in mind, this paper will study and introduce institutions that are formed after these bubbles have taken place in order to better understand and predict the way that the Chinese, American, and global economy may look within the coming years. Generally, these institutions will have an effect in the years to come,

even being strengthened during the time of the depression. It appears that the institutions tend to revolve around the banking system and its regulation or deregulation within the economy.

On a final note, this paper will address the social-political process and the way in which it effects the culture and climate of the various nations leading up to depressions or recessions. The ebb and flow of civil rights movements, immigration, conservatism and liberalism, and the effects of war, reconstruction, and peace on the Kondratiev and other such cycles will be discussed in order to provide a basic framework for how the cycles work over time. Leading up to the alignment of the business cycles near the turn of each century, there appears to be a rise in the amount of spread-oriented thinking within the economy and a polarization of conservative ideas in the economy. This leads to temporary friction as the polarized ideas and the spread ideas seem to fight for dominance, with the polarized ideologies maintaining dominance until around the time of the economic depression. This already appears to be occurring within the United States, and may be occurring within China as well. For this reason, the social/political climate during the recessions and depressions will also be addressed in this paper.

Literature Review

In 1925, Nikolai Kondratiev wrote "The Long Wave Cycle", which would revolutionize the study of business cycles due to its introduction of the fifty year cycle (Kondratiev 1979). Schumpeter would later find a correlation between the processes of this cycle and infrastructure within the economy, thus giving a physical element to this cycle (Amos and Price 62). In later years, this cycle has been paired with other cycles in order to explain growth and social factors within a nation, while other studies attempt to explain the development of dominant nations, though they do not all study the cycles themselves or use them in their research (Zinnes 547-

564). These phenomena could nonetheless be studied due to the acknowledgement of various sizes of economic waves such as the ten year cycle known as the Juglar Cycle and the fifteen to twenty year cycle known as the Kuznets cycle (Mager 17-18). In 1987, it was recorded that 1,380 cyclical economic waves were being studied and tracked by the Foundation for the Study of Cycles (Mager 2). By combining these cycles, economists can examine the occurrence and frequency of events within a nation in order to understand the causes and consequences of each event. One such study performed by Amos and Price analyzed the concept of a managerial and an entrepreneurial generation in which researchers would study novel ideas that had not yet been examined thoroughly or they would manage the preexisting concepts behind economic thought (Amos and Price 61-62). Further studies have linked the appearance of asset bubbles within the 50 year cycle (Knoop 165). There do not appear, however, to be many studies regarding the possibility of a depression around the year 2030, though there may be a fairly general consensus among economists as to the nature of the material that does not show well within the current scientific research. Nonetheless, it would be beneficial across many nations if business cycles were studied in order to better understand and predict large scale, and even some small scale, recessions and depressions.

Theory

In the year nineteen thirty, the United States experienced its largest depression in the last one hundred years, fueled by outdated policies and a realignment of ideas within the country.

Fifty years later, another large scale depression occurred in the United States, fueled by inflation and unemployment that occurred due to a new wave of outdated policy and changing ideology.

Over hundred year periods, many dominant countries have faced the same alignment of policies

and depressions within their economies. These can be shown, and, in some cases, explained by the presence of large cyclical factors within the economy. With this in mind, most economists believe China to be the next incoming dominant power, which may even surpass the United States within the next century. Using the cyclical wave patterns, it should be possible to construct the basic pattern for the emergence of supremacy that China will likely take, including the emergence of an asset bubble and a large scale depression that may occur as early as the year 2030, causing damage to many economies around the world.

Over the course of history, many countries have been given the role of the world economic power. In the late 1500s, Spain was in the process of revolutionizing its canal and river systems in an attempt to improve the economy and enable ships to travel closer to their destinations to unload cargo (Vives 360-364). This process took place after the initial discovery of gold in the Americas 1492, which, after working to create a stable economic system with which to employ the Americas resources, would arrive in large volumes after a large initial volume was discovered (Vives 317). This process of gold and metal exportation largely took place over forty years, and, by 1560, led to the Spanish colonization in the Americas (Vives 317). With a strengthened economic system in the Americas and trade increasing over time, the Spaniards found it necessary to make advances in ship travel, thus leading to the gradual improvement of Spain's rivers (Vives 366-367). By strengthening the rivers, Spain also gained the ability to strengthen its mailing system, thus improving communications between the people (Vives 367-368). These improvements would take course over the entire period that Spain remained dominant (Vives 366-367).

Transportation

In the same way that Spain had slowly recognized the importance of the improvement of infrastructure, France began to improve its own infrastucture before becoming the dominant country in the world. Beginning in the 1740's, France began its improvement of roads that were deemed to be important to the economy (Price 4). In doing so, France hoped to strengthen its country by uniting them through a sort of globalization process (Price 4). France began by building roads throughout the different regions towards the country's capital, Paris (Price 4). This improvement was significant due to the fact that roads had not hardly been maintained, and they had historically been put into place as they were needed, rather than creating them through systematic road-building practices (Price 3). The new roads allowed them to not only experience ease of travel, but to have better systems of drainage in place, thus improving the quality of life (Price 4). With these roads being laid and maintained over time, it would make sense as to why France had become the dominant power.

In the 1800's, England also carried the dominant power's tradition of improving infrastructure over the course of its dominance. Beginning with the connection of cities using the then new method of the railroad in the 1920's, England created a catalyst that would accelerate the process of industrialization within their economy, in a time that would become known as the Victorian Era (Altorfer 289). This expansion of railroads began in 1825, and began to slowly increase as more companies followed suit (Kindelberger 194-195). In about 1840, the railroads began to drastically expand as the amount of financing for the railroads increased (Kindelberger 195). Eventually, this expansion created speculative bubbles around 1845 and 1847 (Altorfer 289-290). Nonetheless, the amount of money gained furthered the expansion of the railroads, making England one of the more developed countries in terms of transportation (Altorfer 289).

Further catalysts can be mentioned, of course, such as the invention of the telegraph by Samuel Morse (F.R.M. 283). The telegraph was first tested in 1847 in the United States, and it quickly gained international attention (F.R.M. 283). As a matter of fact, this invention quickly became one of the main engineering feats talked about in Britain in the nineteenth century, along with the railroads (Morus 455-456). These two inventions are known to increase globalization, the transportation of goods, and the strengthening of communication within a country, thus suggesting that these two inventions contributed, and possibly even caused, many of the events within the processes of the Kondratiev Cycle.

The United States of America demonstrates some of the most recent uses of infrastructure improvement. After the invention and subsequent factorization of the plane in 1903, the United States was able to strengthen its mail services and thus improve communication within and around the country, as the other countries have been recorded doing during their dominance (Lawson 1937). Together with the invention of the automobile, the airplane industry has proven significant to the way in which the Kondratiev Cycle moves (Ogburn 81). This is due to the fact that the airplane and automobile industries have changed the way in which the economy operates by changing the demand curves for complementary and supplementary goods (Ogburn 81). Further technological improvements, such as the invention of the computer in 1936, have also increased communication and globalization with respect to the nation (Heneveld).

Improvements to a nation's infrastructure appear to become catalysts for business cycles and socioeconomic cycles alike. Improvements and innovations that further a country's ability to travel allow businesses to ship items for less money and encourage the country to be more united in their communicative practices, in a view of the economy that seems to correlate with the formation of dominant countries. Eventually, however, this process begins to slow, and, due to

infrastructure and other cyclical factors, causes a depression that occurs about every fifty years. These depressions tend to occur around the 30's and 80's of each century, and appear to have the most direct effect within the dominant or incoming dominant power.

Depressions

In the early 1980's, the United States began to experience a time of public nationalism and economic crisis fueled by conflicts with Soviet Russia (Palmer 42). During this time, the United States faced rising unemployment that had been unparalleled since the Great Depression, and remained unparalleled until 2007 (Sablik, 2013). This had occurred due to the idea that the unemployment rate could be controlled by controlling inflation (Sablik 2013). This idea proved difficult, as the government and the Federal Reserve began to lose control of inflationary processes due to their misunderstanding of the effect of the public's expectations on the inflation and unemployment within the economy (Sablik, 2013). Eventually, the government was able to decrease inflation, raising unemployment until it could be controlled more directly (Sablik, 2013). Fifty years prior to this recession, the United States faced the Stock Market Crash of 1929, which began the Great Depression (Duckenfield 1). Leading up to the Stock Market Crash, the Dow Jones had risen by about 230 points within a little over a year and a half, resulting in many people obtaining loans to purchase stocks (Duckenfield 1). Eventually, the stock market crashed, losing most of the value that had been inflated through speculation (Duckenfield 1).

England, likewise, may have experienced a sort of depression from 1873 to 1896 (Musson 200). It is documented that the people in higher positions at the time, such as business owners and royal people, believed there to be a depression present due to a decrease in prices and revenue (Musson 200). This idea does not appear to be shared by those in the lower classes due to the fact that there does not seem to be any evidence of a traditional depression (Musson 200).

Nonetheless, many researchers do agree that at this time the trough of the Kondratiev Cycle had been reached (Musson 200). Another of England's depressions occurred in 1825, just four years after Britain had switched to the gold standard (Altorfer 161). During this time, new stocks had become available in developing lands, such as Latin America, where natural resources were vast, though fairly risky (Altorfer 161). With interest rates low, borrowing became common, until the bank began to issue less of the stocks, causing bank runs and widespread panic as people attempted to obtain more money to invest or pay off their debts (Altorfer 161).

Fifty years earlier, a different depression was present that in some ways mimicked the two depressions one hundred and two hundred years preceding it. In 1788, France experienced a financial crisis that would ultimately end in the creation of the Assignat for purchasing goods (Kindleburger 101). This crisis would also result in a revolution only one year later (Kindleburger 101). Due to the acquisition and subsequent accumulation of debt earlier in the year and uninformed financial decisions that the government made, inflation occurred that eventually began to spur revolt (White 547-548). This financial crisis appears to coincide with other financial crises due to the fact that it is related to the inflation experienced around the eightieth year of each century (White 547-548). This inflation and revolution eventually led to tax cuts for the lower classes (Kindleburger 101).

From these depressions, it can be seen that a major depression occurs every fifty years that leads to a shift in power, from the more privileged citizens of the nation to the less privileged or vice versa. The 30's depression is characterized by the appearance of an initial market bubble and a laissez- faire market, while the 80's depression appears to be characterized by a sharp rise in inflation. These depressions can be a pivotal moment within the nation, as the roles of the upper and lower class in society appear to shift. The 30's depressions occurs after an

initial speculative market bubble, which may or may not set up the conditions necessary for the depression to occur. This market bubble generally occurs about five years after the beginning of the century, but before the twenty-fifth year of the century. This speculative bubble seems to be centered on the banks and stock markets, leading to policy innovations within the banking system that become more important during or after the larger depression.

Market Bubbles

In 2008, the housing market experienced a bubble burst that drastically contributed to the financial crisis (Levitin 1177). There are many different theories as to why this bubble could have collapsed, though there does not appear to be much agreement as to why the bubble occurred (Levitin 1177). It is known, however, that the risk involved in purchasing a house was greatly under exaggerated, thus creating a problem of investing too much into the housing market (Levitin 1177). This bubble eventually led to the creation of the Financial Crisis Inquiry Commission that attempts to find the reasons that speculative bubbles and other financial phenomena occur within the country (Chamow 114). Likewise, in 1907, a speculative bubble popped, causing a recession that was similar to the 2007 crisis (Koehler 169). Financial institutions during this time were backing their money with stocks that were sometimes risky, and, if they failed, could have led to bank runs and panics in other areas as people attempted to obtain money before it was too late (Koehler 169). After occurring twice in the same year, the government decided it was time to implement a central banking system that could help maintain the status of the banks, causing less panics and fluctuations (Koehler 170). For this reason, the Federal Reserve Bank was created in 1903 (Koehler 170).

Around the year 1720, both the incoming dominant power (Britain) of the next century and the incoming dominant power of the current century experienced a market bubble almost

simultaneously, with Britain basing their market bubble structure off of the same basic idea that created France's market bubble (Sylla 419). In 1716, John Law, a Scotsmen who had been previously exiled from France for his economic views regarding the issuing and regulation of the monetary system, opened a bank in France as an attempt to regulate the economy by regulating the currency within it (Kindelberger 98- 99). Law then opened the Mississippi Company in order to further his economic success, thus leading to what became known as the Mississippi Bubble (Kindelberger 99). The Mississippi Company's goal was to rid France of all economic debt incurred from war with Britain by allowing people to purchase the debt through financial markets (Kindelberger 99). The Mississippi Bubble would pop in 1720 (Kindelberger 99).

The Mississippi Bubble was shortly followed by the pop of the South Sea Shares in Great Britain in 1720 (Knoop 166). The South Sea Company mirrored the Missippi Company in the way that it proposed buying the debt of Great Britain through the purchasing of shares of a company (Sylla 419). In a review by Richard Sylla regarding the book *The First Crash: Lessons from the South Sea Bubble* by Richard Dale, Sylla mentions that the main reason that Great Britain had debts was due to their wars against France (Dale 1-203) (Sylla 419). Likewise, much of France's debt was due to the same wars (Sylla 419). In their investments, citizens hoped to help their country and earn a profit, which could have created a sort of mindset in which people invested in order to show that they believed in their nation, thus creating a sort of tangible and moral action for their country (Sylla 419). Ultimately, this action would lead to a large speculative bubble burst in 1720, as the market failed to return a profit for these investors (Sylla 419).

Using the past couple hundred years in order to analyze the formation and culture around asset bubbles, it appears that there may be a sort of tradeoff between the current dominant and

the incoming dominant power based on the socialization of the country. In terms of the United States and China, it could be possible that China will experience a market bubble burst in the upcoming years, especially since the United States has already faced its market bubble when it burst in 2007. While the idea of a market bubble burst may appear to be far-fetched, judging from the 2007 financial crisis and the financial crises of previous dominant powers alone, both Bloomberg and Barron's have suggested that China may be on the verge of a financial crisis due to an overabundance of fake bonds within the market (Bloomberg 2017) (Pesek 2017). Of course, it may be that China has already gone through their defining market bubble, though it may not have been widely publicized. It does not appear that this is the case, however, since China may be on the verge of a large market bubble burst (Bloomberg 2017) (Pesek 2017). China currently has a large debt market that is beginning to run out of bonds with which to sell to investors, creating the opportunities and environment conducive to fraud (Bloomberg 2017). This market has already created fraudulent cases in which businesses have lied on financial reports and have been caught forging documents in order to maintain cash flow and minimize debts (Pesek 2017). It has been suggested that the frequency of these fraudulent cases will rise as the market bubble begins to burst (Bloomberg 2017). Judging from the theory of business cycles and the aforementioned cases of speculative bubbles, it appears that this bubble may help to create some of the conditions necessary for a widespread depression near the year 2030.

Social Cycles

Social structures appear to be other factors that shift in unison with the Kondratiev cycle, which is interesting, since these likely play a role in the development of depressions and booms. Upon analyzing these phenomena, it can be important to note the movements and policies that create the climate and the culture of the nation, such as the women's rights movements in the

early 1900's and the early 2000's. Along with these movements came policies and ideas that helped to shape culture, such as women's suffrage, and, more recently, the women's marches that occurred in early 2017. Using these social cycles, it is possible to understand better where a country is in its development and how close to societal and economic change it may be. These cycles, therefore, provide a benchmark with which to view the outgoing dominance of the United States and the forthcoming dominance of China.

The theory of social cycles begins with the idea that people embody either polarizationoriented or spread-oriented ideas (Amos 187-204). On the one hand, in recent years it seems that polarized idealists tend to believe in a more supply-side or microeconomic view of the world, along with carrying more religious and classical ideas. This may be observed through the composition of the conservative-polarized party. Polarization-oriented generations appear to believe that those who work harder tend to earn more money, and thus, the government should be less regulated and more laissez-faire. On the other hand, spread-oriented generations seem to believe in a more demand oriented side of economics, in which all people are able to obtain goods and services that are deemed necessary to the pursuit of happiness. This may be observed through the more liberal-spread party. As an example, in the spread-oriented method of thinking, universities would be made free and accessible to all so that people can further their education, which is believed to benefit society in a greater way. Moreover, it seems that there is a general consensus by the spread oriented party that people should be taken care of by the elite and ruling classes in an attempt to benefit the whole of society, which would lead to more necessary regulation from the government. These two conflicting views create two fifty year cycles in which either the ruling class is benefitted, or the lower socioeconomic classes are benefitted (Amos 187-204).

In general, it appears that an age group has the greatest effect within the economy for about twenty- five years (Amos 189). With this in mind, two generations would obtain influence between each peak and each trough of the Kondratiev Cycle (Amos 187-189). Using data provided by Michael A Alexander in his book, *The Kondratiev Cycle*, regarding political policy in the United States and the associated political ideology over time, and the theory provided by Orley M. Amos Jr. in his article, Secular Seasons: Long-Run Trends in Spatial-Temporal Socioeconomic Behavior, it is possible to analyze the differing political practices within the United States in order to establish a timeline (Alexander 263-268) (Amos 187-204). Upon analysis, It appears that Alexander uses conservative and liberal policies in order to describe the social cycle tendencies rather than the polarization and spread cycles that Amos describes (Alexander 263-268) (Amos 187-204). For simplification purposes, the terms described here will consist of the spread and polarization cycles defined by Amos (Amos 187-204). If it is assumed that a country reaches dominance around the thirtieth year, then it can be noted that the nation is more polarized in its views leading up to dominance, but, the first large-scale depression near the thirtieth year of the century appears to be a pivot point in which the nation changes its views to be more spread-oriented (Alexander 226). This may suggest that the long-standing institutions created by the polarization generation culminates in a depression caused by an overabundance of laissez-faire policies and markets. After this period of depression the country experiences the entrepreneurial-spread phase, suggesting that the policies would be directed at the benefit of lower-class and minority people (Amos 190). During this phase, it appears that the country achieves dominance, judging by the aligning of the dates of incidence (Alexander 26). After fifty years, the spread phase is over, and the depression that occurs near the eightieth year of every century becomes the pivot point in which the polarization view comes to power (Alexander 266267). This suggests that the spread phase causes over-inflation within the economy as the overabundance of social programs and regulation reaches a peak in the Kondratiev Cycle. These polarization ideologies then retain their prevalence over the next fifty years, after which a new nation comes to power (Amos 190). With this in mind, it appears that two generations of polarization-oriented generations come to power between the eightieth year of the century and the thirtieth year of the next, and two generations of spread-oriented generations come to power between the thirtieth year and the eightieth year of a century (Alexander 263-268) (Amos 187-204). As each generation comes to age, they influence public policy, though, in some cases, it appears that pockets of spread-oriented ideas can exist temporarily within the polarization wave and vice versa (Alexander 263-268).

The polarization and the spread era are both subject to further classification under the theory of the entrepreneurial and the managerial generation proposed by Dr. Edward Price and Dr. Orley Amos (Amos and Price 61-75). Under the theory of the entrepreneurial generation, the first generations that occur after the depressions tend to abandon some of the former generation's institutions in favor of institutions that benefit their ideological views (Amos and Price 64). For example, a generation of entrepreneurial-polarized people would occur after the inflationary depression in the eightieth of each century, during which time they would rid the nation of policies and practices that they would find to be outdated (Amos and Price 64). This would occur over the next twenty five years, after which the managerial polarized idealists would come to power and erect their policies and ideas on the foundation of the entrepreneurial generation (Amos and Price 64). After twenty- five more years, a depression would occur that would act as a catalyst of reform for the entrepreneurial spread-generation (Amos and Price 64). Following the entrepreneurial spread generation, the managerial-spread generation would come to power,

and, following them, the entrepreneurial-conservative generation (Amos and Price 64). In this scenario, the managerial-conservative generation would be prevalent near the turn of the century, which would stay in power until around the thirtieth of the century, in which an entrepreneurial spread generation would occur (Amos and Price 64). A managerial generation would then become prevalent in the fifty-fifth year of the century, and the entrepreneurial polarized idealists would come to power during the eightieth year of the century (Amos and Price 64). This creates a cyclical pattern in both society and the replacement of institutions over time.

In the years between the turn of the century and the depression, a slow but steady rise in social movements appears to take place (Alexander 253-256). The main social movements appear to involve women's rights and the rights of various races of people, judging by the patterns set forth in the last hundred years (Alexander 253-256). In order to better understand these social movements, among other historical phenomena, Michael Alexander has composed a list of political and social events that have occurred within the context of understanding the Kondratiev Cycle (Alexander 243-282). Upon analyzing these lists, it appears that the United States experienced a wave of polarization that began near the ending of the reconstruction period (Alexander 263). This wave was interspersed with worker's, African-American's, and women's rights movements, during which regulations, unions, and institutions were created in order to promote the fair treatment of people and promote human rights (Alexander 253-256). The importance of these institutions stems from the fact that many are being put into place today, though the polarization movement still appears to be prevalent (Alexander 243-265). For instance, in 2016 Senator Bernard Sanders wrote a book regarding his presidential race and the ideology backing his beliefs (Sanders 1-449). In detailing what his campaign stood for, Sanders mentions that they were trying for a fifteen dollar minimum wage, the separation of large banks,

and the end of offshoring (Sanders 3). In many ways, this supports the lower class workers and the equality of people, thus supporting the social movements prevalent today. These social movements include the Black Lives Matter movement, the women's movement and associated march, and the science movement and march. Sanders himself even argues for the importance of maintaining the rights of Native Americans within his campaign (Sanders 3). With Sanders's opposition to large businesses, he largely attracted the notice and support of many lower class people and families (Sanders 1-449). In this way, Sanders, the Black Lives Matter movement, the women's movement, and many other movements today appear to be similar in nature to the movements experienced one hundred years ago. As these movements gain more political influence, it may be that they gain more strength and backing during the depression period, and thus gain more policies and legislators supporting them. As for Sanders, he gained most of his money for the campaign through lower and middle class citizens, and gained many followers who will likely be around during the 2030 depression (Sanders 2).

If the pattern documented by Amos, Price, Alexander, and many others continues, a change in ideologies will likely be present in both the incoming and outgoing dominant countries. As the United States and China both near the 2030 pivot point for dominance and change in political ideologies, it can be expected that these two nations will encounter a rise in entrepreneurial-spread ideology and a clash with previously established managerial-polarization ideas, likely resulting in a financial and economic crash. Leading up to the Great depression, it has been noted that many economists and public servants believed that using classical-based methods and taking into account the idea that people were rational in nature would lead to more accurate measurements of the economy (Stein 190). Hoover and others believed that there was a rational basis for depressions and other such economic problems, almost leading to a mechanical

cause and effect mentality (Stein 190). For this reason, Hoover and others attempted to lower taxes, hoping to raise the amount of money present within the economy (Stein 192-193). Hoover also arranged projects within the economy in order to provide assistance and revenue to the unemployed population (Stein 193). The reason that this is significant is due to the assumptions present within these policies. It appears that when these policies were implemented, it was strongly believed that people were naturally rational beings (Stein 189-190). The assumption that people are generally rational tends to appear more during the polarization phase, and it tends to be debated and disbelieved during the spread phase (Knoop 99-100). Keynes, for instance, did not believe that people were perfectly rational, whereas Robert Lucas used the rationality assumption in his own research, creating such models as the rational expectations model in 1972 (Knoop 99-102). The rationality assumption appears to be widely used in research today, though it is believed to have been improved upon in newer models, such as the rational expectations model (Knoop 100-102). This suggests that the United States, among others, is currently experiencing a wave of polarization within its theories and research. Using the pattern established by the Kondratiev Cycle and the associated social cycles, the nation is currently undergoing a research process that uses the assumption of rationality as a foundation for its policies and articles (Knoop 100-102). As the nations begin to experience the rise in entrepreneurial-spread ideas, these assumptions will likely deviate to an assumption based more upon the irrationality of people.

President Hoover can be used as an example to show how the political ideology present within the nation begins to change near the depressions, though it is still different than the political ideologies that occur after the depression. Hoover has been noted to be less polarized than previously expected by some historians, which may be an indication that the spread oriented

mentality was on the rise within the United States before the depression (Stein 191-192). Hoover believed that laissez faire policy had been extinguished by the increased regulation of businesses and monopolies, the increase in policies promoting equality, and the government's increased involvement in the regulation of all other industries and practices (Stein 190). It appears that this may stem from a different idea as to what constitutes a laissez-faire market. Nonetheless, Hoover had polarized tendencies, such as his notion that imposing tariffs would protect the United States from the Stock Market Crash of 1929 (Archibald 858). This regulatory practice led to the Hawley-Smoot Tariff, which would be cited for over fifty years as having been the cause of the Great Depression (Archibald 858). Policies such as this occurred in contrast to the entrepreneurial-spread based ideas, of which Keynesianism appeared around the 1930s (Knoop 48). Keynesian theory provided a more spread oriented method of viewing economics, rejecting the more classical-based approach that held precedence before it (Knoop 49). These findings suggest that both China and the United States will likely be experiencing a different set of policies and economic theories after the 2030 depression. Before both countries approach the depression, however, the theories will begin to show these changes, though they will likely be based on assumptions that have been held before the ideological changes.

Within the United States, it may be noted that President Donald Trump has much in common with President Herbert Hoover during his time in the presidency. Though Donald Trump has not been known to be a typical polarization-oriented idealist, some of his ideas, such as his opinions on international trade, appear to mirror the policies used by polarized thinkers (Pesek 2017). During a discussion regarding the possibility of a speculative bubble burst in China, William Pesek explains that some of China's economic difficulties are stemming from the Trump administration and the possibility of United States Tariffs (Pesek 2017). According to

Pesek, Trump has told China that he will raise tariffs to 45% of the value of the goods to be imported (Pesek 2017). This idea is much like Hoover's tariffs, though the reasons for each slightly differ. Trump believes that the nation's dominance is wearing thin, and he wants to improve upon the nation in order to prolong its dominance. With this in mind, he seems to believe he can strengthen the nation's industries by discouraging citizens of the United States from buying foreign goods. It is also interesting to note that Hoover's tariff policies, which were set in place for the same basic reasons that Trump has given, were criticized by Roosevelt and even said to have started the depression, as mentioned earlier (Archibald 858). It may be possible that Trump's policies, or another president after him, will be credited for the next depression or social political phenomena for years to come. In some ways, it could even be possible that the president becomes a catalyst for the entrepreneurial-spread cycle, as the generation in power recognizes the ideas that become associated with the depression. Nonetheless, there are times when Trump appears to be attempting to support the spread-movement, rather than just the polarization movement. Upon examining Trump's platforms when he was running for president, he appeared to support the spread movement through financial means and the increased use of military protection (Johnson 2017). Trump even said that he was going to help strengthen and further women's policy, and, thus, their process of equality if he was elected (Johnson 2017). While this could be nothing more than unfounded political promises, it does appear that Trump is at least aware of the new wave of thinking present within the country and is trying to appeal to it.

Caveats

Among the data gathered, there are certain exceptions to the rules that may or may not affect the data in a different way than predicted. While most of these may not be strong enough

to change the data on their own, they could shift the date of the depression and subsequent change in dominance. For instance, the Kondratiev cycle shifts with other cycles that do not always follow the same patterns, resulting in depressions of various lengths and magnitudes (Reijnders 3-4). This is important due to the fact that it is hard to tell how large the scale of the next depression will be, nor can it be known how long the depression will last (Reijnders 3-4). In a sense, this makes the 2030 depression more of an estimation of when this depression will occur. Another difficulty in analyzing the data occurs due to the fact that there does not appear to be a consensus in the scientific literature regarding which powers were dominant during different hundred year spans. For simplicity, this paper used the Spain, France, Britain, and the United States as the dominant nations from the 1600's to the present. In theory, this should not hardly affect the data, since all of these nations would go through the same basic cyclical processes, and since many nations may have close correlations with the dominant nations regarding these cyclical processes. These correlations may originate from the increased globalization caused by the Kondratiev Cycle. Another difficulty stems from the fact that data regarding China can be hard to find. For this reason, this paper has had slightly more of an emphasis on the United States, though the information should apply to China as well. This paper also does not go into depth regarding the appearance of market bubbles, though further research should prove that they follow the general pattern explained previously. Lastly, this paper shifts focus from the global dominant powers to the United States and China, though each nation experiences these basic processes. As an example, in the book A Financial History of Western Europe, author Charles P. Kindleberger compares John Law to a Keynesian, and mentions that the word "bank" was despised in France for one hundred years due to his attempt at regulation (Kindleberger 98-99). This suggests that France experienced a wave of polarization with a brief period of spread that

was immediately renounced once Law's ideas failed, suggesting that France experienced the social cycles aforementioned (Kindleberger 98-99).

Conclusion

In this paper evidence has been given for a wave of polarized ideology and political movements followed by a major depression. If the pattern continues, the United States and China will both experience a polarization cycle until sometime around the year 2030. With this in mind, each country may experience some sort of speculative bubble before the depression. For the United States, this has already occurred with the housing bubble of 2007, but China's speculative bubble may burst soon. After the period of managerial-polarization has come to an end, a depression will likely occur due to lack of regulation and an overabundance of laissez-faire policies. After this occurs, China and the United States will experience a new wave of entrepreneurial spread ideology and managerial spread ideology, each of which will last for about twenty-five years. During the beginning of this process, it is likely that China will emerge as the dominant power. In order to test and see if this pattern continues as expected, more testing and observation will be necessary over the next several years, so that the theory can be adjusted as necessary.

Bibliography

- Amos, O., & Currier, K. (1989). The Foundations of a Hierarchial Theory of the Long-Wave Phenomenon. *Southern Economic Journal*, *56*(1), 142-156. doi:10.2307/1059062
- AMOS, O., & PRICE, E. (1991). Induced Socio-economic Behavior in Long Waves: The Recurrence of Normal and Revolutionary Economic Science. *Recherches Économiques De Louvain / Louvain Economic Review*, *57*(1), 61-75. Retrieved from http://www.jstor.org.argo.library.okstate.edu/stable/40723944
- Altorfer, S. (2006). History of Financial Disasters, 1763-1995 (Vol. 1). London: Pickering and Chatto.
- Archibald, R., & Feldman, D. (1998). Investment during the Great Depression: Uncertainty and the Role of the Smoot-Hawley Tariff. *Southern Economic Journal*, *64*(4), 857-879. doi:10.2307/1061208
- Bloomberg News. (2017, January 25). *China's Newest Problem with Fakes Threatens Bond Market Pain*. Retrieved from Bloomberg: https://www.bloomberg.com/news/articles/2017-01-25/expect-more-forgeries-fakes-in-china-debt-market-amid-bond-rout
- Chamow, K. (2013). A Socio-Historical Approach to the 2007 Financial Crisis. *Berkeley Journal of Sociology*, *57*, 114-143. Retrieved from http://www.jstor.org/stable/24582309
- Dale, R. (2004). *The First Crash: Lessons from the South Sea Bubble*. Princeton: Princeton University Press.
- Duckenfield, M. (2006). *History of Financial Disasters*, 1763-1995 (Vol. 3). London: Pickering and Chatto.
- F. R. M. (1941). Samuel F. B. Morse, 1791-1872. *The Scientific Monthly*, 53(3), 282-284. Retrieved from http://www.jstor.org/stable/17621
- Heneveld, H. M. (2016). The technology march. *Sdm*, *46*(6), 48. Retrieved from http://argo.library.okstate.edu/login?url=http://search.proquest.com.argo.library.okstate.edu/docview/1798408226?accountid=4117
- Johnson, J. (January, 22 2017). *Here are 76 of Donald Trump's Many Campaign Promises*. Retrieved from The Washington Post: https://www.washingtonpost.com/news/post-politics/wp/2016/01/22/here-are-76-of-donald-trumps-many-campaign-promises/?utm_erm=.a8222c843151
- Jr., O. M. (1995). Secular Seasons: Long- Run Trends in Spatial- Temporal Socioeconomic Behavior. *Papers in Regional Science: The Journal of the RSAI*, 74(2), 187-204.
- Knoop, T. A. (2015). Business Cycle Economics: Understanding Recessions and Depressions from Boom to Bust. Santa Barbara: Praeger.
- Koehler, B. (London). History of Financial Disasters, 1763-1995 (Vol. 2). 2006: Pickering and Chatto.
- Kondratieff, N. (1979). The Long Waves in Economic Life. *Review (Fernand Braudel Center)*, 2(4), 519-562. Retrieved from http://www.jstor.org.argo.library.okstate.edu/stable/40240816
- Kondratiev, N. (1984). The Long Wave Cycle. Richardson and Snyder.

- Lawson, F. (1937). The United States Air Mail. *Social Science*, 12(4), 473-478. Retrieved from http://www.jstor.org/stable/23907342
- Levitin, A.; Wachter, S. (2012). Explaining the Housing Bubble. *Georgetown Law Journal* 100(4), 1177-1258.
- McNaught, K. (1952). International Journal, 8(1), 54-55. doi:10.2307/40197859
- Morus, I. (2000). 'The Nervous System of Britain': Space, Time and the Electric Telegraph in the Victorian Age. *The British Journal for the History of Science, 33*(4), 455-475. Retrieved from http://www.jstor.org/stable/4028030
- Musson, A. (1959). The Great Depression in Britain, 1873-1896: A Reappraisal. *The Journal of Economic History*, 19(2), 199-228. Retrieved from http://www.jstor.org/stable/2114975
- Ogburn, W. (1947). How Technology Changes Society. *The Annals of the American Academy of Political and Social Science*, 249, 81-88. Retrieved from http://www.jstor.org/stable/1025427
- PALMER, W. (2003). The 1980s. In ROLLINS P. (Ed.), *The Columbia Companion to American History on Film: How the Movies Have Portrayed the American Past* (pp. 42-46). Columbia University Press. Retrieved from http://www.jstor.org.argo.library.okstate.edu/stable/10.7312/roll11222.11
- Pesek, W. (2017, January 26). *China's Fake Bonds Flash Enron Warning*. Retrieved from Barron's: http://www.barrons.com/articles/chinas-fake-bonds-flash-enron-warning-1485480765
- Reijnders, J. (1990). *Long Waves in Economic Development*. Brookfield: Edward Elgar Publishing Company.
- Sablik, T. (2013, November 22). *Recession of 1981-82*. Retrieved from Federal Reserve History: http://www.federalreservehistory.org/Events/DetailView/44
- Sanders, B. (2016). Our Revolution: A Future to Believe In. New York: St. Martin's Press.
- Stein, H. (1966). Pre-Revolutionary Fiscal Policy: The Regime of Herbert Hoover. *The Journal of Law & Economics*, 9, 189-223. Retrieved from http://www.jstor.org/stable/724999
- Sylla, R. (2005). *The Business History Review, 79*(2), 419-421. Retrieved from http://www.jstor.org/stable/25097051
- Vives, J. V. (1969). An Economic History of Spain. Princeton: Princeton University Press.
- White, E. (1989). Was There a Solution to the Ancien Régime's Financial Dilemma? *The Journal of Economic History*, 49(3), 545-568. Retrieved from http://www.jstor.org/stable/2122504
- Zinnes, D., Gillespie, J., & Tahim, G. (1978). Transforming a Nation-Dominant International System. *The Journal of Conflict Resolution*, 22(4), 547-564. Retrieved from http://www.jstor.org/stable/173691