AN EXAMINATION OF PREVAILING ECONOMIC THOUGHT AS A NEGLECTION OF ETHICS AND HISTORICAL ANALYSIS

A Dissertation

Presented to

The Faculty of the Department

of History

University of Houston

In Partial Fulfillment

Of the Requirements for the Degree of

Doctor of Philosophy

By

Mahdi R. Domitrovich

December, 2014

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ABSTRACT

This work is essentially an intellectual history that examines how we have changed our academic approach to economics, weighed against a historical narrative of how we adopted the central banking system we now have to demonstrate that the absence of traditional historical narratives that characteristically examine human motives renders an immense ignorance of how our economies and governing systems actually function. Exploring the subject through different eras of Western history illustrates varying arrangements of governments sometimes exploiting money interests for their benefits, and in more modern times money interests exploiting the power of governments for theirs, but regardless of the particulars how it was being done or by whom, a strong historical trend is evident which should support the claim that it is a vitally important field of study. The new scientific economists and their political science counterparts that currently dominate this realm of academia, however, shifted their attention away from the historical tradition of event-based narratives to explain social phenomena and the workings of man in terms that mimic scientific law. In the wake of this movement, the history of economics has become beholden to the application of mathematics and statistical methods to mountains economic data to extract simple relationships. This work counters that trend by examining the origins of economics from its Aristotelian teachings of natural law that influenced scholastics, up through the modern era's turn towards science that displaced the historical tradition of event-based narratives, to show that the turn towards science coincided with vested interests promoting new scientific approaches to economies with the intent of engineering desired outcomes. Once these objectives were met, their rhetoric increasingly became the standard that economics was measured by.

PREFACE

This work is essentially an intellectual history that examines how we have changed our academic approach to economics, weighed against a historical narrative of how we adopted the central banking system we now have to demonstrate that academia's absence of traditional economic historians renders a deficient understanding of these vital economic institutions. We will see what has been lost by examining the origins of economics from its Aristotelian teachings of natural law that influenced scholastics, up through the modern era's turn towards science that displaced the historical tradition of event-based narratives, and ultimately brought about the demise of traditional economic historians. This turn towards science coincided with vested interests promoting new scientific approaches to economies with the intent of engineering desired outcomes. Once their objectives were met, their rhetoric increasingly became the standard that economics was measured by. A mature understanding of the economic generalizations we adopted from this requires not only knowing where they came from, but also knowing what they overturned and gaining an appreciation of what economics used to be so that a basis can be established to evaluate what approaches to the subject best serve us in understanding the policies and economic trends that have come to affect the world at large. This will require understanding what people believed about their world and how changes in perception were central to revolutions in thought that coincided with changes in economics, finance, and new forms of government manipulation. We will accordingly use philosophy as a source for our investigation not only because it helps us reconstruct how people viewed their world, but also because the early economists were primarily philosophers.

This study, however, does not examine these changes with the intent of explaining a global change in economics, as that in and of itself would require examinations of many separate parts that comprise the whole. Rather, this study focuses on what led to changes in the United States which is a story that involves understanding the subject in a global context, particularly Western society. While the bulk of this paper deals with the implementation of modern banking and finance in the United States, I will first cover the origins of modern economics in Europe that the American experience was born from. Through a preliminary examination of events in Europe we will see how modern economics displaced traditions deeply rooted in classical philosophies and how these changes were advocated by players that stood to benefit from unfettered banking and financial restrictions. As our study turns towards the United States we will then understand that the coercive power wielded by the financial elite was not exclusively an American trait, but an extension of norms inherent to modern finance; a constant struggle of influential players working in concert with governments to manipulate economies in their favor. The breadth of our study will serve us in establishing a strong historical trend of manipulation as hallmark trait of how government and banking have coexisted. Governments sometimes exploited money interests for their benefits, and in more modern times money interests have exploited the power of governments for theirs, but regardless of the particulars how it was being done or by whom, the value of understanding this principle has been lost within the limited scope of today's overtly positivist value free analyses and theories of economics that attempt to only describe how things are, not how they should be.

That having been said, a considerable amount of the examination investigates the actions of key players to formulate a traditional historical narrative that otherwise would receive very little attention from economists because the evidence needed to answer questions about the intent of individuals bear upon human motives with fewer measurable dimensions. It should therefore be understood that this study is not limited to an examination of scientific thought as it pertains to banking, although this is no doubt one of the key conclusions. As we draw nearer to the modern era, the diversity of our sources change because not only are there more sources to draw upon, but also because the people changed. Scholars of intellectual history have pointed out that the progression of American ideals did not so much take shape in philosophical works as they commonly did in Europe, but are more evident in the establishment of American institutions. While our examination shows how early institutions were an extension of prevailing thought, the underlining philosophical outlooks of later subjects are revealed more as extensions of the institutions they forged. While philosophy receives little attention, if any, from our modern approach to economics, its underlying principle that begs, "What is reality?" is imperative to the outlook and conclusions of our investigation from a historical perspective. By examining the ascent of the central banking concept that culminates in our study with the establishment of the Federal Reserve and the prevailing thought surrounding it, we will counter some of the contemporary generalizations about the American economic system by demonstrating how a historical perspective is paramount to understanding what it actually is, and why it came into being in the first place. To demonstrate just how far we have strayed from historical based narratives as they apply to economics and our economic institutions, it is nearly unavoidable that even posing key questions from a historical perspective that characteristically evaluates motives casts this work in the light of sounding like a conspiracy narrative, although it is not. If many evidences of manipulative intent are revealed by just scratching the surface of the resources that are available to investigate the histories of influential bankers and their government counterparts, we should caution the dismissal of posing "unconventional" questions as "radical" or "seditious" — although by definition it partially fits that a historian would be asking questions "radically" different than today's science based economists. Before we even reach any conclusions that might allude to our financial systems being out of balance, failing to challenge the dominance of understanding the driving forces of economics as a "science" will only prolong the mysterious ambience that has cloaked misgivings from serious reform, if not mutiny.

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I dedicate this work to my loving family. I will always appreciate their sacrifice to see me through the process. Just as I am hopeful that the small voice this work represents may somehow lend itself towards the truth amidst the noise of this world, I pray the efforts of this dissertation will make our family's life a little better too.

بسم الله الرحمن الرحيم

In the Name of God.

"Tu ne cede malis, sed contra audentior ito."

—Virgil

Latin: *Do not give in to evil, but proceed ever more boldly against it.*

Introduction

We live in an era where it is common not to have a full understanding of many things we interface daily, and we do not care just so long as they work; cars, cell phones, the internet, and *money*. Even the politicians elected to guide our society are deficient in the "science" of how the economy works, and accordingly defer their judgments to the "experts"; an ignorant bliss perhaps best paraphrased in the title of David Wessel of *The Wall Street Journal's* book, "In Fed We Trust." While we defer the engineering of technology to scientists without a care of *how* something very technical works— just so long as it works— the difference with money is that economics is *not* a science and is far too complicated to be aptly engineered by fallible statistical relationships.[1] We have become increasingly conditioned to reject anything outside of overtly positivist philosophies of science—the outlook that the exclusive source of all authentic knowledge that applies to social and natural "sciences" must be data derived and subjective to mathematical verification. The Federal Reserve and other "experts" throughout the historical rise of modern economics draw upon this very way of thinking to cite that central banks as we have come to know them came into being because their need was all but obvious. The typical account of why the Federal Reserve was created usually follows a similar storyline to the one provided by the Fed that states, "Before the Federal Reserve was founded, the nation was plagued with financial crises. . . . A particularly severe panic in 1907 resulted in bank runs that wreaked havoc on the fragile banking system and ultimately led Congress in 1913 to write the Federal Reserve Act." As we will discover, however, the Federal Reserve Act and other bills like it were not written by Congress, but by influential bankers that passed them along to their point men in Congress that pushed them through legislation. Elsewhere, the Fed reinforces such generic versions with rhetoric like, "Although the need for banking reform was undisputed," or, "the nation's financial centers persuaded many Americans that their banking structure was sadly out of date and in need of major reform."[2] The focus of this examination, therefore, stems from the need of historians to counter these generalities by making judgments on the motives of those advocating these innovations precisely because those seeking economic gain through the manipulation of the political process are inclined to deliberately obscure their true intentions behind a mask of lofty abstract goals and ideological principals.

This need for an alternative examination is a direct result of the way modern scholarship approaches economics. As Nobel laureate F.A. Hayek stated, "nobody can be a great economist who is only an economist - and I am even tempted to add that the economist who is only an economist is likely to become a nuisance if not a positive danger."[3] It is paramount to understand that our modern perceptions of the subject are relatively new and have only come about with a radical change of thought based upon science and relativism that have since altered a whole host of social norms. As we will see, Western economics was born from the refining of Aristotelian ideals that date back to St. Thomas Aquinas' teachings of natural law which influenced scholastics over several generations to formalize their explanations of supply and demand, the cause of inflation, the operation of foreign exchange rates, and the subjective nature of economic value. These conclusions derived from Natural Law, however, came under increased assault from competing science based ideologies that rejected the rational deductions historians used about the nature of man as being suitable for understanding economics.[4] These new outlooks that were ushered in with the rise of modern thought advocated that experts could examine the accumulation of data to advise states how to forge the outcomes of their economies.

The academic approaches to understanding the "science" of economics and politics, and the intersection thereof, is largely to blame for their mysterious ambience that has cloaked their misgivings from serious reform, if not mutiny. As empirical based approaches to understanding economics and politics became codified in the midst of the 19th century progressive movement, it has increasingly become distant from its political theory roots that date back to Plato and Aristotle. Robert Dahl, the Sterling Professor emeritus of political science at Yale University, writes:

> The empirical political scientist is concerned with what is. . .not with what ought to be. He finds it difficult and uncongenial to assume the historic burden of the political philosopher who attempted to determine, prescribe, elaborate, and employ ethical standards—values, to use the fashionable term—in appraising political acts and political systems. The behaviorally minded student of politics is prepared to describe values as empirical data; but, qua ''scientist'' he seeks to avoid prescription or inquiry into the grounds on which judgments of value can properly be made.[5]

These new theory and methods for studying government were actually derived from economics. Sir Karl Popper, prominent 20th century philosopher of science and professor from the London School of Economics, declared in 1960 that "Economics is the first of the social sciences to have had its Newtonian Revolution."[6] The new scientific economists and their political science counterparts shifted their attention away from the historical tradition of event-based narratives, to scouring whatever sources they could find — historical databases, newspaper archives, ethnographic studies — to explain social phenomena and the workings of man in terms very similar to scientific law; general laws governing societies with correlating political, economic and demographic variables that could even be used to predict the future.

In the wake of this movement, the history of economics has become beholden to cliometrics; the application of mathematics and statistical methods to mountains of economic data to extract simple relationships. The fusion of modern economics and economic history in the 1970's brought about the demise of traditional economic historians. According to Harvard economist

Claudia Goldin, the success of the cliometric revolution has brought about the unintended consequence of economic historians nearly vanishing altogether. As economic historians started using the same tools as economists, their new approach effectively handed the field over to economists. This quantitative (as opposed to qualitative or ethnographic) approach to economic history has dominated the modern discourse of economics with scientific prose and methodological processes that characterize the *Journal of Economic History,* and effectively compromises, if not kills, public discourse over one of the most vital aspects of any society. In Goldin's words, "the new economic historians extinguished the other side."[7] This "other side" has nearly disappeared altogether, with few scholars remaining in history departments and business schools today.

The tragedy that lies within this way of thinking is that it narrowly limits the kind of questions that historians will ask as they approach economics. Like political science, issues within this field of history that do not readily lend themselves to formulations in quantitative terms or which no statistical data is available will tend to be downplayed or neglected all together. The questions behind what *motivates* governments and economic trends, or put differently, the question of "*Cui bono?*"—or "Who benefits?"— receives very little attention because the evidence needed to answer these questions bear upon human motives with fewer measurable dimensions. While the methods of new economic historians lend them to explain how changes in institutions or policies have effected income distribution, they will characteristically lack an examination of what motivated individuals to lobby for the changes that effected income distribution to their favor. While the three coequal branches of government established by the Constitution are more tangible and accordingly attract attention, it is baffling that the history of the Treasury Department and Federal Reserve do not receive the similar attention from today's economic scholars. According to the Board of Governors, the Federal Reserve System "is considered an independent central bank because its monetary policy decisions do not have to be approved by the President or anyone else in the executive or legislative branches of government, it does not receive funding appropriated by the Congress, and the terms of the members of the Board of Governors span multiple presidential and congressional terms."[8] How the Federal Reserve operates without Congressional audits and essentially became accountable to no one seems to beg for a historical inquiry into the motives and often hidden intentions of its founders, but the truth is that these questions are not as obvious to modern economic historians and political scientists as one might think. If one does not accept the empirical conclusions of math and science we can logically conclude that they are irrational, and so too has modern society adopted similar notions about political and economic conclusions. Newton's conclusion that the universe tends toward greater entropy was applied to world-wide Anglo-American prosperity to show that its political economic system was evolving towards a state of inert uniformity. While conclusions about globalization may appear to uphold such a tendency, I will argue that the prosperity of the system is not based upon the perceived leveled and open playing field that advocates fair and equal access to politics and market competition. Quite the contrary, the power of banks was acquired through means that won government protection and exclusive privileges that permitted these patrons of government policy to attain advantageous circumstances. To that end, we will examine a broad span of economic innovations that represent the rise of modern finance and central banking to discover that politics and self-interest have consistently been a central characteristic in the rise of modern economics, absent from the common discourse of the subject.

While Plato and Aristotle sought to identify the characteristics of a good government, and the works of scholastics made moral judgments as they pertain to economics, most modern social scientists only seek the characteristics of politics, their causes and effects, and leave aside moral judgments of their worth. Normative conclusions—affirming how things ought to be, their value, if they are good or bad, right or wrong— have been marginalized in place of overtly positivist conclusions; value free analysis or theories that attempt to only describe how things are, not how they should be. ''A science cannot be a science,'' writes Levy-Bruhl, ''in so far as it is normative."[9] This way of thinking no doubt has its place as it applies to science, and it is not the intention of this work to devalue the worth of science or the work of scientists. The preliminary examination of these scholastic values, however, introduce us to the need of examining the motives behind the formation of our modern economic institutions that have been eclipsed by the misuse of scientific thought that has been applied to fields where it is not competent.

If scholarship is reduced to making conclusions based solely on mathematical certainties, those who stand poised to manipulate policy in their favor will enjoy the continued unchallenged freedom to do so. Historians must make estimates and judgments on human behavior precisely because those seeking economic gain through the manipulation of the political process are inclined to deliberately obscure their true intentions behind a mask of lofty abstract goals and ideological principals. Given the propensity of individuals to manipulate factors in their favor, the State throughout history has served as the medium for a segment of the population to establish itself as the parasitic ruling class by establishing a hegemonic "political" relationship with the most productive members of society. Taxpayers that earn their living through production and voluntary exchange are preyed upon by a minority of "tax consumers" who bolster their positions through the coercive manipulation of the government for oligarchic privilege to maintain a lucrative hegemonic bond over the producers. A reason why the ruling class has remained oligarchic is due in part to the law of comparative advantage. Just as division of labor and specialization pervades all sectors of society and the economy as a whole resulting in small segments of the population efficiently addressing the issues others do not attend, only a fraction of the population excel at wielding coercive power. Since politics is the main source for their monetary benefit, the actions of the ruling oligarchy will be driven by economic motives. The exploited working class, however, will not expend comparable resources or be motivated by economic gain in politics precisely because they too are absorbed in earning their livelihoods in their areas of specialization. At the risk of such rhetoric sounding radical, it is noteworthy that these conclusions are hardly new, or only maintained by those advocating on behalf of the proletariat. Our examination will reveal that influential personalities were keenly aware that society was run by such norms. This knowledge was perhaps best conveyed by Gouverneur Morris, the credited "Penman of the Constitution," at the Constitution Convention in Philadelphia. His commentary reinforces the importance of examining the economic motives of the powerful in order to properly interpret the outcomes of their actions. Morris stated, "The Rich will strive to establish their dominion and enslave the rest. They always did. They always will." He further understood that the majority would be hard pressed to ever challenge the power of the elite: "Let the rich mix with the poor and in a Commercial Country, they will establish an Oligarchy."[10]

At the risk of revolution, the ruling class has continuously confronted the ongoing challenge of persuading the productive majority that their polices are beneficial to them. In pre-industrial times clergy served as influential apologists for the State, but in modern times as religion has become increasingly decentralized from the fabric of society, this role has become increasingly filled by academics. Court Intellectuals that weave tapestries of lofty ideologies to appease the productive masses is one thing, but the plundered citizenry is simultaneously beguiled with shrouds of awarded scholarship from the "experts" whose lofty and intangible "science," devoid of measuring human motives that cannot be directly observed, narrowly focus on just the facts. But still, these new science driven processes of examining economics and government have not found balance or come under sharp criticism amidst the growing evidence that it is precisely the economic and governing processes and our way of gauging them that have brought about the financial turbulence the world is experiencing today. The failure behind continuing this approach to regulate economies is built on a set of assumptions that these "experts" know what is best for nations as a whole, are not pressured to manipulate the process for individual interests or to win upcoming elections, are able to move prices at will, and are always able to stay one step ahead of business owners, labor, and lenders. In reality, however, none of this is likely. The Keynesian doctrine that monetary policy enacted by central banks along with the fiscal policy of governments stabilizes business cycles in perpetual booms, now guides the economy of the entire world. This is embodied in the famous phrase "We are all Keynesians now," that was coined by Milton Friedman and attributed to President Richard Nixon.[11]

If we are to have a mature understanding of what economics has become, we must understand not only what it was previously, but also what people *believed* about their world, and how the new ways they saw it was central to revolutions in thought that coincided with changes in economics, finance, and new forms of government manipulation. Traditional Western thought that was rooted in an objective ontological outlook of reality gave way to increasing personally subjective conclusions until such time that there was no longer any definitive say on what reality was. As Auguste Comte concluded, "There is nothing good and nothing bad absolutely speaking; everything is relative, this is the only absolute statement." The increasing acceptance of these conclusions that overhauled the way Western society looked at the world made it easier for vested interests to overhaul the basic tenants of economics and money that, like our ideas about objective reality, had been with us for a long time. Friedrich von Hayek wrote, "it is probably no exaggeration to say that every important advance in economic theory during the last hundred years was a further step in the consistent application of subjectivism."[12] As we will see, however, it is not the case that the progress of modern thought embodied in personal subjectivism led economics to inevitable conclusions that we adopted. Rather, subjectivism fostered a complacency that allowed vested interests to take advantage of an intellectual climate that increasingly compromised the traditional basis of the "moral sciences" that begged our conscience to reconstruct the actions and motives of others and judge them as moral, or not. While subjectivism faced a long battle before *the truth was accepted as anything an individual said it was*, we will also see that it paralleled another battle that was required before *money was accepted as anything the government said it was.*

Despite claims that modern economics rationally evolved from circumstances that revealed the obvious need to form the central banking practices we have come to know, I will provide evidence that one of the most prevalent qualities of modern economics and central banking is that its innovations were formed by the determined efforts of vested interests. While the bulk of this paper deals with the implementation of modern banking and finance in the United States, I will first cover the origins of modern economics in Europe that the American experience was born from. Through a preliminary examination of events in Europe we will see how modern economics displaced traditions deeply rooted in classical philosophies and the teachings of the Church to demonstrate how these changes were advocated by players that stood to benefit from unfettered banking and financial restrictions. It will become further evident how vested interests forged modern economics and the central banking systems we have become familiar with amidst these revolutions in thought. As our study turns towards the United States we will then understand that the coercive power wielded by the financial elite was not exclusively an American trait, but rather an extension of norms inherent to modern finance; a constant struggle of influential players working in concert with governments to manipulate economies in their favor. By investigating the circumstances surrounding the history of central banking in the United States it will finally become evident that the constant manipulation of governments on behalf of private interests constitutes a hallmark of how capitalism and democracy truly interact. This is the intended purpose of this academic work because in the absence of historians that can assist in this understanding, our contemporary conclusions about what modern economics is and how it works is deficient. If anything, the prevailing political economic system has merely upheld Thucydides' ancient Melian dialogue: "The strong do as they can and the weak suffer what they must."

Chapter I: The Cradle of Western Economic Thought

To understand and appreciate the changes in economics that culminated with the establishment of engineered central banking systems and the dominance of fiat money that were lobbied into existence by the persuasion of wealthy private interests, it is paramount to understand how radically the ideas about economics and our world have changed over time. By establishing an understanding of this revolution in thought and finance that predated the formation of the United States it will become evident that economic trends in American banking are a continuation of vested interests lobbing governments for their own self-interests, and that these trends stemmed from an increasingly scientific outlook of the world that sought to engineer social outcomes. It is not enough to postulate that these changes shaping the modern era were results of technology, prices, population, or financial innovations, although these were no doubt contributing factors. What people *believed* about their world and the new ways they saw it was central to revolutions in thought that coincided with changes in economics, finance, and new forms of government manipulation that ushered in the era of modern economics.

It is impossible, however, to have a mature understanding of the course of history that shaped the United States without acknowledging its Western heritage rooted in Europe and the trans-Atlantic influence Europe has had an American society. Discerning the course of ideas that shaped European thought not only provides us with a basis of understanding the circumstances the United States was born out of, but it also proves useful in formulating an understanding of how radically our ideas about money have changed over time, and further cultivates an appreciation of how far we have strayed from the origins of thought that the West was established on. An initial examination of these issues prior to delving into the particulars of

American banking will provide a foundation for understanding that the historical trends we will focus on were an extension of the European experience that gave rise to manipulated economies.

The initial social overhaul that bankers embarked on was to overcome usury restrictions and the prevailing hostility of society towards it. So entrenched were the arguments against usury in the economic history of the West that our study reveals repeated arguments against it up through the American Civil War. Usury did not fit our modern banker approved definition that would lead you believe that usury is the charging of an *excessive* rate of interest. Rather, the ancient definition of usury is what we would call interest today: using money— or selling it— as a means of acquiring more money. Usury is derived from the Latin term *usura* which means "money paid for use."[1]

Objections against usury of this kind were standard in the ancient world, denounced by the reasoning of philosophers, and later religion. Before Christianity weighed in against usury in Europe, philosophical arguments condemned it first. Plato asserted, "and no one shall deposit money with another whom he does not trust as a friend, nor shall he lend money upon interest; and the borrower should be under no obligation to repay either capital or interest."[2] While we can trace Plato's view on the issue, it was the objections of his student Aristotle that proved so convincing that his works went on to influence future church leaders. Aristotle wrote:

> With every article of property there is a double way of using it; both uses are related to the article itself, but not related to it in the same manner-one is peculiar to the thing and the other is not peculiar to it. Take for example, a shoe- there is its wear as a shoe and there is its use as an article of exchange; for both are ways of using a shoe, inasmuch as even he that exchanges a shoe for money or food with the customer that wants a shoe uses it as a shoe, though not for the use peculiar to a shoe, since shoes have not come into existence for the purpose of exchange.[3]

Sir Erich Roll draws upon Aristotle's simple shoe analogy and writes, "In these words, Aristotle laid the foundation of the distinction between use-value and exchange-value, which has remained a part of economic thought to the present day."[4]

Aristotle's concern was on the basis of ethics; what is natural and unnatural. Aristotle held that wealth is part of the good life and consists of tools and useful things that are limited in size and number by the ends they serve, such that their constitutive ends set the standard of deciding how much wealth is enough. Aristotle explains:

> But there is another kind of acquisition that is specially called wealth-getting, and that is so called with justice; and to this kind it is due that there is thought to be no limit to riches and property. Owing to its affinity to the art of acquisition of which we spoke, it is supposed by many people to be one and the same as that; and as a matter of fact, while it is not the same as the acquisition spoken of, it is not far removed from it. One of them is natural, the other is not natural, but carried on rather by a certain acquired skill or art.[5]

Aristotle held that actions are defined by their aims and ends. If two activities have albeit similar ends, but they are nonetheless different, they are different activities. Natural exchange aims at the use-value or getting useful things, whereas unnatural exchanges would aim at exchange-value or getting money. Distinction in the concept of wealth follows from the metaphysical gap between use value and exchange value established in Aristotle's *Ethics:*

> The source of confusion is the near connection between the two kinds of wealth getting; in either, the instrument is the same, although the use is different, and so they pass into one another; for each is a use of the same property, but with a difference: accumulation is the end in the one case, but there is a further end in the other.[6]

"True wealth," he contended, is "the stock of things that are useful in the community of the household or the polis."[7] In the *Rhetoric,* Aristotle further explained, "Wealth as a whole consists in using things rather than owning them; it is really the activity- that is, the use- of the property that constitutes wealth."[8]

While these preliminary arguments seem elementary, their ethical conclusions have serious social implications. Unnatural wealth has the aim of acquiring quantity of exchange value in the form of money, what Aristotle called, "wealth of a spurious kind."[9] The application of Aristotle's metaphysics of substance, form, and change leads us to the conclusion this form of exchange distorts the appearance of wealth over time and leads to the displacement of natural exchange through a warped sense of reality associated with money. Economist Joseph Schumpeter said that Aristotle's treatment of money in *Politics* formed the "basis of the bulk of all analytical work in the field of money," adding that it "prevailed substantially until the end of the nineteenth century and even beyond."[10] Through the course of our study it will become evident that there have been radical changes in our social conceptions of wealth and the institutions associated with money. This examination will further reveal that vested interests forging innovations with the end goals of acquiring the same advantageous exchange values that Aristotle deemed "wealth of a spurious kind," is a story as old as banking itself. The culmination of this study that focuses on the formation of the Federal Reserve stems from a long history of determined bankers aimed at overcoming the ethics and social norms affiliated with precious metals and interest that go as far back as Aristotle and the roots of Western civilization.

The key to understanding Aristotle's ethical treatment of natural and unnatural wealth is the distinction he draws between the ends of both activities. If 'C' equals a commodity, and 'M' equals money, Aristotle's logic can be understood in the interaction of the two. For Aristotle, trading a commodity for a commodity, or C-C, is acceptable because its end is consumption, the bringing together of needs with the use values that will satisfy them, and is natural because it can easily be understood through the usual criterion of having 'enough'. Selling a commodity for money so that another commodity can be purchased, or C-M-C, is also acceptable because it shares the same end. But transactions that amount to M-C-M, or worst of all M-M—using money to make money (usury)— share the same end which is the accumulation of money, by means of what Aristotle referred to as an "acquired skill or art." He argued:

> The most hated sort, and with the greatest reason, is usury, which makes a gain out of money itself, and not from the natural object of it. For money was intended to be used in exchange, but not to increase at interest. And this term interest (tokos), which means the birth of money from money, is applied to the breeding of money because the offspring resembles the parent. Wherefore of any modes of getting wealth this is the most unnatural.[11]

This aim, Aristotle contends, differs from natural wealth because it cannot be rationed in terms of having enough. Using money in this way means that it is not subordinate to a natural end, and is without limits which makes it irrational. A society, moreover, that has displaced natural exchange by the formation of a perceived social reality associated with money has itself become dangerously irrational.

The analysis of exchange value, or economic value, has since become an issue of economics, rather than philosophy. The difference is not as simple as discerning the rights of which discipline should handle questions about money; changes in thought had to occur before the traditional responsibilities of philosophy were displaced. We should not be surprised to learn, therefore, that the changes in economic thought that we will examine did not come about without an overhaul of philosophy and the way man perceived the world. Economics, as such, does not concern itself with a metaphysical analysis about the nature of a subject, or beg the question about what the reality of a subject's circumstance is. Aristotle's frame of reference that was concerned with understanding the world and our place in it assisted him in identifying how the aim of exchange values transferred once they became latched to different activities. As metaphysics became displaced by later philosophies, however, this view fell increasingly silent. An understanding of this will assist us to conceptualize how we arrived at taking such things as exchange values for granted, compartmentalized these issues to the 'dismal science' of economics, and deferred these major issues to the prevailing problem of modern social philosophy that lacks the asking of the right questions about reality which has since become largely subjective.

The Aristotelian line of thought prevailed in the Hellenistic world. It is worth mention, however, that the teachings of Plato also found reception, although they would not enjoy the influence of Aristotle's teachings during this particular era. Nonetheless, Platonic ideals remained preserved and would play a decisive role influencing the progression of thought that would later rise to challenge, and eventually overcome Aristotelian principles. Plotinus (204/5–270 CE) is attributed to being the founder of Neo-Platonism, an intellectual revival of Plato's teachings. The praise Plotinus lathered upon Plato effectively elevated him to prophetic levels, although Plotinus' interpretations of Plato's work are known to be substantially different from what Plato wrote or believed himself. Plotinus travelled to Alexandria to study philosophy, in addition to other travels that took him through the Middle East. The course of Neo-Platonism that followed synthesized Platonism with Egyptian and Jewish theology.[12] While Plato expressed concern over how the senses could be deceived by the material world, Aristotle's approach accepted the reliability of our senses as more of a given, and did not express grave concern about doubting if the world around us was real or not. It would come to pass, however, that the

Platonic distrust of our senses would ultimately result in prevailing Western philosophies that brought severe doubt on what could be known at all, damaging the credibility of the way objective reality was viewed, and would spawn into the destruction of authorities, like the Church, to guide society at large. In this way, while Aristotelian thought was upheld by the Church with its ban on usury, Neo-Platonic conclusions emerged as a rival that was promoted by the patronage of bankers.

Another controversy, almost as old as civilization itself, is founded upon differences that arose between Plato and Aristotle over the role of government. Should government take a principal part in the activities of the community and control with plenary powers the movements and welfare of the members, or should it stand apart from the struggle, arbitrating upon its issues by upholding fair play? While the works of Plato endorsed a more encompassing government, Aristotle thought Plato's political ideals were completely unpractical:

> But, even supposing that it were best for the community to have the greatest degree of unity . . . That all persons call the same thing mine in the sense in which each does so may be a fine thing, but it is impracticable; or if the words are taken in the other sense, such a unity in no way conduces to harmony. And there is another objection to the proposal. What is common to the greatest number gets the least amount of care. People pay most attention to what is their own: they care less for what is common; or, at any rate, they care for it only to the extent to which each is individually concerned. Even when there is no other cause for inattention, people are more prone to neglect their duty when they think that another attending to it.[13]

While the course of Western civilization has largely upheld many of Aristotle's conclusions about the virtue of individualism and freedom, there has long been a strong assertion of governmental power to dictate what the worth of money is, and how it may be used. The lesson to be had that will prevail through the course of our examination is that when it comes to money, in the face of moral or religious objections, right or wrong, governments tend to act more in line with worldly gain than heavenly virtue.

The influence of the Greco-Roman thought was permeated by the teachings of Christianity that fused many monotheistic teachings with prevailing philosophies of the day. The Aristotelian conclusions of the Church as they applied to money and finance influenced Western thought and continued to impede the aspirations of bankers nearly through the birth of the United States. We will later see that the social and philosophical environment the Untied States arose from fostered American bankers to ride the historical momentum of European efforts that fought for unfettered leverage to manipulate money.

Although Roman law permitted the lending of money at interest prior to the advent of Christianity that forbade the practice, it was not glossed over and ignored then as it is today. While justice was the first principle of Roman law, "to render to each what is his due," there were abounding arguments that the tolerated usury far exceeded "to each what is his due." Cicero condemned usury as being hateful to mankind, Seneca (4 BC – AD 65) argued against usury because it involves the selling of time, Plutarch (46 – 120 AD) developed a similar argument that money is sterile, and Cato (234BC–149BC) even placed usury on the same level of moral obliquity as murder in his *De Re Rustica*: "And what do you think of usury? — What do you think of murder?"

With the advent of the Church, the First Council of Nicaea, in 325, partially forbade clergy from engaging in usury.[14] Although usury was considered interest of any kind at the time, the canon only forbade the clergy to lend money on interest above 1 percent per month (12.7% APR), and later ecumenical councils applied this regulation to the laity.[15] The main moral argument levied against usury was that excessive profit could be gained without "labor" which is deemed "work" in the Biblical context. Profits from usury that came without any substantial labor or work were deemed mere avarice, greed, trickery and manipulation. The economic theory that followed in the Middle Ages was primarily done by theologians and canonists, and in addition to their religious positions, their arguments were derived from Roman law, Aristotelian philosophy and natural law theory. Like Aristotle, their economic theory was essentially framed in ethical terms and theorists were primarily concerned with the correct moral use of wealth. Essentially, the defining difference between the intersecting of governments and finance from this era and the world we are more familiar with is that those involved with money lending were not active participants in legislation.

In the year 529, the Church closed Plato's Academy in Athens, while in the same year, the Benedictine order, the first of the great monastic orders, was founded. In this way, the year 529 symbolizes the way the Christian Church put the lid on Greek philosophy. Thereafter, monasteries steered the intellectual development of Europe, and Christianity grew to become the predominant philosophy of life. Moreover, Christianity in the Middle Ages became the unifying force of Western culture. As we will see, it would take an undoing of the Church's monopoly on thought through a resurgence of Greek inspired ideals before bankers (whose patronage promoted these new ideas) would successfully attain their prized goal of legislating how money could be used. Like modern bankers born from the experience of these predecessors, the undoing of economic norms were steadily dismantled, first through small gains, followed by an overhaul.

Initially, the Church held firm in its opposition to usury, and those who lent out money at interest were excommunicated by the Third Lateran Council in 1179. The Council of Vienna from 1311-12 not only upheld the Church's opposition to usury, but went even further to condemn any arguments that usury was not a sin as heresy. Christian usurers even had to make restitution to the Church before they could be buried on hallowed ground. The strong opposition to usury from the later council was no doubt influenced by the works of St. Thomas Aquinas (1225 – 1274).

Aquinas was an immensely influential philosopher and theologian, and in the tradition of scholasticism he became not only the leading theologian of the Catholic Church, but also the foremost economic scholar and opponent of usury. Aquinas was heavily influenced by the teachings of Aristotle that made their way back to Europe through Arabs who had studied his works and kept the Aristotelian tradition alive. From the end of the 12th century, Arab scholars began to arrive in Northern Italy at the invitation of nobles. Thereafter, many of Aristotle's writings were translated from Arabic into Latin. Aquinas, heavily influenced by these works of Aristotle, also looked upon usury as an issue of ethics; it was a sin precisely because it took advantage of the needs of others. Joseph Schumpeter observed that Aquinas was not interested purely in economics or economic questions themselves: "it is only where economic phenomena raise questions of moral theology that he touched on them at all." Schumpeter also asserts that Aquinas inspired scholasticism followed by never treating economics as a subject in and of itself.[16]

Aquinas upheld the Aristotelian position that all things have their final cause, and that money is not an end but a means for securing the goods we need. Usurers, Aquinas argued, confuse ends and means. By nature, money bears no fruit; it is merely a measure of the fruits derived from economic activity. By making money out of money, usurers commit a crime against nature.

Aquinas said that this moral dilemma would be like selling a bottle of wine, and then levying an additional charge to actually drink it. St. Thomas quoted Aristotle saying "to live by usury is exceedingly unnatural." He drew upon the superiority of Aristotelian metaphysics over economic conventions to conclude that money is the measure of things sold, but not saleable itself. The value of money is attributed to the face value assigned to it and solely a measure of value or exchange-medium, but if "sold," its formal charter would be submerged into its material character, and its price would fluctuate with the market. Aquinas also upheld Seneca's argument that since the nature of interest increases with the time the money is loaned out, time is also being sold while it is not a commodity that can be produced and traded. If time is a gift besought by God, nobody has the right to appropriate it for himself or appropriate its fruits. In his *On Law, Morality, and Politics* he concluded: "To take interest for money lent is unjust in itself, because this is to sell what does not exist, and this evidently leads to inequality, which is contrary to justice."[17] Finally, Aquinas also influenced many of the ideas capitalism continues to uphold about price using Aristotle's *Nicomachean Ethics* as the basis for his position that, "The one standard which truly measures all things is demand. This includes all commutable things inasmuch as everything has reference to human need."[18]

The large shift away from the Church's mandate on the practice of economics, particularly as it applied to banking, did not occur on the periphery of its domain. Ironically, it began close to the Church's center in Italy. The Monte dei Paschi di Siena Bank in Siena, Italy has been in continuous operation since 1472, making it the oldest bank still in existence.[19]Not surprisingly, the coming changes in economics were accompanied by a major shift in thought and culture—*the Renaissance*. The Renaissance is now regarded by many scholars as far more of an economic revolution than a cultural one. The Renaissance originated and flourished in Italy due to the small size of the Italian city-states. They retained their independence largely because of the long-running battles between the papacy and the Holy Roman Empire which allowed merchants to have a freer hand in trade without government interference.

By 1300, this growth in Italian trade resulted in a uniquely urban population with 23 cities with populations of more than twenty-thousand. The political fragmentation of the Europeans from the high Middle Ages through the early modern period allowed for a political pluralism with hundreds of separate jurisdictions fostering institutional experimentation that allowed for discoveries of what systems made labor and capital more productive.[20] "The fact that European civilization has passed through a city-state phase is," according to Sir John Hicks, "the principal key to the divergence between the history of Europe and the history of Asia."[21]The Thirty Years' War accelerated Europe's development into independent sovereign nation-states. Through the course of these events, governments discovered that the more they interfered with trade, the more they lost merchants— and more importantly their *tax base*— to competing jurisdictions. This motivated rulers to curb their authority over businessmen.[22] The gradual improvement of governments acting to protect private-property was fundamental to the sustained development of Europe; if the prospects of people reaping the fruits of their labor and investments are not reasonably protected, they have little or no incentive to work hard. Initially, Venice, Genoa, Pisa, and Florence most successfully implemented these ideals, and maintained militias to defend against threats to their politico-economic autonomy.

In ancient and medieval times, economies did not grow exponentially with agricultural based economies. Booms may have occurred on occasion from the spoils of war when one governing body conquered another and robbed it of its riches, but production remained constant on average year after year. Medieval economies were fundamentally similar to ancient agrarian economies; nearly everyone farmed, and there were few artisans, merchants, and aristocrats. Europe's exposure to the outside world, largely through the experience of the Crusades, positioned Italy to benefit from Europe's taste of foreign fineries that could not be quenched. As a gateway to the Mediterranean, Italy's geography encouraged commerce, seafaring, trade and industry. Per capita growth that was not a reality of past economies changed with the enormous the profits made from trading. While trade routes to the east and a burgeoning economy in Europe promised great opportunity, a resilient and fundamental difference in this new economic prosperity was that launching a successful trade business required significant capital.

The Crusades also left a lasting impression on the practice of banking in Europe that would influence the future production of such capital. Medieval European Knights Templars developed an early prototype of an organized banking system across Europe and the Middle East. The Knights created an innovative system of bank checks on a coded piece of paper that only the Knights Templar could decode.[23] Pilgrims on their way to Jerusalem deposited their money with the Knights to avoid the danger of being robbed, then once reaching the Holy Land would "cash" their "check" to receive its value, minus a handling fee. Additionally, nobles placed their wealth and businesses under the control of Templars as a safeguard until their return from participating in the Crusades, which often amounted to years of absence. The Knights promises to pay were widely respected, and the majority of the Order's infrastructure eventually became devoted to economic pursuits, not combat.[24]Once the Crusades had all but ended and Christian prospects of ever regaining territories reclaimed by Muslim armies looked increasingly grim, the Knights Templars, while still having enormous financial power and an army that could move freely throughout Europe with a papal decree, became an Order without a clear purpose or support. The fear arose that the Templars might assert their powers to form their own state which brought them into conflict with the Pope and kings indebted to them. The Templars, despite their once wide acceptance, were finally pushed out of the public eye on heresy charges of incorporating secret practices outside of the teachings of the Church. While it seems unlikely that the entire organization and its members vanished without a trace, popular theory holds that the Templars went underground and formed the secret society of the Freemasons to preserve their secret traditions that follow ancient Egyptian mysteries. Although the Order was ended by a Papal Bull in 1307 and forcefully disbanded, the financial practices they left behind became incorporated in Europe. While active in banking, the Templars had found cleaver ways to skirt around Church prohibitions against usury. One stipulation of Templar services, for example, was that they retained the rights to the production of mortgaged property, or as one researcher put it, "Since they weren't allowed to charge interest, they charged rent instead."[25] It is noteworthy that their practices did not lead to controversy within the Order or the Church at large which may be an indication of the Order's power, or given that their holdings supported large campaigns during the Crusades, the Church may have simply looked the other way. When the Order was disbanded, a vacuum of finance was left that was once again restrained by religious laws against usury.

This provided an opportunity for Jews who were not confined by the teachings of the Church. While *Deuteronomy 23:19* established the restriction "Thou shalt not lend upon usury to thy brother; usury of money, usury of victuals, usury of anything that is lent upon usury," the following verse appears to have provided the Jews with a convenient loop hole: "You may charge a foreigner interest, but not a brother Israelite, so that the Lord your God may bless you in everything you put your hand to in the land you are entering to possess."[26] Jews became the first money lenders and pawnbrokers and were tolerated in Venice because they could provide a service forbidden to Christians. Performing usury in a Christian community came at the price of being confined to an island in the Cannaregiosestiere area of Venice where a foundry stored slag, or the waste left over from smelting ore. For Venetians, the word they used for waste and the area of the city it was stored in was "ghèto." Jews performed their transactions atop desks in the "ghetto" of Venice while seated on benches, or "banca" in Old Italian, the root for the Italian word "bank." Jews would extend credit (derived from the Latin word "credo" meaning "I believe") and charge interest as a compensation for their risk. This small window of opportunity that was permitted by Christians looking the other way resulted in the foundation for international trade that is still practiced to this day, and began the long association between Jews and finance— one of the few forms of economic activity they were not excluded from. Jews were also coerced into becoming the front men for the collection of taxes and thereby became associated with taking people's earnings, while royalty and nobles retained loyalty. The position of Jews cultivated their harassment well into the future, although the royalty, nobility and church borrowed money from Jewish bankers, and employed them as financiers. These Jewish financiers, called "court Jews," used their family connections, and connections between each other, to provision finance, food, arms, ammunition, gold and precious metals to their sponsors. In return for their services, court Jews gained political and social influence, and some eventually collected vast fortunes like Aaron of Lincoln who became the richest man of 12th century Britain with wealth exceeding even the King's, or Mayer Rothschild who founded the Rothschild banking dynasty that is believed to have amassed the largest fortune in modern world history.[27]Despite the advances Jewish bankers made in money lending, the culture cultivated by the practices of the Church still made the practice an irreparable business for Christians. The headway made in Venice coupled, with the allure of fortune from the new economy that required venture capital, however, successfully forged a struggle to make the notions of modern banking acceptable; a huge turnaround from the Council of Vienna that previously condemned such arguments in favor of usury as heresy. Jews would lose their exclusive position as money-lenders as Italian banking brought about an economic revolution that would introduce the practices of currency exchange, deposit-taking, book transfers, credit for interest, and overdrafts.

Many of the practices of Templar and Jewish banking became incorporated in Italy and gave rise to great banking families— the Acciaiuoli, Amieri, Bardi, Penizzi, Scali, and the foremost amongst them— the Medici. The history of the Florentine Republic and the rise of the Medici serve our examination well as they are often regarded as the cradle of the modern Machiavellian state, and few historical episodes match the scale in which domineering bankers usurped the power of government to serve their interests and change the world. The Medici family of Florence was connected to most other elite families of the time through marriages or business. Their position gave them stature with other families who could only gain systematic access to other influential elite families through the Medici. Prior to their success in banking, the Medici were more known for violence than finance. Salvestro de' Medici was central to the 1378 Revolt of the Ciompi that took up arms and attacked government buildings to weaken the controlling power that was centered in the Guilds of Florence. Antonio de' Medici was exiled from Florence in 1396, and in a seventeen year period no fewer than five Medici were sentenced to death for capital crimes.[28] In 1400 the entire family was banned from Florentine politics for twenty years for their participation in another plot, with the exception of Averardo de' Medici, the father of Giovanni who would found the Medici bank.

Giovanni di Bicci de' Medici would not to be thwarted by laws that banned usury. He devised a means to make a profit through lending and *still* avoid the restrictions. His solution: exchange rates. Giovanni became head of the Medici family and placed members of his family as managers of Medici banks at the centers of European commerce. Increasing international trade required a great deal of currency exchange because merchants in London, for example, were not interested in being paid with Florentine money and vice versa. These branches allowed the Medici to keep repositories of money all over Europe and avoid risky transfers of gold. Success also came through the implementation of bank diversification. Default could potentially happen by the failure of one borrower, but the Medici bank was made up of multiple interlocking partnerships, each with some measure of independence. This scale and diversity was the key to reduce the risk of money lending which not only lowered the cost to borrowers, but essentially what made banks different from loan sharks. In this fashion the Medici managed most of the great fortunes in Europe, and landed the most important account of all— the Pope. When rival banking houses tried to cry foul that the Medici's use of exchange rates and calculated risk was equivalent to usury, the Pope himself was already participating in joint trading ventures with the Medici, and ruled in the Medici's favor. The ban on usury was partly overcome through the *damnumemergens* doctrine, meaning that a charge was fair to compensate the risks encountered by the lender for part of his capital, and precisely because a delay could give rise to losses. In these cases, compensation was no longer considered "usury," but now "interest."[29]

When Giovanni died and his son Cosimo took over as gran maestro, he effectively took the oligarchic influence of the family to new levels by forging a political hegemony that established himself as the unofficial head of state of the Florentine Republic. As Florence functioned on a democratic system, Cosimo pretended to have little political ambition while conversely using his wealth and power to control votes. Pope Pius II said, "Political questions are settled in [Cosimo's] house. The man he chooses holds office...He it is who decides peace and war...He is king in all but name."[30] In addition to Cosimo's front to have little political ambition, his adherence to Catholicism was also a farce. While Aristotelian thought that forbade usury was conducive to the scholastic mind, Cosimo adhered to Neo-Platonic philosophies and the ideals of humanism that stressed the value of human thought, individually and collectively, preferring evidence, rationalism, and empiricism to any established doctrine of faith. This worldly outlook suited the changes the Medici were trying to bring about in banking. Aristotle was seen in light of Aquinas and the Catholic tradition, whereas Plato was seen outside of faith, and the wisdom derived from the Platonic outlook did not have to stem from religion. It was no accident, therefore, that the Platonic academy was founded just outside of Florence, and that translations of Plato's dialogues and the works of Plotinus became available to the West under the private patronage of Cosimo de' Medici. Cosimo's grandson, Lorenzo de' Medici (1449-1492), was yet another de facto ruler of the Florentine Republic, and his patronage further supported the spread of Neo-Platonic thought during the Italian Renaissance. Lorenzo commissioned Giovanni Pico (1463-1494) to translate and spread neo-Platonic ideals, but in addition to his knowledge of Greek and Latin, he was also immensely versed in Hebrew and his works delved into Egyptian mysticism and Kabbalah. Pico's works were banned by the pope because they attempted to introduce Neo-Platonic and Hermetic doctrines into the teachings of the Church. Pico's surviving the fate of Church persecution in and of itself testifies to power of Lorenzo de' Medici's support and protection.

Amidst the upsurge of these new ideals that spread from the private patronage of the Medici, Niccolo Machiavelli (1469-1527) wrote *The Prince* in 1513—dedicated to Lorenzo de' Medici. Machiavelli's ideas about accruing honor and power as a ruler had a profound impact on political leaders throughout the modern west, and promoted the development of modern materialist thought. The primary lessons to be taken from *The Prince* include the concepts of "realpolitik"—that the state is not subject to moral laws and serves only itself— and that excesses are permissible for the survival of the state. *The Prince* was shocking not only because it recommended ruthless behavior and injustice, but it did so with no apparent concession to morality. References to God were absent in his discourse on politics, and religion was only mentioned mockingly. Machiavelli prescribed that rulers should only show reverence when it suited them, that their interests should be the basis of their decisions, and that their sole responsibility was to retain power. "A ruler . . . must be a fox to recognize traps and a lion to frighten off wolves." The original "prince" was Ceasere Borgia (1475-1507), the illegitimate son of Pope Alexander VI. His renowned ruthlessness behavior modeled the ideal ruler Machiavelli portrayed in *The Prince*. In reality, Borgia was a failure; a spoiled prince that never won a state for himself. Machiavelli dismissed his failure to bad luck. The claim has been made that Machiavelli's work was written with the intention of being ironic; he did not intend for rulers to enact his observations. If *The Prince* was intended to be ironic, a greater irony followed: it was taken seriously and immensely influential.

The same year Niccolo Machiavelli wrote *The Prince*, a Medici ascended the papacy. Giovanni had instilled in Cosimo and his family the need to continually network and invest in people the family had a use for. Cosimo's grandson, Lorenzo de' Medici, pushed his son Giovanni di Lorenzo de' Medici into the 'service' of the Church. With aid of the influence his father had with Pope Innocent the VIII, Giovanni quickly rose to the ranks of a Cardinal at the age of thirteen, and later assumed the head of the family bank when his father unexpectedly died. Cardinal Giovanni, beset with qualities suited for bankers, politicians and venture capitalists, but not nearly as endowed with those befitting a man of the cloth, realized his opportunity for personal advancement when Pope Julius II died. Giovanni applied his Medici sharpened skills to network with other Cardinals during conclave to win himself the position of the papacy. After a week of negotiations, promises, and bribes, Giovanni ascended the papacy and adopted the name of Pope Leo X.[31]

Running counter to the business philosophies of Giovanni and Cosimo de' Medici, Pope Leo X failed to conduct his business without drawing attention to himself. He depleted the treasury of Vatican and looked to pawn off Vatican treasures, all while the family firm handled the banking. When pressed for money, he resolved to fix his financial ailment with a business solution that would offer the sale of forgiveness (known as indulgences) to the masses.[32] Martin Luther, now remembered as the first to "*protest*" Pope Leo X's selling of indulgences and the behavior of the Catholic Church as a whole, sparked the beginning of the *Protest*ant reformation. Although Medici craftiness serves as a fine example of elites exploring and opening new avenues of exploitation to get around banking restrictions, it also contributed significantly to breaking the Catholic monopoly on Christendom.

Chapter II: The Protestant Ethic and the Spirit of Capitalism

The Reformation created modern politics by enhancing the rise of the modern state. The success of Luther's arguments not only destroyed the universalist ambitions of the Catholic hierarchy, but also made religion subordinate to the state. Clergy increasingly took on the role of guardian of only the 'inner life' of individuals. Protestantism was the main reason that power in Europe slipped away from the Mediterranean countries to Northern Europe between the 16th and 17th centuries. Authorities in Rome badly misjudged what was happening in the north. Pope Leo X failed to realize the magnitude of those turning away from the Church, and dismissed the Protestant revolt as a mere "squabble among monks."[1]

Leo's successor, Pope Adrian VI, the only Dutch pope in history and the last non-Italian Pope until Pope John Paul II, 455 years later, confessed to the College of Cardinals in his first speech that corruption was so bad "those steeped in sin" could "no longer perceive the stench of their own iniquities."[2] The new pope was surrounded by Italians with vested interests that nullified his every move. He died after only one year and was succeeded by Giulio de' Medici who was appointed to archbishop by his cousin Pope Leo X after a special arrangement was made to grant him the office despite his illegitimate birth with a formal declaration that explained how his parents had been secretly married. Giulio de' Medici became Pope Clement VII (1523-1534), the same pope, who despite the controversy surrounding Niccolò Machiavelli's *The Prince,* permitted its publication in 1532.

Though Pope Adrian VI (1522-1523) sought to reform and convert the Church, his short pontificate made that impossible, and Pope Clement VII's response to the Protestant Revolution was wholly ineffective. Clement VII devoted much of his papal energies to enjoying art and culture, and it was this same Medici pope who drove Henry VIII of England to Protestantism over the validity of his marriage to Catherine of Aragon. It was his successor, Pope Paul III (1534-1549), that responded to Protestantism and sent the Church into the era known as the Catholic Reformation, especially after his ecumenical council, the Council of Trent (1545-1563).

Banking during the reign of Carols V witnessed a massive inflow of precious metals to Spain from the Americas that resulted in Spain displacing Italy as the economic center of gravity. Just as governments characteristically never run out of projects to spend money on, Carlos V implemented extravagant imperial policies that left him in need of cash. The complicity between bankers and government reached new heights under Carlos who eventually bankrupted the Royal Treasury, took down the bankers that financed him, and ruined the Spanish economy as a whole. The government resorted to appropriating money from where it was most readily available- bank deposits in Seville. These bankers also violated their demand-deposit contracts and used a large amount of the deposits for their own business. The policy of confiscating money, a gross violation of basic property rights, only encouraged bankers to loan out as much money as they could which became a habitual practice. It was preferable to devote a greater fraction of reserves to loans than cash reserves that could be, and were, confiscated. In the proper order of things governments should enforce justice to secure the deposits of third parties, but as we will continue to see, when they stand poised to be the main beneficiary of illegitimate banking practices governments justify and grant bankers privileges to practice fractional-reserve ratios outside of the frame work of general legal principles that would usually favor the security of depositors.

In the backdrop of the treasury needing liquidity based upon confiscations, solvency became a problem as bankers increasingly engaged themselves in risky personal business deals such as insurance transactions and speculative business. Inevitable recession and economic crisis was caused by artificial booms caused by inflation of precious metals from America and artificial credit expansion without an adequate base of savings derived from the practice of banking with fractional-cash ratios. Italian and Spanish banks were intricately linked and financial flows between the nations were common. In the second half of the 16^{th} century there were large amounts of "bank money" created out of nothing by banks that did not keep 100 percent reserve ratios of deposits from their clients. This led to an artificial thriving of the economy which inevitably reversed when the economy soured and economic difficulties led to a wave of bankruptcies in both Florence and Seville. The expansion in Italy began by the Ricci Bank that used a significant part of their deposits, to the pleasure of the government, to purchase public funds and grant credits. Other banks were dragged into the credit expansion to remain competitive and uphold their profits and market share. We can read in an edict of 1574 that accusations were made against bankers who refused to return deposits in cash to depositors that were "paid in ink." Artisans could not withdraw their money or pay their debts and there was a large contraction of credit.[3]

These events led to the sharpest minds of the era, the theorists of the School of Salamanca, to reflect upon financial and banking activities through a series of theoretical analysis.[4] The foremost scholastic works during this time that defended the traditional Catholic position on economics against the trends emerging in Northern Europe came from Spain by a group of theologians known as the School of Salamanca. While the birth of modern economics is traditionally attributed to Adam Smith, there is no shortage of opinion that attributes the founding modern economics to these Scholastic writers. Amidst the burgeoning economy of Spain that profited immensely from its colonies in the New World, the idea arose that price is the function of the supply of money, while Domingo de Soto and Martin de Azpilcueta Navarro delved into what we might now call problems of the morality with capitalism. While most of the scholastics that railed against Spanish banking practices were from the same is Dominican order that Thomas Aquinas belonged to and characteristically upheld his views while being very critical and distrustful of banking practices, it is interesting to note that there was another group from the School of Salamanca, most of them Jesuits, who opposed their positions. Another notable *modern* Jesuit, Father Bernard W. Dempsey, in his work entitled *Interest and Usury*, analyzes the positions of these Jesuit scholars and concludes that the outcome of their implications gave rise to economic practices of fractional-reserve-banking that have resulted in such a perverse, vast and illegitimate process of *institutional usury,* that even they would have strongly opposed them.[5] As we will see, however, the lure of easy money from manipulation has proven so difficult to put down throughout history that it would be terribly difficult to achieve a fair marketplace like the one the Dominicans envisioned. While regulation and vigilance may hold back manipulators for a time, they persistently creep back with governments granting bankers special privileges to assist them in their tasks of raising revenues.

After the Catholic Church lost its monopoly on Christendom, leaders like Henry VIII wouldn't care what the Catholic Church had to say about usury, and in the gross absence of religious objection and the lure of governments to pervert money supplies to their advantage, Protestants would revolutionize the organization of the world's economy. Moreover, the finest minds in Spain whose philosophies upheld the ban on profits without any substantial labor from usury indirectly contributed to discrediting of the Scholastic method because of their association with the Catholic Church. The validity of the Church was further complicated by the Jesuit order that generally favored interest and worked to find sophisticated ways of allowing merchants, and finally professional moneylenders, to get around the sinful ban on usury. These loopholes and contradictions in the Church's arguments opened the Church to criticisms of hypocrisy.[6]The assault that came from the outward rise of Protestantism, combined with the criticisms of conservative Christians that denounced the Church for its alleged decadence and moral laxity, resulted in a religious bias that unduly discredited the achievements and methods of Scholasticism. While crypto-Calvinists attacked the Church for the Jesuits weakening the prohibition of usury, Protestants and secularists attacked the Church for keeping it. As a result of these influences, around 1620, according to the theologian Roger Ruston, "usury passed from being an offense against public morality, which a Christian government was expected to suppress, to being a matter of private conscience, and a new generation of Christian moralists redefined usury as excessive interest."[7]

Martin Luther's famous translation of the Bible into German, in the 16th century, inspired a rapid transition towards writing in the vernacular that resulted in economic, social, and religious thought becoming increasingly isolated in each national language, and the influences of Scholastic economic thought became confined to writers in Catholic countries.[8] The changes in thought that emerged as Northern Europe distanced itself from Southern Europe promoted a sense of individualism truer to the spirit of self-interest, economic freedom, and private-property rights. Thereafter, the power of economies in Western Europe — and later its colonial off spring in North America — steadily pulled ahead of the rest of the world.

If the Protestant revolution opened the way to dismiss natural-law derived ethics or political philosophy from the use of man's reason, then the secularists of the 16th and 17th centuries capitalized on the breach. The outcome of this movement as it applies to our examination could be aptly summarized by the popular thesis of sociologist Max Weber in his famous *The Protestant Ethic and the Spirit of Capitalism.* The eventual symbiosis of the state and science based ideologies in Protestant Europe grew with innovations and shifts in power that produced unheard of wealth. All the more, organizing society with the ends of controlling the outcome of the economy seemed to be reinforced by the growth of wealth in the era linking the Scientific Revolution with the Age of Enlightenment. While the Dutch Republic's 17th-century mercantilist dominion became the first global commercial hegemony, we can also see that it was at the forefront of developing some of the most influential modern philosophies that resulted in a fundamental shift in thinking.

René Descartes spent most of his adult life in the Dutch Republic and has been dubbed the "Father of Modern Philosophy." Subsequently, Western philosophy followed the trend of responding to his writings. Descartes decisively broke with the traditional Scholastic-Aristotelian philosophy prevalent at his time and developed and promoted the new mechanistic sciences.[9] This new way of thinking changed the criterion of truth; what Henry Veatch recognized as "transforming the everyday world . . . into a world that is largely unrecognizable by the commonsense and common experience of man- kind."[10] Here, the nature of man, morality, and ethics became largely subjective which had the end effect of society disregarding what it could be sure of unless it was upheld by science and mathematical evidence. While Aristotle's good was one of virtue, what could be actually be known and proven as "virtue" became so displaced that even the rulers and intellectuals of society accepted eudaimonia as the very thing Aristotle scoffed: "some plain and obvious thing like pleasure, wealth or honor."

This trend of thought that reorganized the conception of "good" would lead to discrediting the classical philosophical tradition of natural-law realism that had lasted from Plato and Aristotle at least through Aquinas and the late Scholastics. Thought proceeding from Descartes convictions were increasingly subjective to the extent that the political and social prescriptions that followed were radically individualistic. In historical and political terms the idea of the "tabula rasa"- the absolute rejection of all preconceptions and inherited beliefs derived from tradition- cast doubt on the validity of institutions and formed the modern notion of revolution. Alexis de Tocqueville remarked that the men who started the French Revolution of 1789 who were referred to as "Jacobins" were in fact "Cartesians."[11] This trend of materialism was further promoted by the Dutch philosopher Baruch Spinoza who helped lay the groundwork for the 18th century Enlightenment. He has been recognized as one of Western philosophy's most important contributors by going beyond Descartes to discredit traditional religion and promote a very scientific view of the universe. Despite Spinoza's expulsion from the Jewish community, his materialism won him credit as being hailed Europe's first secular Jew.

The unraveling of traditional beliefs in Europe not only brought with it the consequence of promoting materialist conceptions of what might be considered good, but reduced the former conception of good to something altogether too subjective and personal to be validated. Thereafter, scientific and materialist explanations were taken as "gospel," and man contrived solutions and systems to manage society were increasingly implemented. These ideals advocated by Descartes and Spinoza set the scene as Holland developed the world's first "modern" economy. It is no coincidence that new ideas of thought accompanied new economic practices, particularly as the progressive idea that the steady advance of scientific knowledge is the force that drives history displaced cyclical outlooks towards history.

The Dutch amassed wealth and became the most urbanized region of the world through free trade and investment that revolutionized commerce with the organized development of the world's first stock exchange, operating the world's largest merchant fleet, and dominating world trade through conquering a vast colonial empire.[12] The Dutch East India Company (Dutch: *Vereenigde Oost-Indische Compagnie*, VOC) was the world's first multinational corporation that issued stock. This revolutionary innovation in the scale of business lowered the costs of transactions such that cost-effectiveness of corporations began to displace smaller firms.[13] Statistically, the VOC's scale and access to capital gave it the advantage to surpass all its rivals in Asian trade. Between 1602 and 1796 the VOC it sent almost a million Europeans to trade in Asia on 4,785 ships, and shipped more than 2.5 million tons of Asian goods. By contrast, the rest of Europe combined sent an estimated 882,412 people from 1500 to 1795, and the fleet of the English East India Company, the Dutch's nearest competitor, was a distant second with 2,690 ships that carried a mere one-fifth the tonnage of goods traded by the VOC. The success of the VOC allowed it to pay its investors an 18% annual dividend for almost 200 years.[14] In same way that the scale and new organization of the VOC allowed it to eclipse it rivals, the economic competition that caused frequent wars amongst European nations rivaling for colonial expansion went hand in hand with Europe's transition from isolated feudal estates to more powerful centralized nation-states that depended upon successful economies to bolster their power. At this juncture, society and the laws of government became increasingly subordinate to economics.

The Dutch were initially leaders in mercantilist policies to control foreign trade and ensure the prosperity and military security of the state. Dutch prosperity also stemmed from their advance of individualism reflected in their political structure that guaranteed property rights, enforcement of contracts, and freedom of movement, in addition to freer markets for commodities and factors of production. While the British surpassed the Dutch in these areas in ways that gave rise to the Industrial Revolution and the strongest economy in the world, it can not be overlooked how Dutch central banking and mercantilist policies would inspire the British in ways that would radically change the course of economics.

The Dutch enacted enduring practices in banking and finance that were monumental in the historical progression of central banking. Savers had long since kept their precious metals in safekeeping with goldsmiths, receiving goldsmith receipts for their deposits which soon came to be used as a surrogate for the precious metals and a trusted medium of exchange. Goldsmiths observed that depositors would not usually redeem all their notes at the same time, and cheated on the system by printing pseudo receipts for interest-bearing loans to increase their wealth. This process was the beginning of fractional-reserve banking that has become the most common form of banking practiced in nearly all countries today. This initial deception transformed goldsmiths from passive fee charging guardians of bullion, to the harbingers of modern interest-paying and interest-earning bankers. The Dutch, like the Spanish before them, were keen to this trend of manipulation and delved into fractional reserve banking. The scientifically inspired plans of the Dutch to engineer their economy, a mix with the economic challenges of their time, engaged the government to directly intervene in the economy in ways that resulted in new heights of sophistication in the evolution of banking.

The mix of currencies and coinage awash in the prosperity of the Dutch economy compromised the nominal value of currency. Currency was minted as a standard weight in fixed relation to other currencies which gives us the names of monetary units that we have become familiar with— the pound, mark, franc, and even the dollar.[15] In the process of use, however, coinage deteriorated over time or was intentionally "clipped," meaning that precious metal was shaved off a coins circumference while continuing to circulate it at face value. Amsterdam's currency consisted primarily of coins from neighboring countries, and to a lesser extent its own. Many of the foreign coins were worn or intentionally damaged which reduced the value of Amsterdam's currency to about 9 percent below standard, or legal tender. It was impossible to infuse newly minted coins into circulation because they were rapidly collected, melted down, and exported as bullion while their place in circulation was quickly taken by imported damaged coins. Hence, undervalued money was driven out so that debts could be paid by overvalued or degraded money, due to the legal tender status given these degraded coins.

To remedy this situation, the Bank of Amsterdam was founded in 1609 under the protection of the city of Amsterdam, and was the precursor to, if not the first true central bank. The Bank served the purpose of facilitating trade, suppressing usury, and gaining a monopoly on all trading of specie, but its key function was to withdraw overvalued abused coins from circulation. Initially, it received both local and foreign coinage at their real, intrinsic value, deducting a small coinage and management fee, and then deposited the remainder in a credit known as *bank money,* guaranteed by the City of Amsterdam against fire, robbery, and other uncertainties. Bank money was worth more than real coinage because it always kept the same value as mint standards which eliminated the uncertainty of its value and created a perfectly uniform currency.

Adam Smith wrote in the *Wealth of Nations* that this "took away all uncertainty in the value of the bills," and forced all merchants to keep an account at the bank, "which necessarily occasioned a certain demand for bank money."[16] The fees associated with the widespread use of the bank created a handsome profit for the City of Amsterdam. Smith writes:

> The bank of Amsterdam has for these many years past been the great warehouse of Europe for bullion, for which the receipts are very seldom allowed to expire or, as they express it, to fall to the bank. The far greater part of the bank money, or of the credits

> upon the books of the bank, is supposed to have been created, for these many years past, by such deposits which the dealers in bullion are continually both making and withdrawing.[17]

To protect large sums of money, people started depositing their coins and paying their debts with the bank pioneered the system of cheques and direct debits or transfers that we take for granted today.[18] This new faith in ink, as opposed to precious metal, differed from the Spanish suspicion embodied in the edict of 1574 that accused bankers of refusing to return deposits in cash, but instead shortchanging depositors that were "paid in ink." Reliance upon representations of precious metals was intentionally planed to uphold the validity of the deposited money, not to enact an inflationary scam. The Dutch practice caught on quickly and spread to England and elsewhere.

The success of the Bank of Amsterdam was a result of its commitment from inception to maintain a 100-percent reserve ratio to its deposits. For over one hundred fifty years the Bank of Amsterdam scrupulously fulfilled this founding commitment that allowed it to satisfy each and every request for cash withdrawal of deposited florins in all crises. When the French threats caused a panic in 1672, massive withdrawals from Dutch banks forced banks in Rotterdam and Middelburg to suspend payments, while the Bank of Amsterdam had no trouble returning deposits. The Bank of Amsterdam increased the confidence in its soundness and became the international object of economic admiration. By the 1780s, however, the bank systematically began to violate the legal principles it was founded on. From the time of the fourth Anglo-Dutch war, the reserve ratio decreased drastically when the City of Amsterdam demanded loans from a large portion of the bank's deposits to cover its expenditures. Deposits that amounted to twenty million florins were only backed by four million florins worth of precious metals in the bank's vaults. The bank's violation of the essential principle of safekeeping it was founded on and kept for over one hundred seventy years led to its demise in leadership, and fall from admiration.[19]

The Dutch economy established a leadership role in Europe that was widely admired, quickly incorporated, and eventually surpassed by the well-connected British. The Dutch significantly influenced the British through their western ideals of liberalism that flourished into the prevailing beliefs of the Anglo-American world; providing a model of mercantilism that the British would use to lay the foundation for today's capitalism; and being a forerunner of central banking that the British incorporated into the Bank of England- the model that most central banks are now based upon. It is no mistake that the same time the British inspired a revolution in economics that advanced the fundamentals capitalism and central banking, it also became the center of philosophy and thought. The driving force that put the British on course to surpass the Dutch stemmed from what they *believed* about their world and the new ways they saw it.

Although the British replaced the Dutch as the world's foremost financial power, and the Americans would latter displace the British, these transitions occurred gradually with innovations in thought in the up and coming nation that coincided with the reign of the former giant. Upon examination, it becomes evident that the ideas that set the British apart from the Dutch cannot be reduced to science and advances in technology. The Netherlands, after all, did not lack distinction in the sciences in the second half of the eighteenth century. The Scientific Society of Rotterdam, interestingly known as the *Batavic Association for "Experimental Philosophy,"* evidences the Dutch commitment to science. During the time around the middle of the seventeenth century, the Dutch were on the cutting edge of technology in Europe, and on the eve of the Industrial Revolution the Netherlands was in some regards the most advanced economy in Europe. It could even be argued that the wars with Great Britain and France at the end of the 18th century, compounded by domestic political upheavals, caused the financial and economic crisis that made the Dutch relinquish the world's most prosperous economy to the British. After all, during the very years that Dutch society went through a set of external and fiscal shocks that drained its resources, Britain enjoyed the fortune of being an island separated from the French Revolution and French armies. The tremendous costs of events that befell the continent between 1789 and 1830 imposed considerable strain on the Netherlands. While the British were able to focus on steam and cotton, the best minds in Holland were absorbed by crisis and political reform

In addition to the mentioned differences that separated the emerging British from the relinquishing Dutch, a further depth of understanding can be gained through an examination of how both nations differed in their approaches to business. Economic growth in Holland that resulted from commercial expansion led to rent-seekers, tax-men, mercantilist protectionists, and state-sponsored monopolies. When technological innovations brought about prosperity as it did with shipbuilding, entrenched labor interests in trades resisted further innovations that could potentially reduce the value of their human capital. Furthermore, governments sold monopolies on nearly everything imaginable — iron, soap, leather, starch, books, wine, and fruit— to raise revenues.[20] In *The Wealth of Nations*, published in 1776, Adam Smith referenced such monopolies as the "great enemy of good management." These privilege seekers that preyed upon the prosperity of economies were often the parasites that killed the geese that laid the golden eggs. Historian Joel Mokyr examined mid-eighteenth century Britain and concludes that their economy differed by establishing "free internal trade, weak guilds, a relatively effective fiscal system, and a state that was firmly committed to protection of property."[21] In absence of recognizing this key difference, we fall short of a mature understanding that limits the emergence of a superior British economy to political tension, technology, prices, population, or financial innovations, although these were no doubt contributing factors. Central to what set the British apart was their increasingly scientific philosophies that sought engineered outcomes for social and economic issues.

The principles and beliefs of the prevailing Anglo-American world view were born from the works of three notable "prophets": Isaac Newton, the father of modern science; John Locke, the father of liberal political theory; and Adam Smith, the father of laissez-faire economics. Newton's conclusion that the universe tends toward greater entropy was applied to world-wide Anglo-American prosperity to show that its political economic system was evolving towards a state of inert uniformity. These teachings promote that advanced societies are most prosperous for the greatest number of people when we recognize the dignity of individuals and level the playing field to grant them fair and equal access to politics and market competition. We will come to see, however, that the banking systems born from the British experience were not based upon the perceived leveled and open playing field that advocates fair and equal access to politics and market competition. If anything, the prevailing political economic practices have merely upheld Thucydides' ancient Melian dialogue: "The strong do as they can and the weak suffer what they must." While Newton worked in the realm of fundamental science, Anglo-American economists and political "scientists" followed with supporting axioms of economic and political principles as if their "science" had a similar hard, provable, and undebatable basis. This necessitated an overhaul of philosophy that would stress the superiority of empirical data over reason. Thereafter, experts versed in these new "sciences" shrewdly guided governments to adopt the prescriptions of bankers.

The stage for modern economics was set with the completion of secularization that radically changed Western thought and has since been enhanced by the continued unraveling of traditional religion as the basis of society. Economics as we have come to know it first passed through a secularization before it became a science. This was advanced with the abandonment of the Aristotelian and Thomistic idea that economics should focus on the behavior of individual economic agents and households, coupled with the demise of scholastic metaphysics and gnosiology. For Aquinas, 'universals' were the essential properties of all things; Universals exist from God, His attributes residing in all things at the roots of their empirical reality. Once set into motion, the works of Aquinas that embarked on logic explanations of issues that had formally been within the sphere of Gnosticism, were followed by successive philosophers like Rene Descartes and the British scholars we will examine who relied solely upon logic based explanations of phenomena that encroached upon Gnosticism until it was totally displaced from mainstream Western thought.

So too, the initial abandonment of economics from Thomism occurred at the same time science underwent a secular process. The expansion of European universities after the Reformation created opportunities for intellectuals and academics who wanted to escape the spiritual control of the Church to attain unfettered creativity in lay academics. Nietzsche observed that the Reformation made each individual their own priest. In this environment, the new universities gave rise to modern philosophy, and with it science. The Scientific Revolution began with Copernicus in the first half of the 16th century, and with Keplero, Galileo, Bacon, Leibnitz, and Descartes the state continued taking the place of the Church in intellectual activity until secularism was finally completed with Newton in the 18th century when the admiration of science gave rise to natural-law philosophy. When human action was no longer motivated by spiritual ends, a context was reached where it became studied without aspiration of reaching universal propositions. As Ernesto Screpanti stated, "And it is precisely when public choices are no longer limited by God, but only by the ends of men and the nation, that it is possible to study them scientifically."[22] In this climate of this cultural revolution, the basis of modern economic thought was laid down as a "science."

The British philosophers of this era stressed the necessity of empirical data to come to sound conclusions which gave their outlook the distinction of being recognized as British empiricism, as opposed to the works of authors like Spinoza and Descartes from continental Europe that became known as continental rationalism. British empiricists took it upon themselves to scrutinize all human conceptions to see whether there was any basis for them in actual experience. Empiricists maintained that words like "God" or "eternity" were a misuse of reason because they had never experienced God, or eternity in ways that could be upheld by empirical data. From their standpoint, 16th and 17th century philosophers had inherited such assumptions so it was imperative for them to work towards riding man of such hollow notions. As this applied to economics, the absence of the West's traditional God that set the basis for an objective source of what was good set philosophies well on their way to become subjective. This further complicated referencing any common basis of judging economic systems or polices as ethical or not. The want of man uniquely made economics completely muddled because without the standard that had traditionally held Western society from straying too far away from what was deemed objectively ethical, those who stood to gain from polices would no doubt use the power at their disposal to insist their subjective views were correct.

While the works of Rene Descartes proved monumental to the development of modern thought, the same time period was dually influenced by the scientific advocacy of British scientist and statesman, Francis Bacon. While Descartes' conclusions of using mathematical deduction to derive certainty gave rise to the school of rationalism, and the advocacy of Bacon to endlessly sift through data stemmed into the English empiricist tradition, both contributed to the same destructive point: severing reason and thought from empirical data which had previously been integrated in natural-law. The emergence of modern thought derived from the dual influence of Descartes and Bacon fatally displaced natural-law and the conception of universals derived from Aristotelian and Christian thought with the monopoly of the scientific method that followed and continues to plague us with its application to fields where it is not competent. Normative theorizing must deal in facts just as empirical work must deal in values, but they do not inhabit different worlds. Their segregation, however, has resulted in the error of modern thought that has refused to use commonsense as the starting point to examine the world.

Though it would prove futile to definitively cite the source of an idea, it appears that Bacon's *The Advancement of Learning,* published 1605, was the first work to publicize the modern idea of technological "progress"; the steady, cumulative, historical advance of knowledge from applied science. As we will see, this outlook has grown to such proportions that governments have since enacted a whole host of programs, progressive in nature, that ideologically view government as the essential means to improve the lot of man. Historian William Hepworth Dixon, for example, referred to the Napoleonic Code as "the sole embodiment of Bacon's thought."

It was in this environment of thought that yet another testimony of man's turn towards extreme materialism came about with the works of Thomas Hobbes (1588 – 1679). Hobbes similarities to Bacon as an advocate of the state come as little surprise in light of his philosophic apprenticeship as secretary to Bacon himself, in addition to serving the royal family as the mathematical tutor to the future king, Charles II. Hobbes was, no doubt, what we might call an English Machiavellian with his world view that "force and fraud are the two cardinal virtues." It would be futile to postulate the extent that society adhered to the prescriptions Hobbes, especially considering how difficult it is to differentiate between his ideals and the influence Francis Bacon. He did, however, contribute to advancing the trend of modern thought that calls upon governments to take the helm in guiding society.

Sir William Petty (1623 – 1687), English economist, scientist and philosopher, was largely influenced Hobbes. Like Hobbes, Petty was a materialist opposed to conventional universities, and committed to the 'new science' inspired by Francis Bacon. He studied in Holland in 1643, and it was there through a connection with Dr. John Pell, a mathematics professor in Amsterdam, that he met Hobbes. Petty became his personal secretary, research assistant, and came under the influence of Baconian and Hobbesian empiricism. Through Hobbes, Petty participated in the Parisian circle of Father Marin Mersenne, with scientists that included Fermat and Gassendi, as well as philosopher-mathematicians such as Pascal and Descartes. We must remember that the science of the day did not yet enjoy the professional specialization of our times, such that any new scientific discoveries were often made in an atmosphere of scientists surrounded by philosophical supporters. Petty succumbed to the conviction that mathematics and our senses of the material world must be the basis of all rational knowledge. In this way, Petty distinguished himself as the first dedicated economic scientist, amidst philosopher-scientists, such as John Locke, that followed the trend of previous philosophers that occasionally discussed economics. Given his time, however, obtaining accurate data was difficult, if not impossible, which led his works to be based more upon methods of estimation, and the new "science" of he and his followers often became confused with statistics, national accounting, and demography. Many of his arguments purported to be based upon the use of statistics were actually based upon preordained ideological conclusions. William Letwin writes, in his study of Petty:

> Petty's way with numbers, here as always, was utterly cavalier. The facts, whatever they were, always had a congenial way of upholding Petty's conclusions. Or rather, Petty's factual assertions did; for he was not averse to citing authorities mysterious, unknown, and even non-existent, when he needed their help.[23]

Ironically, Petty couldn't have chosen a more apt title for his new way with numbers than "political" arithmetic.

Through examining Petty we gain further insight to the direction modern thought would take economics. His ideas about inflating money is remarkable as evidenced in his *Verbum Sapienti* where he states "nor is money wanting to answer all the ends of a well policed state, notwithstanding the great decreases thereof which have happened within these Twenty years."[24] Petty addressed the issue of money supply and the velocity of money, alluding to higher velocities to forge prosperity which have since proven a subject of controversy across schools of economic thought that still argue over the stability of such policies. It is of further interest that modern ideas about increasing the money supply through displacing gold and silver can also be found in Petty's work that held nothing unique about gold and silver in fulfilling the functions of money:

> Nor were it hard to substitute in the place of Money [gold and silver] (were a comptency of it wanting) what should be equivalent unto it. For Money is but the Fat of the Body-Politick, whereof too much doth often hinder its agility, as too little makes it sick... so doth Money in the State quicken its Action, feeds from abroad in the time of Dearth at home.[25]

While many religious writers throughout England were still condemning interest charges as sinful, Petty weighed in on the debate maintaining that interest rates were a rational reward for forbearance on the part of the lender. Petty defended banks stating, "The trade of banks is the buying and selling of interest and exchange." Unlike Bacon who had taken the bold controversial stance to argue in favor of usury in his 1601 essay *Of Usurie* that endorsed a system of state regulation fixing a lower interest rate (5 percent for most loans, and a higher rate of 9 percent for loans to merchants in large centers), Petty's promotion of interest had strong Hobbesian qualities.[26] Petty argued that any government regulation of the interest rate amounted to the "vanity and fruitlessness of making civil positive laws against the laws of nature."[27]It will come as little surprise, then, to discover that Petty is also attributed to have started the economic philosophy of 'laissez-faire' although the term he used was the Latin phrase "*vaderesicutvult,*" meaning "*as it will go*." It was Boisguillebert who argued in his *Dissertationsur la nature des richesses, de l'argent et des tributs* (1712) for "*laisser faire* la nature et la liberte"; for a simplified tax system and liberalization of internal trade that had a natural tendency towards equilibrium when individuals pursued their own interests. Petty warned that over-interference by government in an economy was analogous to a physician tampering excessively with the natural course of a patient's recovery. In this manner he maintained that monopolies, controls on the exportation of money and on the trade of commodities were vain and harmful to a nation, citing examples such as the price effects of the French king's salt monopoly as evidence.

Petty's enthusiasm for the sciences lent itself to the admiration of the numerological mysticism of the hermetic and Kabbalah tradition, and his involvement in Masonry. It is noteworthy that the Royal Society he was a founding member of was sometimes referred to as

"Solomon's House" or as the "Invisible College". The reference to "Solomon's House" is evocative of Freemasonry, while there is speculation that the "Invisible College" might have been a reference to Rosicrucianism. The eminent Harvard sociologist Pitirim Sorokin references the religious conviction these scholars held about mathematics and the arrogant frenzy of enthusiasm for quantitative and mathematical study of social life that stems from that day to the present, as "quantophrenia" and "metromania." He writes:

> The mathematical study of psychosocial phenomena was especially cultivated in the seventeenth and the eighteenth centuries. Spinoza, Descartes, Leibnitz, Newton ... and others, began to build a universal quantitative science, *Pantometrika* or *Mathesisuniversae,* with its branches of *Psychometrika, Ethicometrika,* and *Sociometrika* designed for investigating psychosocial phenomena along the lines of geometry and physical mechanics. "All truths are discovered only through measurement," and "without mathematics human beings would live as animals and beasts," were the mottoes of the Social Physicists of these centuries.[28]

We cannot look at the works of any one philosopher and say that their ideals were responsible for the course of society, especially in the face of contrasting works of other prevalent philosophers that were also popular during the approximate time. Nonetheless, these works collectively testify to ideas and notions that became increasingly popular, and evidence the course of human decisions that enacted policies based upon the conventional wisdom of a time. If we examine the works of John Locke, Sir Dudley North, or Bernard Mandeville we discover that while they were no doubt influenced by Petty, there are a host of ideas that they are in disagreement with Hobbes or Petty about, and indeed each other, but overall their works reveal the trend towards the ideas that formed modern economics. As Locke himself stated, "As people are walking all the time, in the same spot, a path appears." In 1601, when Bacon published *Of Usurie,* his stance in favor of interest was controversial, but it is interesting that some 90 years later, John Locke does not even entertain any serious possibility of an objection to interest per se, but only addresses the pragmatic issue of where to set the legal rate of interest. From the time of Bacon to the time Locke, the strong moral argument against usury was increasingly undermined by the growing availability of profitable financial investments.

The growing trend of individuality and the decisive strides towards free trade during this era is inescapable. Sir Dudley North (1641–1691), merchant, politician and economist, refused to base politics and economics on any elevated moral philosophy. He maintained that the public is nothing more than a sum of private citizens, and that the engines that drove society were the appetites of individuals. Accordingly, North believed that any measure taken by the state that interferes with the individuals attempt to pursue private goals hinders the public interest. In his *Discourse*, North proclaims, "The public is a beast," which also became famously quoted by Alexander Hamilton. This trend of ideas had drastic ramifications for economics: collective interests depend upon preservation of private interests because individuals are the best judges of their own interests which should be acknowledged by the state. The best policy would be no policy; no regulation of trade, the interest rate, or money supply. For North, the "just" level for the rate of interest would be what the forces of supply and demand "naturally" lead it to be.

John Locke, although sharing some of the same economic convictions as North, is not remembered for his economic ideals to the extent that the rest of his philosophical works became popular, particularly as they pertain to government. Although the works of Locke would not directly lead to revolutions in economics, the revolutions it influenced yielded democracies that would have profound effects on the ways governments would interact with private business, and the rise of individualism. It is noteworthy, however, that English mercantilists pursued government interference in the economy during Locke's life which brought him into opposition with policies that he believed were exceedingly unnatural, and provides further evidence for our examination of how our modern economic systems were born from an environment of parties seeking legislated advantages.

Chapter III: A Forged Symbiosis Between the Financial Elite and Government

The mercantilist doctrine practiced by the Dutch led to a British implementation that forged a symbiosis between the financial elite and government in ways that are still paramount to modern economics. Mercantilism amounted to colonialism; using the power of the state to go abroad for capital markets that benefitted private firms. This was essentially the precursor the comprehensive system of state privilege, subsidies, interventions, regulations, and central planning that we have inherited. British policies were designed to protect and maximize the income of traders and merchants. The Navigation Acts, which severely restricted other nations from trading between England and its colonies, were one such example. Here we see the influence of the elite influencing laws in ways that protected their interests at the expense of others. Favoring exports and penalizing imports had the effect of subsidizing merchants and manufacturers engaged in the export trade, while also granting privilege to inefficient manufacturers who were formerly rivaled by foreign competition. Moreover, the network of regulations gave rise to state bureaucracy, corruption, and national power. This predecessor of today's capitalist legislation was pamphleteered for by special interests seeking freedom for themselves, restrictions for others, and general policies that would subsidize their activities or companies.

Mercantilism not only set the stage for enhanced corporate interference in the dealings of the state which is in and of itself vital to this study, but it also established a pre-Keynesian policy of inflation. Mercantilists sought to be the recipients of heavy government spending and accordingly lobbied for the increased circulation of money throughout the economy. Their arguments drew heavily upon an alleged "scarcity of money" as the cause of depressed trade and unemployment. William Potter, an advocate of inflation and one of the first voices calling for paper money in the Western world (1650), wrote:

> The greater quantity… of money… the more commodity they sell, that is, the greater is their trade. For whatsoever is taken amongst men… though it were ten times more than now it is, yet if it be one way or other laid out by each man, as fast as he receives it…it doth occasion a quickness in the revolution of commodity from hand to hand…much more than proportional to such increase of money.[1]

While arguments were made in favor of inflation benefiting society as a whole, we can see then, as it is now, that inflation does not benefit the poor and that wages always lag behind the rise in prices. Britain's "debtors" were generally not the poor, but large merchants and quasi-feudal landlords. Inflation benefitted landlords by increasing food prices, lowering interest rates and the purchasing power of money to aid their role as debtors, and increasing land values caused by the fall in interest rates. It is no coincidence that the English Parliament was heavily dominated by landlords, and that one of the main arguments mercantilist pamphleteers emphasized was that inflation raised the value of land.

Mercantilism was also propagated upon the basis of seeking full employment, but in no way should we error in interpreting such calls as "progressive" or enacted out of love for the common man. Quite the contrary, they stemmed from the Old Order of oligarchy and special privilege. Nearly all mercantilists called for ways to bring more people into the labor force as a means of maximizing the exploitation of the working class. William Petty— arguably the first "modern" economist— called for an inflation of money to increase employment and improve productivity. His outlook towards labor, however, clarifies how he and the class he represented saw workers as: "capital material … raw and undigested … committed into the hands of supreme authority, in whose prudence and disposition it is to improve, manage, and fashion it to more or less advantage."[2]

English mercantilists were resentful of the superior prosperity and economic growth the Dutch enjoyed from the early decades of the 17th century. They observed that interest rates were lower in Holland than they were in England and jumped to the conclusion that the cause of Dutch prosperity was Holland's low rate of interest, thereby taking it upon themselves to influence the government to force the interest rate below Holland's. The first prominent mercantilist that called for lowering the interest rate was Sir Thomas Culpeper, in his brief *Tract Against the High Rate of Usury* (1621), arguing that the government should force maximum interest rates down to outcompete the Dutch. Culpeper's pamphlet influenced Parliament to lower the maximum usury rate from 10 to 8 percent. Culpeper's work was reprinted several times, and Parliament accordingly lowered the maximum rate from 8 to 6 percent. Finally, in 1668, the mercantilists called for a bill to lower the maximum interest rate from 6 to 4 percent, which would presumably set rates below the Dutch. Culpeper's son accompanied the bill with propaganda by reprinting his father's work, along with one of his own whose title makes plain the aims of the mercantilists: *A Discourse showing the many Advantages which will accrue to this Kingdom by the Abatement of Usury together with the Absolute Necessity of Reducing Interest of Money to the lowest Rate it bears in other Countreys.*

When the House of Lords' committee held hearings on the interest-lowering bill during 1668–69, Locke wrote his first economic work at the behest of his powerful patron Lord Ashley, entitled, "Some of the Consequences that are like to follow upon Lessening of Interest to Four Percent" (1668). Locke defended a free market economy arguing that the measure would make the economy worse off by restricting the supply of savings and credit. Instead, Locke concluded that the interest rate should be set at the "natural rate," determined by the free-market, "which the present scarcity [of funds] makes it naturally at."[3] The House of Lords finally killed the 4 percent bill in 1669. Ashley became the Chancellor of the Exchequer and titled the Earl of Shaftesbury, and the following year Locke became Secretary to the Council for Trade and Plantations. By the end of 1674, however, Ashley was fired, the council of trade and plantations was disbanded, and Locke followed his mentor into exile in Holland. When the Stuarts were overthrown in the Revolution of 1688, John Locke returned to London in triumph on the same ship as Queen Mary. No sooner had Locke returned than the supporters of the East India Company that fought for a government backed monopoly also renewed their arguments for lower interest rates. Sir John Somers, John Locke's new political patron after the death of the Earl of Shaftesbury, asked Locke to expand *his*1668 paper to refute the proponents of the 4 percent bill. Once again, the 4 percent bill was killed in the House of Lords as Britain maintained its position at the forefront of emerging free market economies.

The latter part of Locke's economic works were devoted to the great recoinage controversy that came about as a result of Gresham's law once England's basic money stock of silver coins had deteriorated from erosion and coin-clipping. People traded with overvalued eroded coins, while hoarding the better ones. By 1690 the older hammered coins had lost approximately one-third of their worth compared to their face value. It was evident that the Mint would have to recoin the currency, but amidst the growing controversy Mercantilists, who tended to be inflationists, called for debasement to devalue silver coinage and increase the money supply. Secretary of the Treasury, William Lowndes, issued a "Report on the Amendment of Silver Coin" in 1695, calling for an official debasement of coinage by 25 percent of its silver to its face value. In his *Considerations,* Locke had denounced debasement as deceitful and immoral. Locke was adamant that the amount of silver in a coin gave it its worth, not the name granted to it by the authorities. Locke warned, "when men go to market to buy any other commodities with their new, but lighter money, they will find 20s of their new money will buy no more than 19 would before."[4] Locke's patron, John Somers, who had been made Lord Keeper of the Great Seal in a new Whig ministry in 1694, asked Locke to rebuttal Lowndes's position that resulted in Locke's publication of *Further Considerations Concerning Raising the Value of Money.* Locke dramatically argued that *any* change of standards would be as fraudulent and deceitful as the government's changing the definition of a foot or a yard: "one may as rationally hope to lengthen a foot by dividing it into fifteen parts instead of twelve, and calling them inches." Furthermore, he held that the government is supposed to act as the guarantor of contracts, and that any alterations to the currency would amount to government a sanction of contract-breaking:

> The reason why it should not be changed is this: because the public authority is guarantee for the performance of all legal contracts. But men are absolved from the performance of their legal contracts, if the quantity of silver under settled and legal denominations be altered ... the landlord here and creditor are each defrauded of twenty percent of what they contracted for and is their due.[5]

One of Locke's key opponents on the issues of the interest rate and coinage was Nicholas Barbon (1637–98); prominent builder, land-bank projector, and fire-insurance mogul who pioneered the fire insurance industry after the Great Fire of London in 1666. Barbon had just been elected to Parliament, and published his *Discourse of Trade* (1690), to push for another 4 percent interest bill in Parliament. He refuted that money is a market commodity and what the authority of the government says it is: "Money is the instrument and measure of commerce and not silver. It is the instrument of commerce from the authority of that government where it is coined."[6] It comes as little surprise that Barbon, who had made fortunes from projections off of borrowed debt, would be a staunch inflationist that would have liked to diminish his interest costs. Barbon and Locke set the trend for the coming monetary battle between the hard-money anti-inflationists, and inflationist whose projections and schemes were based upon an intervening authority of governments.

During the short remainder of Locke's and Barbon's lives, Locke's view triumphed, and the recoinage was carried out by preserving the currency with the integrity of the weight of the silver. Defeated, but not beaten, inflationists and bankers would rise again with an upsurge of governments that could not resist asserting their authority to establish monopolies in national banks to promote manipulation in favor of government borrowing. Locke was favored once again by Sir John Somers, who had become Chief Minister from 1697 to 1700, and appointed to the dominant commissioner of the newly constituted Board of Trade. When the Somers regime fell in 1700, Locke was ousted from the board of trade, and remained in retirement until his death four years later.

The newly instated policy recoinage was assisted by Locke's old friend, the great physicist Sir Isaac Newton (1642–1727), who shared Locke's convictions about hard-money recoinage. While still a professor of mathematics at Cambridge, Newton also became Warden of the Mint in 1696, and rose to the post of Master of the Mint three years later, which he maintained until his death in 1727. Newton became a justice of the peace and conducted more than 100 cross-examinations of witnesses, informers, and suspects of counterfeiting coinage, and successfully prosecuted 28 coiners. He disguised himself as a patron of bars and taverns to gather much of that evidence himself. As the King's attorney, he prosecuted William Chaloner who was hanged, drawn and quartered at Tyburn gallows.[7] An ironic influence of Newton on Britain's economic affairs, albeit indirect, came from the inspiration he provided John Maynard Keynes. The British math-based economist, who was anything but hard-money, in addition to promoting the scientifically engineering of prosperity through monetary policy, collected and protected many of Newton's papers, and wrote about his life where he famously referenced him as "the last of the magicians."[8]

Newton's main contribution to the direction of economic thought, however, would not come from his efforts to preserve hard-money. Sir Isaac Newton, the second scientist to knighted after Sir Francis Bacon, became a champion of scientific admiration that resulted in enhancing Bacon's philosophies that were met with enthusiasm in an era where new scientific discoveries, the growth of the economy, and the expansion of European nations into new worlds, bolstered the rebuttal against the popular notion that any change wrought by human beings merely corrupted the natural order of God. Newton is regarded as the most influential and famed scientist from the era referred to as the "Scientific Revolution"; a revolution that not only refers to the history of science in the early modern period that changed our approach to mathematics, physics, astronomy, biology, medicine and chemistry, but also revolutionized views towards society and nature that resulted in the Enlightenment era.[9]

Newton's great contribution to the paradigm shift in thinking was both his stress of mathematical proofs that he detailed in his 1687 book *Philosophiæ Naturalis Principia Mathematica,* and his success in popularizing the use of math as a cornerstone to philosophical principles. Newton wrote:

> we offer this work as mathematical principles of philosophy; for all the difficulty of philosophy seems to consist in this — from the phenomena of motions to

> investigate the forces of nature, and then from these forces to demonstrate the other phenomena.[10]

Newton refashioned the conception of a world governed by an interventionist God into a world that God designed along rational and universal principles. "God created everything by number, weight and measure."[11] Newton was inspired by his religious convictions and devoted himself to writing extensively about God and His natural creation, although the unforeseen theological consequence of Newton's success in science over the next century was that his work was used to replace the conception of God with science as the new basis of understanding the universe.

While prominent figures of the era like John Locke and Isaac Newton were reverent men who were not out to eliminate religion and God, David Hume, cited by the Stanford Encyclopedia of Philosophy as, "The most important philosopher ever to write in English," certainly was.[12] "The Christian religion," he wrote, "not only was at first attended with miracles, but even at this day cannot be believed by any reasonable person without one."[13] Understanding the process of induction became popularly associated with Hume only in the early twentieth century, which may have been a connection that became known through the works of John Maynard Keynes.[14] Sir Karl Popper, who was a philosopher and professor at the London School of Economics, and generally regarded as one of the 20th century's greatest philosophers of science, said, "I approached the problem of induction through Hume. Hume, I felt, was perfectly right in pointing out that induction cannot be logically justified."[15]Today, philosophers recognize Hume as a precursor of contemporary cognitive science. While modern scientists held Hume in high esteem such as Charles Darwin, and Albert Einstein who even went so far as to say that Hume's positivism helped inspire his Special Theory of Relativity, Hume's influence on economic thought is also momentous.[16] Hume's ideas on private property, inflation, and foreign trade led Nobel laureate, Paul Krugman, to say, "David Hume created what I consider the first true economic model."[17] Hume explained how an increasing the supply of money in circulation would gradually increase prices from one sector to another, and how the volume of international trade was not fixed in a way that countries expanded their wealth at the cost of others. Hume's work also serves as a pre-Keynesian prelude to economic trends to come:

> From the whole of this reasoning we may conclude, that it is of no manner of consequence, with regard to the domestic happiness of a state, whether money be in a greater or less quantity. The good policy of the magistrate consists only in keeping it, if possible, still increasing; because, by that means he keeps alive a spirit of industry in the nation.[18]

Although Hume is not remembered so much for his direct contributions to economics, his indirect influence could be regarded immense. Not only did Hume promote secularism to sever God from public and academic discourse, advance the ideas of Petty and Locke to fortify the foundations for English free-trade economics, and inspire economics to be recognized as a "science," he also left an imprint upon Adam Smith whose far reaching influence can be summarized in the frequent reference of him as the father of modern economics. Hume and Smith were close friends as evidenced by Smith's fond recollections of Hume: "Upon the whole, I have always considered him, both in his lifetime and since his death, as approaching as nearly to the idea of a perfectly wise and virtuous man, as perhaps the nature of human frailty will permit."[19] Interestingly enough, Smith was once nearly expelled from Oxford for having a copy of Hume's *A Treatise of Human Nature* in his room. While not as outspoken and radical as his friend, Smith nonetheless shared Hume's Enlightenment enthusiasm about science, and lack thereof about religion.

Adam Smith expounded upon the natural laws of the universe, while claiming his preference not to stretch philosophy beyond its limits in search of an architect behind it all as the Chair of Philosophy at Glasgow University. His irreverence was noted by his petition to the Senatus Academicus not to open class with prayer, delivering prayers that smacked of "natural religion," as well as being accused of smiling during prayer, and keeping company with the outrageous David Hume.[20] Smith's moral philosophy in his *Theory of Moral Sentiments* turned out to merely be a refinement of Hume's moral philosophy, while his *Wealth of Nations* is not considered so much an original book as it is an epoch of the teachings Locke, Petty, and of course Hume whom Smith acknowledged for influencing his economics.

Hume's attempt to create a "science of man" by eliminating metaphysics from philosophy, while establishing an empirical basis of understanding human nature, was as complete as he would ever make it with his 1752 *Political Discourses*. Hume's project to create a science of man based on his survival and prosperity in an organized society was finally realized nearly half a century later with the release of *The Wealth of Nations*. It was this far reaching innovation of explaining free markets that made Smith the father of economic science and modern liberalism. Smith thought that man's innate desire to be wealthy drives him to work hard to better his own condition, and that we sympathize on the basis of wealth and rank. It was from these complementary ideas of self-interest and sympathy that Smith's famous conception of the "Invisible Hand" arose. For Smith, the welfare of individuals is identical to the "wealth of nations"; a nation's wealth arises from the sum of its citizens products. Men will work hard to maximize their product, if given the freedom to do so, which will increase the wealth of the nation as a whole. Hence, it is by the invisible hand that individuals serve the collective interest precisely because they are motivated by self- interest: "it is not from the benevolence of the butcher, the brewer or the baker that we expect our dinner but from their regard to their own interest."[21]

Smith's theories about the division of labor and prices on the market maintained what we might expect about his commitment to free markets. In the spirit of Locke's argument about black markets, Smith upholds that efforts to outlaw interest only have the effect of raising the cost of borrowing:

> This prohibition, however, like all others of the same kind, is said to have produced no effect, and probably rather increased than diminished the evil of usury.. . . They seem to have followed and not to have gone before the market rate of interest, or the rate at which people of good credit usually borrowed.[22]

What may surprise us about Smith, however, is that his ideas about usury that he acknowledged as "evil" were not entirely in keeping with what we would consider "modern." Smith was convinced that without caps on interest rates:

> Sober people, who will give for the use of money no more than a part of what they are likely to make by the use of it, would not venture into the competition. A great part of the capital of the country would thus be kept out of the hands which were most likely to make a profitable and advantageous use of it, and thrown into those which were most likely to waste and destroy it. Where the legal rate of interest, on the contrary, is fixed but a very little above the lowest market rate, sober people are universally preferred, as borrowers, to prodigals and projectors.[23]

It seems that for all the faith Smith promoted in a free and open market, he was still unwilling to let the interest rate float. Much to the chagrin of many of Smith's followers, he never recanted his support of a state-imposed cap on the interest rate through the course of the four edited editions of the Wealth of Nations.

The debate played out in a well-known exchange between Jeremy Bentham and Adam Smith that amounts to a modest dispute between an over-eager disciple and his master. Bentham acknowledged in his 1787 *Defence of Usury* that all he knew of political economy originated in Smith's work. Smith thought 5 percent was an appropriate amount for any borrower to repay in Great Britain. Bentham argued, "But why a policy, which as applied to exchanges in general, would be generally deemed absurd and mischievous, should be deemed necessary in the instance of this particular kind of exchange, mankind are as yet to learn."[24] If the market provided the most efficient means to determine prices, Bentham thought it made little sense to permit government interference to justify the price of interest, and this price only. How could a legislator "who knows nothing, nor can know anything, of any one of all these circumstances, who knows nothing at all about the matter," justify interfering in the market? Bentham celebrated the role of finance as the driving force of the creative powers in the new industrial order. It made little sense to him that this new economic liberty should emancipate consumer sovereignty, market prices, and free trade, while rejecting the prospects of new innovations in the fundamental process of financing. Bentham upheld Hume's view that, "*interest* is *the barometer of the State*, and *its lowness* is a sign almost infallible of the flourishing of a people."[25] Precisely because lending was of such vital importance to the growth of industry and the flourishing of the economy, Bentham saw lending to investors as what may well be the best of market transactions, certainly one that was too important to be restrained or prohibited. Bentham's letters make it very clear that he was eager to gain Smith's endorsement of his *Defence*, and explicitly asked Smith in "Letter XIII" to suspend his support of usury legislation, but through the last edition of *The Wealth of Nations* to appear in Smith's lifetime that defended free markets, he left the usury passages unchanged. Instead, he sent Bentham a copy of the new 1789 edition, which contained no changes to his support for limiting usury, and a copy of the 1790 edition of the *Theory of Moral Sentiments*. Smith had cautiously wished to hedge the point, but Bentham and the influential moguls of finance that followed would refuse to let Smith, or the rest of the world for that matter, have it both ways.

Smith observed that individuals who seek their own objectives organize themselves into social groups directed at increasing their power, and that the state as an apparatus is continually crossed by economic agents that impair public interest, rather than foster it, by pursuing government granted licenses and privileges. To counter this, Smith called for an "impartial spectator," warning that exploitation and the formation of monopolies occurs when the impartial spectator is weak. Gilbert K. Chesterton, identifying the origins of economics emancipating itself from ethics and political philosophy and the rise of unrestrained finance, called Bentham's essay on usury as the clearest and least adorned beginning of the "modern world." Chesterton bemoaned a modern world built on the principles of British liberalism; a liberalism forged by circumstances that brought about an innovative mobilization of political, military, and economic resources that propelled the British to a domineering world position.

Amidst the free market and hard-money debates that intensified in England, the government came heavily into the center economics by forming a monopoly with the Bank of England. The British embraced and promoted free-trade as the world's pre-eminent financial, industrial, and imperial power, buttressed by empire, and backed by military might. London became the world's leading supplier of credit by exporting the highest percent of national income than any creditor nation has since.[26] British Sterling was used as the international standard that financed perhaps 60 percent of world trade in the years leading up to WWI.[27]Britain influenced international finance to such an extent that the world became so entrenched along British norms that there was little alternative to dealing outside of the system. Weaker countries became dependent and integrated in the trade and finance of strong economies that bound them in a myriad of overlapping and constraining relationships that dictated a great deal of influence over their affairs. These circumstances formed what is sometimes referred to as the *First Age of Globalization.*[28]

Although the Bank of England was not the first privately owned central bank in Europe, it nonetheless followed the growing trend of governments consolidating and complicating the control of money across the continent. In 1656, Sweden formed an earlier private central bank named the Stockholms Banco. Its founder, Dutch merchant Johan Palmstruch, lobbied the King to form the bank and was twice rejected until on his third proposal he promised half of the bank's profits to the crown. The bank itself was a simple imitation of the successful public deposit banks in Amsterdam and Hamburg, although Palmstruch innovated using the goldsmith model of fractional reserve lending to finance loans from bank deposits. Palmstruch was eventually condemned to death for issuing of too many notes without the necessary collateral, and in 1668 the Swedish central bank was replaced with the *Riksens Ständers Bank* (Bank of the Estates of the Realm) that was under the direct control of the parliament (Riksdag of the Estates) to prevent the interference of the King, and barred from issuing bank-notes. The Bank of England was similarly formed by lobbying the King, but under opportune circumstances that pressed a desperate government into circumstances that made it subservient to the private sector.

Thus far along into our examination we have demonstrated that governments characteristically never run out of things to spend money on, and accordingly legislate means of manipulating money in their favor. Before the invention of paper money governments secured a compulsory monopoly for occasional debasements of coinage, although it could not be used, as the state would have preferred, to create money. Numerous blunders along these lines occurred before the Government of England was put into a position to seek assistance from private business that had since become all too weary of trusting the government. Before the 17th century, loans were generally made by banks from capitalists that lent out funds from what they had saved. There was no deposit banking per se, so these merchants would deposit their gold in the King's Mint in the Tower of London. Like Carlos V of Spain, King Charles of England resorted simply to confiscating huge sums of gold trusted to the mint by announcing the crown was borrowing a "loan" from the depositors. The crown's confiscation of the gold from the Mint managed to simultaneously destroy the government's credit and establish an independent banking industry. Thereafter, merchants were pushed to deposit their gold in the coffers of private goldsmiths who offered the service of storing and safekeeping precious metals. Soon, goldsmith receipts began to function as private bank notes which laid the foundation for future banking practices. Goldsmiths in England, as on the continent, quickly learned that depositors did not usually redeem all their notes at the same time, and cheated on the system by printing pseudo receipts for interest-bearing loans to increase their wealth. This initial deception transformed goldsmiths from passive fee charging guardians of bullion, to the harbingers of modern interest-paying and interest-earning bankers who delved into fractional reserve banking. With endless wars with France looming, however, it remained to be seen where the government would find money to finance them. The post-medieval state acquired most of its revenue through taxes but had always been attracted by the idea of creating its own money. The French government, under the influence of the fanatically inflationist Scottish theoretician John Law, resorted to paper-money inflation. The English government sought the same objective, but through a more subtle device that changed history — a central bank.

The catalyst that prompted England to assert itself as a global power came from the crushing defeat the English and Dutch suffered at the hands of the dominant French Navy. The culminating Battle of Beachy Head ensued on the orders of Queen Mary and her ministers against the advice Admiral Torrington to avoid engagement with the superior French fleet. Thereafter, England had no choice but to build a powerful navy if it was to regain its global position. Public funds were exhausted, and the credit of William III's government was so low in London that borrowing the funds the government wanted at reasonable interest was impossible. A scheme was devised by merchant mogul William Paterson for a pool of lenders to relieve England's desperation in exchange for a government sanctioned privately owned limited-liability corporation to take exclusive possession of the government's balances, and assume the power to issue new notes, mostly used to finance the government's deficit, out of nothing.[29] Essentially, Paterson and company were willing to buy interest-bearing government bonds that would be paid for by newly created bank notes. Charles Montagu, the 1st Earl of Halifax and one of the Commissioners of the Treasury, pushed for the establishment of the bank in exchange for becoming the bank's first Chancellor of the Exchequer.[30] In order to induce subscription to the loan, the subscribers were incorporated by the deceptive name of the Governor and Company of the Bank of England (later just the Bank of England) to dupe the public into believing it was part of the government, while it was not. A British Parliamentary report on finance revealed, "The Bank of England is almost unique as a Central Bank in that it is a private institution practically independent of any form of legal control save in regard to its power to issue bank notes and granting loans to the State."[31] Eventually, the 1844 Bank Charter Act granted the bank an absolute monopoly of issuing of banknotes, and exempted its demand deposits for the issuing of money with the assertion that new notes would be backed by government debt.[32]

Like any other private corporation, the Bank of England sold shares to raise the money it needed from its investors. As soon as Parliament chartered the Bank of England in 1694, King William himself, and numerous MPs, rushed to become shareholders of this new money-creating enterprise. The Bank began in 1694 as the English Government's banker and debt-manager, with 17 clerks and 2 gatekeepers, and was built atop the ancient remains of a Roman temple to Mithras (ironically worshipped as the 'God of Contracts').[33] The lenders put up partial bullion, began issuing notes against government bonds, and loaned out several times the money it supposedly had in reserves, *all at interest*. Ideally, the bank was supposed to keep enough gold to pay its notes on demand, although during episodes when gold reserves were drained the government would prohibit the payment of bills in gold.[34] After the Bank of England issued an enormous sum of 760,000 pounds to buy up government debt, it had an inflationary impact that caused the Bank of England to become insolvent after just two years. The crisis was deepened by private goldsmiths who were all too happy to redeem gold for the Bank of England's inflated notes. The Bank of England survived because the government granted a suspension of payments in specie. Supporters of the bank had successfully gained influence over the government to secure the elite trend of the future; privatizing their profits, while socializing their debt. The English Crown remained its main customer and granted additional privileges that the British Parliamentary Reports on International Finance states, "coincided with the grant of additional loans to the State."

These loans won privileges that included legal protection against the competition of other banks, renewals of their charter, limited liability privilege, and a monopoly on joint stock banking with more than six partners.[35] The same year the Bank of England was granted a suspension of payments in specie, a Tory backed financial group tried to establish a national land bank to compete with the Whig-dominated central bank. The Bank of England quickly induced Parliament to pass a law quelling competition by prohibiting new corporate banks from being established in England, thereby limiting any new banks to the disadvantage of being either a proprietary or partnership, and prohibiting existing incorporated banks and partnerships over six from making any short-term loans; effectively reducing the Bank of England's competition to tiny banks. Any banknotes aside from the Bank of England's were made illegal and counterfeiting these notes was made punishable by death.

As a result of the initial crisis to restore the navy and regain England's global position, the huge industrial effort to quadruple the strength of the Royal Navy transformed the economy, and helped the newly formed United Kingdom— after England and Scotland formally united in 1707— become the dominant world power in the eighteenth and nineteenth centuries. Consequently, the shareholders that financed this mammoth £1,200,000 undertaking became exceeding rich and used their fortunes as capital to promote their successful model that most central banks are now based upon.[36] The wake of these events coincided with an outpour of warfare across Europe: the Austrian War of Succession (1741-48), colonial wars between England, France and Spain (1754-63), the Seven Years War (1756-63), and the Russian-Turkish War (1768-74). The crisis fostered conditions that resulted in the beginning of England's military, political, and economic dominance of Europe. The enormous costs of war on the British government were further strained by the revolution that occurred in its American colonies (1775-1783), and a series of wars with France (1793-1825) that drained gold from the vaults of the Bank of England, and forged an innovative mobilization of political, military, and economic resources. The government and the Bank of England responded with a flood of paper money, followed by illicit government interference into the affairs of the private sector with the Bank

Restriction Act of 1797 that freed the central Bank of England from converting bank notes and other financial claims into gold. This trend of the reigning world power that permitted financing excessive state spending inhibited the Enlightenment ideals of a scientifically engineered progressive state in the sense that its new ideologies displaced a set notion of "good" with a generalized notion of "progress." In the absence of having a clear distinction of what society was progressing towards, "good" was replaced with calls for "more"; more education, more wealth, more military might, more money— with no end in sight. G.K. Chesterton wrote, "We are fond of talking about progress; that is a dodge to avoid discussing what is good. . . . Let us not settle what is good; but let us settle whether we are getting more of it."[37] As Chesterton bemoaned, England had spread this influence far and wide, although its former colony on the other side of the Atlantic affirmed these strong tendencies well ahead of the rest of the world.

Chapter IV: Private Interests and American Debt

Born from the progression of ideologies outlined thus far, the United States was founded on the Enlightenment dream Adam Smith promoted. His book was released the same year as the Declaration of Independence and encouraged revolution stating:

> To prohibit a great people [the American colonials] ... from making all that they can of every part of their own produce, or from employing their [capital] and industry in the way that they judge most advantageous to themselves, is a manifest violation of the most sacred rights of mankind.[1]

Smith, who had acquired an appreciation of the American colonies, likely from his encounters with Benjamin Franklin, referenced what he called "the late disturbances in the American colonies" with remarkable foresight. Smith wrote of this fledgling nation, who none could have possibly fathomed would eventually surpass the British as the world's foremost economic and banking power, that:

> Unless this or some other method is fallen upon, and there seems to be none more obvious than this, of preserving the importance and of gratifying the ambition of the leading men of America, it is not very probable that they will ever voluntarily submit to us; and we ought to consider that the blood which must be shed in forcing them to do so is, every drop of it, blood either of those who are, or of those whom we wish to have for our fellow-citizens. They are very weak who flatter themselves that, in the state to which things have come, our colonies will be easily conquered by force alone. The persons who now govern the resolutions of what they call their continental congress, feel in themselves at this moment a degree of importance which, perhaps, the greatest subjects in Europe scarce feel. From shopkeepers, tradesmen, and attornies, they are become statesmen and legislators, and are employed in contriving a new form of government for an extensive empire, which, they flatter themselves, will become, and which, indeed, seems very likely to become, one of the greatest and most formidable that ever was in the world.[2]

It has been widely observed that public interests in the United States have never been so intimately linked to philosophic issues as they were during the time of the American Revolution.[3] The new 'cult of the state' euphoria that swept Western society during this era was perhaps best summarized by G.W.F. Hegel (1770-1831) who wrote: "The state is the divine idea as it exists on Earth." "The State is the reality of the moral idea . . . the moral spirit, the manifest will."[4] The 'cult of the state' which Americans held in common with Europeans, however, was offset by another American characteristic that created something distinctly unique. Woven into the communal belief systems alongside the cult of the state was a crass individualism that cultivated a reverence for market capitalism that would allow individuals to wield new levels of influence upon the government that would eventually propel the United States to eclipse its rivals in economic innovation. Money-making emerged in the United States as the dominant ethic where the common man could enjoy a level of dignity which was unprecedented in the Western experience. Not only did this result in the implosion of the old-world aristocracy, it also meant that Americans would refuse to defer the guidance of society to European styled aristocrats possessing— as Alexis de Tocqueville put it— "superior virtue, talent and intelligence." Tocqueville's journey through the United States and study of the American people led him to conclude that Americans with the most education and intelligence would rather join limited intellectual circles characteristically within the academic or contemplative realms, or use their superior talents to take advantage of America's growing obsession with money-making and amass vast fortunes in the private sector. In America, he observed, the balance of property determined the balance of political power. Given how all of these unique elements converged, we can trace the early potential America possessed to emerge as a leading innovator of modern economics.

At about the same time as the formation of the Bank of England, another development in the progression of banks and modern finance emerged on the other side of the Atlantic. Apart from medieval China that invented both paper and printing centuries before the West, the world's first paper money was printed as fiat by the colonial government of Massachusetts in 1690.[5] Massachusetts became accustomed to launching plunder expeditions against the prosperous French colony in Quebec, and as the expeditions would return the booty would be sold in Boston, and the soldiers paid from the proceeds. On one occasion, however, the expedition was decisively beaten, and the discontented soldiers returned to Boston expecting payment. Governing officials of Massachusetts failed to borrow the money from Boston merchants to pay the soldiers so to avoid mutiny they printed £7000 of paper notes in December of 1690. To entice the public to accept the fiat currency, the government pledged that it would redeem the notes in silver and gold over the course of a few years, and that it would issue no further notes. As soon as February 1691, however, the government characteristically became fixated with the lure of easy money and printed an additional £40,000 to repay debts, again pledging that this would be the absolute last issuing of notes. The lack of confidence in the government to be able to repay the fiat bills in specie caused depreciation on the market of 40 percent against specie. By 1692 the government moved against the depreciation by passing a legal tender law making the notes payable for all debts on par with specie and granting a 5 percent premium on all debts to the government paid with paper notes. Consequently, Massachusetts's poorly valued fiat money caused an outflow of the more valued specie from the colony, and the expanding availability of money inflated prices and hampered exports from the colony. In 1690, before the government addiction to fiat money, there was £200,000 of silver specie in New England. By 1711, however, after Connecticut and Rhode Island followed suit and started printing their own money on the agreement that New England colonies would honor each other's currency at par, there was £240,000 of paper money in circulation and nearly all the silver had disappeared. This problem was exacerbated by the shortage of specie in the colonies that was a result of the prevailing economic policy of mercantilism. England saw its colony as a market for its finished goods, and only permitted it to export its raw materials. As a result of this arrangement that forged a distortion of the colony's economy, there was characteristically a shortage of specie from England. Without enough specie to cover the value of goods and services, the printing of fiat money was a seemingly popular remedy to the imposed market distortion, particularly amongst the poor that characteristically accessed specie last. The end result, however, was that the poor still accessed the money last and as its purchasing power had been diminished through inflation, they suffered the consequence of higher prices with increasingly devalued money.[6] While the printing of money was promoted as a remedy of money scarcity, the hoarding of specie became the result, rather than the cause, of issuing paper money.

In 1711, Massachusetts released a huge issue of £500,000 after another failed expedition against Quebec. This caused an additional 30 percent depreciation of Massachusetts pounds from 7 shillings to the silver ounce, to 9 shillings per ounce. Over the course of 20 years prices had doubled and the British Crown tried to pressure New England to reduce the bills in circulation and return to specie currency. In 1744, after the loss of another expedition against the French, Massachusetts issued an enormous amount of paper money that increased the paper money in circulation from £300,000 in 1744, to £2.5 million by 1748. Silver rose to 60 shillings an ounce, ten times the price from the time fiat money started being issued in 1690. By 1740, every colony but Virginia was issuing fiat money, and Virginia finally succumbed in the late 1750s in its attempt to finance the French and Indian War. Massachusetts suffered depreciation against specie of 11-to-1, Connecticut 9-to-1, the Carolinas 10-to-1, and in Pennsylvania with the least inflated currency, still suffered an appreciation of specie to 80 percent over par. While Rhode Island had policies to purposely inflate their currency that eventually reached 23-to-1, Maryland was perhaps the most bizarre. Maryland's public bank issued £70,000 of notes and gave away £30,000 in fixed amounts to each inhabitant of the province to universalize the use of the new currency. The inflationary impact of the paper notes, however, was lessened by tobacco which remained legal tender in the colony and receivable for taxes. Rhode Island wildly inflated their currency for the purpose of making purchases in neighboring Massachusetts at par with inflated money. By doing so Rhode Island could make purchases before prices in Massachusetts could adjust to inflation, and export the costs of inflation on the latter colony.[7] The inflationary boom that ensued from "easy-money" injected into the economy confused the price system, and the inevitable leveling of prices burst artificial bubbles. By studying these creations of money in colonial America we begin to recognize the origins of the bust-boom patterns we now call the "business cycle."[8]

At the conclusion of the Seven Years War with France that nearly doubled Britain's national debt, the need to collect taxes was hampered by the money problems the colonies created. Great Britain outlawed all further issuing of paper money in New England and ordered the redemption of existing issues in specie. In 1764, Parliament finally extended the prohibition to the remaining colonies to retire outstanding notes. After a brief adjustment, trade and production became more prosperous with the harder money and lower prices that attracted the inflow of specie, foreign exchange rates stabilized, and the leveling of prices improved the lot of consumers.[9] The initial run of fiat money in the colonies proved dangerous, and had it not been for the British intervention once their tax base was compromised, it is likely that economic circumstances would have worsened. This is in keeping with Adam Smith's observation, "There is no art which one government sooner learns of another than that of draining money from the pockets of the people." What the elite in the colonies had figured out was that that if citizens are taxed or take up a debt directly they will demand justifications for their money being taken, while if the agents of government just create their own funds and let the public suffer the results of inflation, they will be able to get away with more money and less oversight. The class that prospers from inflation while forcing another to finance their benefits needs to take caution that the relationship between the creation of money and the growth of inflation is not overtly obvious, which is usually concealed by the lag between the initial money creation and the increase in prices. In extreme cases inflation led to divisions in society which caused revolutions, such as in France in 1789. Essentially, it's easier for governments to ask for forgiveness for their schemes than permission *if* the public is ever the wiser to what is happening. This led Adam Smith to advocate, "The tax which each individual is bound to pay ought to be certain, and not arbitrary. The time of payment, the manner of payment, the quantity to be paid, ought all to be clear and plain to the contributor, and to every other person."[10]

Given the relative advantages and disadvantages of inflating currency, there were mixed feelings about the retirement of fiat money. The colonial merchants that were forced to accept the rapidly depreciating paper notes and took their complaints to the British Parliament were glad to retire the fiat money, but others with political clout did not share their enthusiasm.[11] Benjamin Franklin stands apart amongst notable figures in colonial America whose histories bear testimony to the propensity of individuals to manipulate and co-opt the government's power of monopoly for self-benefit at the expense of competition. Franklin is particularly interesting as it pertains to our study because although he is widely quoted as being in opposition to the manipulation of currency, available sources tell us a different story.[12] Franklin seems to have characteristically been an opportunist. At the age of twenty-two, Franklin set up his own printing business. He had learned the trade from Andrew Bradford, Pennsylvania's first printer, and his son William, who had befriended the young Franklin and secured him his first job as a printer. When Franklin noticed that Bradford had printed an Assembly address with errors, he quickly prepared a correct printing and sent a copy to the all the members of the Assembly in order to take the public printing business away from Bradford and win for himself the highly lucrative patronage of being public printer. Franklin lost no time in gaining the patronage of older and influential men, notably Andrew Hamilton, an extremely powerful member of the Assembly whose son would soon become governor of the colony. In 1729, debate ensued whether or not Pennsylvania should print another large issue of paper money. Franklin, motivated to secure the lucrative contract for printing the new money, wrote an anonymous pamphlet entitled *A Modest Inquiry into the Nature and Necessity of a Paper Currency* that advocated a monetary theory where interest rates would be determined by the supply of money. Franklin begins, "it is impossible by any Laws to restrain Men from giving and receiving exorbitant Interest, where Money is suitably scarce." He remedies this problem by stating, "*A plentiful Currency will occasion Interest to be low* . . . [and] People will find more Profit in employing their Money that Way than in Usury; and many that understand Business very well, but have not a Stock sufficient of their own, will be encouraged to borrow Money; to trade with, when they can have it at a moderate Interest." Drawing upon the, "Nature of *Banks* emitting *Bills of Credit*, as they are at this Time used in *Hamburgh, Amsterdam, London* and *Venice,"* that, "are able besides to lend large Sums, on good Security, to the Government or others," Franklin demonstrates remarkable foresight about new alternatives to age old notions about wealth:

> For many Ages, those Parts of the World which are engaged in Commerce, have fixed upon Gold and Silver as the chief and most proper Materials for this Medium; they being in themselves valuable Metals for their Fineness, Beauty, and Scarcity. By these, particularly by Silver, it has been usual to value all Things else: But as Silver it self is no certain permanent Value, being worth more or less according to its Scarcity or Plenty, therefore it seems requisite to fix upon Something else, more proper to be made a *Measure of Values.*[13]

In wake of the Assembly siding with Franklin's view, he later wrote in his autobiography: "My friends there [in the Assembly] who conceived I had been of some service, thought fit to reward me by employing me in printing the money; a very profitable job and a great help to me."[14] Hamilton further lavished his patronage upon Franklin by securing him the public printing work in Delaware and the printing of its paper money. In 1736, he networked to become the Clerk of the Pennsylvania Assembly which secured further privileges and government business. Franklin candidly admitted: "Besides the pay for the immediate service as Clerk, the place gave me a better opportunity of keeping up an interest among the members, which secured to me the business of printing the votes, laws, paper money, and other occasional jobs for the public, that on the whole were very profitable."[15]

Edmund Morgan summed up the nature of the American Revolution as follows: "The fact that the lower ranks were involved in the contest should not obscure the fact that the contest itself was generally a struggle for office and power between members of an upper class: the new against the established." From the outset of the war, opportunists with vested interests lost no time in asserting themselves to influence government decrees in their favor. The Continental Congress devised to issue fiat money to fund the war with the plan to retire it after seven years and recover the expenses by levying taxes from the separate states. Soon, however, Congress broke their pledge and rapidly escalated the printing of money which marked the beginning of the 'federal trough,' one of America's most imperishable institutions.[16] The total money supply at the beginning of the Revolution has been estimated at $12 million, and with the issuing that increased the money supply, "Continentals" were worth $1 to $1.25 in specie by the end of 1776. General Washington complained to Congress in April of 1779: *". . . a wagon full of money will scarcely purchase a wagon load of provisions."* By the spring of 1781 the Congress had issued over $225 million in fiat currency, and Continentals were virtually worthless at a rate of 168 paper dollars to one dollar in specie.[17] This led to the widely popular phrase "not worth a continental." To continue the war effort the government issued certificates of debt to common citizens, but not surprisingly these citizens did not fair as well the politically connected and economic savvy by war's end. Thomas Jefferson protested:

> It is well known that during the war the greatest difficulty we encountered was the want of money or means to pay our soldiers who fought, or our farmers, manufacturers and merchants, who furnished the necessary supplies of food and clothing for them. After the expedient of paper money had exhausted itself, certificates of debt were given to the individual creditors, with assurance of payment so soon as the United States should be able. But the distresses of these people often obliged them to part with these for the half, the fifth, and even a tenth of their value; and speculators had made a trade of cozening them from the holders by the most fraudulent practices, and persuasions that they would never be paid. In the bill for funding and paying these, Hamilton made no difference between the original holders and the fraudulent purchasers of this paper.[18]

Robert Morris, wealthy merchant and Superintendent of Finance for the Continental Congress during the final two years of the war, moved to ensure that the massive federal and state debt (that could have depreciated and passed out of existence at the end of the war) was assumed by government. This would confer a vast subsidy on politically connected insiders that had only recently bought up the public debt at highly depreciated values in anticipation of their assets being revalued with interest at par in specie. As Morris candidly put it, the fortune to be had by the public debt speculators at the expense of the taxpayers would ensure that wealth would be conferred "into those hands which could render it most productive."[19] Furthermore, this built the case for the taxing power of Congress. Although the Articles of Confederation denied the federal government such power, it was successfully overcome by the agitation of Morris's protégé and former aide, Alexander Hamilton.

On April 30, 1781, Alexander Hamilton sent a letter to Morris to convey that he had recommended him to head a fractional reserve commercial bank for the United States; privately owned and modeled after the Bank of England. Morris, who had been in regular correspondence with Hamilton about funding the war, immediately drafted a legislative proposal based on Hamilton's suggestion. Morris called upon Congress to establish a national bank and sell corporate shares of it for "four hundred dollars each," allowing subscribers to, "pay one-half the sum on the day of his subscription, and the other half within three months of that day." Each share holder would "have as many votes as he holds shares; and that every subscriber may sell of transfer his share or shares at his pleasure." The national bank would be run by "Directors chosen from among those entitled to vote," who would "determine the manner of doing business . . . and dispose of the money and credit of the Bank for *the interest and benefit of the proprietors*."[20] Congress acted upon Morris and Hamilton's successful persuasion and resolved to:

> approve a plan for such an institution submitted to their consideration by Robert Morris, and now lodged among the archives of Congress . . . now filled from an

> expectation of a charter of incorporation from Congress . . . by the name and title of "The President, Directors and Company of the Bank of North America."[21]

The Congress additionally passed that, "no other bank or bankers shall be established or permitted within the said states," and made it a felony to produce bank notes outside of the authority vested in the new "corporation . . . to make, have and use, a common seal, with such device and inscription as they think proper, and the same to break, alter and renew at their pleasure."[22]

Once chartered by Congress on December 31, 1781, the Bank of North America opened on January 7, 1782. There is no shortage of criticisms that the formation of the bank and its dealings were for the benefit of vested interests, not the nation. Robert Morris failed to raise the specie capital required to launch the bank so he used his government position to appropriate specie loaned to the United States by France to cover the shortage. These funds were borrowed from Morris's bank by Morris as government financier, and channeled into contracts for his friends and business associates.[23]The location selected for the bank was the store of Tench Francis on Chestnut Street in Philadelphia. Tench Francis forged his relationship with Morris as a fellow merchant and agent for the proprietary interests of the William Penn family. In addition to being appointed as the bank's first cashier, he also benefitted from the patronage of Washington who appointed him Purveyor of Public Supplies for the United States Navy. Following the bank's opening, there was speculation as to whether the Continental Congress had the authority to grant a banking license and form a corporation, so the management of the bank sought a duplicate charter from Pennsylvania three months later. The Bank of North America had its state charter repealed on September 13, 1785 due to objections of "alarming foreign influence and fictitious credit," favoritism to foreigners, and unfair competition against state banks by issuing their own currency in the form of bills of credit.[24]After working through the back channels of negotiations, promises, and bribes to politicians, the Bank of North America was re-chartered after a change of party in Pennsylvania's legislature in 1787. Thereafter, the bank lent most of its newly created money to the federal government to purchase public debt on the back of the hapless taxpayer. After the government's debt to the bank had been paid, Morris ended his bank's role as a central bank and shifted it to the status of a private commercial bank in Pennsylvania.

The times were awry with discontent and rebellion against those monopolizing the power of government in the interests of their wealth. Thomas Jefferson was in France as ambassador at the time that a credit squeeze caused by a lack of hard currency, coupled with fiscally harsh policies instituted to solve Massachusetts' debt problems, led to the violence of Shay's Rebellion. Jefferson wrote a friend:

> God forbid we should ever be twenty years without such a rebellion. The people cannot be all, and always, well informed. The part which is wrong will be discontented, in proportion to the importance of the facts they misconceive. If they remain quiet under such misconceptions, it is lethargy, the forerunner of death to the public liberty. ... What country before ever existed a century and half without a rebellion? And what country can preserve its liberties if their rulers are not warned from time to time that their people preserve the spirit of resistance? Let them take arms. The remedy is to set them right as to facts, pardon and pacify them. What signify a few lives lost in a century or two? The tree of liberty must be refreshed from time to time with the blood of patriots and tyrants.[25]

In contrast to Jefferson's sentiments, Federalists, who had been calling for constitutional reform for many years, used the event as a catalyst for change that would ultimately lend itself to steering the nation towards another national bank. John Jay wrote that the rural disturbances and the inability of the central government to fund troops to crush the rebellion made "the inefficiency of the Federal government [become] more and more manifest."[26] A convention was convened to revise the Articles of Confederation, although the intention from the outset of many of its proponents, chief among them Hamilton, was to create a new government behind closed doors, rather than fix the existing one. Fifty-five delegates drafted the Constitution, including many of the Founding Fathers, although some notable absentees included Thomas Jefferson, who was Minister to France during the convention, John Adams, John Hancock, Samuel Adams, and Patrick Henry who refused to go because he "smelt a rat in Philadelphia, tending toward the monarchy." Rhode Island also refused to send any delegates to the convention.

Charles Beard wrote in his famous book *An Economic Interpretation of the Constitution:*

> Inasmuch as the primary object of a government, beyond the mere repression of physical violence, is the making of rules which determine the property relations of members of society, the dominant classes whose rights are thus to be determined must preforce obtain from the government such rules as are consonant with the larger interests necessary to the continuance of their economic processes, or they must themselves control the organs of government.[27]

Beard is clear that the Constitution was not written solely to personally benefit the Founding Fathers, but their establishing a strong federal government did benefit the economic interests of the class they represented. Hamilton, who drew upon Dudley North to refer to the masses as the "great beast," was clear about the interests he thought the government should protect:

> All communities divide themselves into the few and the many. The first are the rich and well-born, the other the mass of the people. . . . The people are turbulent and changing; they seldom judge or determine right. Give therefore to the first class a distinct permanent share in the government.[28]

Beard discovered that most the founders present at the Constitutional Convention were men of wealth in land, slaves, shipping, or manufacturing, half of them loaned out money at interest, and that records from the Treasury Department confirm that forty of the fifty-five held government bonds that could pay handsomely if a nationwide tax was enforced to pay them off. Some of the financial concerns that served the interests of those present at the convention, including the formation of a national bank, seem to have been purposely excluded from the enumerated powers, so that they could be impliedly exercised. In Thomas Jefferson's memoirs we find evidence of debate amongst members intent on using the powers of government to establish a national bank, and granting Congress the power of forming incorporations. According to Jefferson, how these powers came to be left out of the Constitution is as follows:

> When the bank bill was under discussion in the House of Representatives, Judge Wilson came in, and was standing by Baldwin. Baldwin reminded him of the following fact which passed in the grand convention. Among the enumerated powers given to Congress, was one to erect corporations. It was, on debate, struck out. Several particular powers were then proposed. Among others, Robert Morris proposed to give Congress a power to establish a national bank. Gouverneur Morris opposed it, observing that it was extremely doubtful whether the constitution they were framing could ever be passed at all by the people of America; that to give it its best chance, however, they should make it as palatable as possible, and put nothing into it not very essential, which might raise up enemies; that his colleague (Robert Morris) well knew that 'a bank' was, in their State (Pennsylvania) the very watch-word of party; that *a bank* had been the great bone of contention between the two parties of the State, from the establishment of their constitution, having been erected, put down, and erected again, as either party preponderated; that therefore, to insert this power, would instantly enlist against the whole instrument, the whole of the anti-bank party in Pennsylvania. Whereupon it was rejected, as was every other special power, except that of giving copyrights to authors, and patents to inventors; the general power of incorporating being whittled down to this shred. Wilson agreed to the fact.[29]

We know that Gouverneur Morris, the credited "Penman of the Constitution," authored large sections of the Constitution and is widely credited as the author its preamble. From an examination of James Madison's notes on the Constitutional Convention we learn that Morris seems to uphold the wise counsel referenced in Jefferson's account. Morris' keen understanding of class differences is perhaps best demonstrated by his following observation at the convention that reinforces the importance of examining the economic motives of the powerful in order to properly interpret the outcomes of their actions: "The Rich will strive to establish their dominion and enslave the rest. They always did. They always will." Morris understood that the majority would be hard pressed to ever challenge the power of the elite. "Let the rich mix with the poor and in a Commercial Country, they will establish an Oligarchy." The poor's best chance would be if the rich split, "into a separate interest. The two forces will then control each other."[30]

In keeping with Gouverneur Morris' counsel that the framers of the Constitution be prudent should they arose too much suspicion of their motives in Philadelphia, ideological conflicts inevitably broke out between Federalists and anti-Federalists that threatened final ratification. Some influential opponents of the Constitution, including prominent Founding Fathers, argued that the Constitution should not be ratified because it failed to protect the fundamental principles of human liberty. Alexander Hamilton, in *Federalist* No.84, argued that a "Bill of Rights" was unnecessary, even "dangerous":

> I go further, and affirm that bills of rights, in the sense and in the extent in which they are contended for, are not only unnecessary in the proposed constitution, but would even be dangerous. They would contain various exceptions to powers which are not granted; and on this very account, would afford a colorable pretext to claim more than were granted. . . . Here, in strictness, the people surrender nothing, and as they retain everything, they have no need of particular reservations.[31]

In a paper later collected into the *Anti-Federalist Papers*, the pseudonymous "Brutus" (probably Robert Yates) wrote:

> Ought not a government, vested with such extensive and indefinite authority, to have been restricted by a declaration of rights? It certainly ought. So clear a point is this, that I cannot help suspecting that persons who attempt to persuade people that such reservations were less necessary under this Constitution than under those of the States, are willfully endeavoring to deceive, and to lead you into an absolute state of vassalage.[32]

James Madison, who was in close correspondence with Thomas Jefferson through the course of the process, quelled the controversy through a proposal of a Bill of Rights in the body of the Constitution that eventually helped secure ratification of the Constitution itself.

With the ratification of the Constitution and the formation of a new government in 1789, Hamilton stood poised to create the First Bank of the United States, which would pick up where the Bank of North America left off. Hamilton, acting Secretary of Treasury, wrote Congress in 1790 that the United States should follow the banking practices of "Italy, Germany, Holland, England and France," where there was, "not a question about their utility in the countries in which they have been so long established." Hamilton outlined some of the key elements of what became a new implementation of the old European goldsmith scheme, and cornerstone of modern banking:

> Gold and silver, when they are employed merely as the instruments of exchange and alienation, have been not improperly denominated dead stock; but when deposited in banks, to become the basis of paper circulation . . . they then acquire life, or in other words, an active and productive quality. . . . banks in good credit, can circulate a far greater sum than the actual quantum of their capital in gold and silver. . . . the money of one individual, while he is waiting for an opportunity to employ it, by being either deposited in the bank for safe keeping, or invested in its stock, is in a condition to administer to the wants of others.

In this way, Hamilton concludes, "banks become the nurseries of national wealth."

Through the course of his argument, Hamilton cedes that there are problems that arise from granting banks the power to create wealth.

> It is a truth, which ought not to be denied, that the methods of conducting business, which is essential to bank operations, has . . . given occasion to usurious transactions. The punctuality in payments, which they necessarily exact, has sometimes obliged those who have adventured beyond both their capital and their *credit*, to produce money at any price, and, consequently, to resort to userers for aid.

Hamilton counters this ailment with the observation that, "If the abuses of a beneficial are to determine its condemnation, there is scarcely a source of public prosperity which will not speedily be closed. In every case, the evil is to be compared to the good." After all, he contends, "There is, in the nature of things . . . an intimate connection of interest between the Government and the bank of a nation." Hamilton asserts a central bank will in turn regulate and confine the "evils" he spoke of by virtue of federalism.

> The emitting of paper money by the authority of Government is wisely prohibited to the individual States . . . they are of a nature so liable to abuse-and, it may even be affirmed, so certain of being abused- that the wisdom of the Government will be shown in never trusting itself with the use of so seducing and dangerous an expedient.

Upon forming a national bank, Hamilton advises "Everything which can fortify confidence and repel suspicion, without injuring its operations, ought carefully to be sought after its formation." This would include fortifying its integrity with a monopoly: "No similar institution shall be established by any future act of the United States, during the continuance of the one hereby proposed to be established." This monopoly, however, would be too important to leave in the hands of government. Hamilton argues, "It would, indeed, be little less than a miracle, should the credit of the bank be at the disposal of the Government, if, in a long series of time, there was not experienced a calamitous abuse of it. . . . What nation was ever blessed with a constant succession of upright and wise administrators?" Hamilton advises, "To attach full confidence to an institution of this nature, it appears to be an essential ingredient in its structure, that it shall be under a *private* not *public* direction- under the guidance of *individual interest*, not *public policy*." So who should guide such a vital institution? Hamilton insists:

> the directors of a bank are not elected by the great body of the community, in which a diversity of views will naturally prevail at different conjunctures, but by a small and select class of men, among whom it is far more easy to cultivate a steady adherence to the same persons and objects, and that those directors have it in their power so immediately to conciliate, by obliging the most influential of this class, it is easy to perceive that, without the principle of rotation, changes in that body can rarely happen, but as a concession which they may themselves think it expedient to make to public opinion. . . . The necessary secrecy of their transactions gives unlimited scope to imagination to infer that something is or may be wrong. And this *inevitable* mystery is a solid reason for inserting in the constitution of a bank a necessity of a change of men.

So amongst this "small and select class of men," Hamilton referenced, the "necessity of a change of men" could be attended to as it was with Morris' Bank of North America; Hamilton maintains, "The number of votes to which each stockholder shall be entitled, shall be according to the number of shares he shall hold."

The question arises that if the government granted a monopoly to private interests to run such a bank for profit, what exactly is the nature of the relationship between the government and the private bank? After all, Hamilton states, "It is to be considered that such a bank is not a mere matter of private property, but a political machine, of the greatest importance to the State." One of the key operations of the bank in relation to its monopoly is its purchase of the public's debt. Instrumental to the argument in favor of central banks, well before the formation of the United States and long since the arguments of Hamilton, is the reoccurring claim that the credit they provide is fundamental to the success of governments to engage in war. Hamilton contends, "The comparative quantity of gold and silver in different countries, depends upon an infinite variety of facts and combinations," key amongst them, "the kind of wars in which it usually engaged," so as to, "judge whether the existence or non-existence of paper currencies has any share in the relative proportions they contain." The fortify his argument, Hamilton draws upon the experience of the Revolution citing that, "The late war, naturally produced, on the one hand, a great demand for money, and, on the other, a great deficiency of it to answer the demand." To such ends, he proposed that the new bank could purchase the nation's debt on the agreement that, "The bank to extend its operations, and consequently to enlarge its profits, will produce a direct annual revenue of six per centum from the Government, which will enter into the half-yearly dividends received by the stockholders."

As was seen with the formation of the Bank of England, and as we will continue to see with central banks in the United States, wars and times of national crisis historically produce great opportunities for private interests to purchase government debt at interest (backed by taxes), and are expedients for banking innovations, and power grabs for the bankers themselves. Having previously outlined the conditions surrounding the formation of the Bank of England, it provides us great insight to Hamilton's conclusion: "There is an important fact, which exemplifies the fitness of the public debt for a bank fund, and which may serve to remove doubts in some minds on this point: it is this, that the Bank of England, in its first erection, rested wholly on that foundation . . . and, as a source of security, is worthy of imitation."[33]

Chapter V: The First & Second Banks of the United States

Initially, the bill entitled "An Act to Incorporate the Subscribers to the Bank of the United States," passed through Congress with a 39-20 vote. In President Washington's cabinet, however, Attorney General Edmund Randolph and Secretary of State Thomas Jefferson wrote strong memoranda objecting the constitutionality of the proposed bank.[1] The Attorney General protested, "That the power of creating Corporations is not *expressly* given to Congress, is obvious. . . . To be implied in the nature of the Federal government would beget a doctrine so indefinite, as to grasp every power." Randolph concluded, "In every aspect therefore under which the attorney general can view the act, so far as it incorporates the bank, he is bound to declare his opinion to be against its constitutionality."[2] Jefferson further objected to Washington signing the bill:

> To give them the sole and exclusive right of banking under the national authority; and so far is against the laws of Monopoly. . . . That "all powers not delegated to the United States, by the Constitution, nor prohibited by it to the States, are reserved to the States or to the people." [XIIth amendment.] To take a single step beyond the boundaries thus specially drawn around the powers of Congress, is to take possession of a boundless field of power, no longer susceptible of any definition. . . . instituting a Congress with power to do whatever would be for the good of the United States; and, as they would be the sole judges of the good or evil, it would be also a power to do whatever evil they please.

Jefferson reminds Washington that the Constitution gives the Congress the power "to make all laws *necessary* and proper for carrying into execution the enumerated powers." Jefferson then argues, "But they can all be carried into execution without a bank. A bank therefore is not *necessary*, and consequently not authorized." Suspect that Hamilton and members of Congress have vested interests in establishing such a bank, Jefferson finally pleads, "It is chiefly for cases where they are clearly misled by error, ambition, or interest, that the Constitution has placed a check in the negative of the President."[3]

Within the span of just a few days, Hamilton promptly countered these arguments that he referenced as a "strange fallacy" with a lengthy letter to Washington. "The Secretary of the Treasury having perused with attention the papers containing the opinions of the Secretary of State and Attorney General, concerning the constitutionality of the bill for establishing a National Bank," concluded that, "All of those observations are grounded on the erroneous idea that the *quantum* of necessity or utility is the *test* of a constitutional exercise of power." Hamilton insisted, "A *general* legislative authority implies a power to erect corporations in *all cases*." "If the *end* be clearly comprehended within any of the specified powers, and if the measure have an obvious relation to that *end*, and is not forbidden by any particular provision of the Constitution," he continued, "it may safely be deemed to come within the compass of the national authority." Contrary to Jefferson's view that the "public good" in question was aptly addressed by the Constitution granting Congress the power "to lay taxes for *the purpose* of providing for the general welfare," Hamilton argued for expanding the means of attaining the public good:

> The general administration of the affairs of a country, its finances, trade, defence, &c., outght to be constructed liberally in advancement of the public good. . . . A bank, then, whose bills are to circulate in all the revenues of the country, is *evidently* a *general* object, and for that very reason, a constitutional one, as far as regards the appropriation of money to it.

Key amongst Hamilton's arguments for the public good, was the reoccurring argument of how central banks facilitate the defense of the country:

> With a war; large sums are wanted on a sudden to make requisite preparations. . . . If there be a bank, the supply can at once be had. . . . The relation of a bank to the execution

> of the powers that concern the common defense, has been anticipated. It has been noted, that, at this very moment, the aid of such an institution is essential to the measures to be pursued for the protection of our frontiers.

Finally, continuing our established theme that American banking was born from modern banking norms established in Europe, Hamilton made the case that the United States should keep par with what was happening in Europe. "Why may not the United States, *constitutionally*, employ the *means* usual in other countries, for attaining the *ends* entrusted to them?" He concludes, "The fact, for instance, that all the principle commercial nations have made use of trading corporations or companies, for the purpose of *external commerce*, is a satisfactory proof that the establishment of them is an incident to the regulation of commerce."[4]

Hamilton's counter-memo carried the day, and Washington signed the bill. The First Bank of the United States was yet another privately owned, fractional reserve institution, with a substantial interest of the bank purchased by European investors. Furthermore, the bank was granted a charter that assured its monopoly privileges for 20 years. Article One, Section 10 of the new Constitution forbid any state, but not the federal government, to "grant Letters of Marque and Reprisal; coin Money; emit Bills of Credit; make any Thing but gold and silver Coin a Tender in Payment of Debts." Since the Spanish silver dollar was the major coin in circulation, it was generally agreed that the dollar would become the basic currency unit in the United States.[5] In keeping with the continuity of the Bank of North America, Thomas Willing, former partner of Robert Morris and longtime president of the Bank of North America, was made president of the new Bank of the United States. The bank immediately began inflating with massive loans to the new government to the extent that producer prices rose at an annual rate of 12 percent a year for its first six years of existence. This inflation, which financed military spending and interest on existing debt, enlarged the pool of beneficiaries that came to depend on government inflation.[6]Additionally, another financial element of the American economy was established in 1792 when the First Bank of the United States and Hamilton's own Bank of New York obtained the first shares in the formation of the New York Stock Exchange. Jefferson had only disdain for what he called "money men." With the activities of the bank and 80 percent of the new bank's stock sold to private investors (with foreigners allowed to be Bank of the United States stockholders), Jefferson balked:

> Hamilton's financial system had then passed. It had two objects; 1st, as a puzzle, to exclude popular understanding and inquiry; 2nd, as a machine for the corruption of the legislature; for he avowed the opinion, that man could be governed by one of two motives only, force or interest; force, he observed, in this country was out of the question, and the interests, therefore, of the members must be laid hold of, to keep the legislative in unison with the executive. And with grief and shame it must be acknowledged that his machine was not without effect; that even in this, the birth of our government, some members were found sordid enough to bend their duty to their interests, and to look after personal rather than public good.[7]

To ensure that the government could meet Hamilton's goal of paying off the national debt, an additional source of funding was required. To achieve this, Hamilton surmised a tax on imported spirits, plus raising an excise tax on farmers who sold their grain in the form of whiskey. The farmers strongly resented the tax and their opposition resulted in the Whiskey Rebellion. The rebels all went home before an army headed by Washington arrived to crush the rebellion, but the significance of the event showed that the new government was willing to use violence on its own citizens to enforce its policies. The issue fueled opposition to Hamilton's Federalist Party, and won support for Jefferson's Republican Party that came to power in 1800 and repealed the whiskey tax.

Thomas Jefferson and James Madison maintained their position that the Bank of the United States was unconstitutional, and that it benefited merchants and investors at the expense of the majority of the population. Madison wrote, "A rage for paper money, for an abolition of debts, for an equal division of property, or for any other improper or wicked project, will be less apt to pervade the whole body of the Union than a particular member of it."[8] Article I, section 8 of the new Constitution specifically stated that congress had the power "to coin money, regulate the value thereof, and of foreign coin," but nowhere did it grant the power to create bills of credit. Jefferson wrote, "I wish it were possible to obtain a single amendment to our Constitution ... taking from the federal government their power of borrowing."[9] Hamilton, however, had paved the way for virtually unlimited expansion of the federal power by maintaining that the Constitution implied the power to carry out national goals in pursuit of the greater good. Since the creation of the bank, the two decades that followed witnessed a multiplication of new state banks and lavish bank credits. Despite the Jeffersonian hostility to commercial and central banks, the ranks of the Republican Party were filled with more quasi-Federalist moderates than hard-money Old Republicans, so no battles raged to repeal the charter of the Bank of the United States before its expiration in 1811.

Through examination of the reports of Albert Gallatin, the Secretary of Treasury, we not only learn that the private investors of the central bank were prosperous at the expense of the fledgling nation trying to repay its loans, but also the extent that foreigners were invested in the bank. Gallatin reports that records "of all the dividends made by the Bank of the United States, since its establishment, shows that they have, on an average, been at the rate of 8 3/8 (precisely 8 13/34) per cent, a year. . . . from the interest received on loans made, either to Government or to individuals." Additionally, "The stockholders resident within the United States," he disclosed, "hold . . .little more than one-fourth part of its capital." To argue the case for renewing the charter of the national bank, Gallatin attempted to counter objections to the stake of foreign investors in the bank:

> The strongest objection against the renewal of the charter seems to arise from the great portion of the bank stock held by foreigners- not on account of any influence it gives them over the institution, since they have no vote- but of the high rate of interest payable by America to foreign countries, on the portion held. If the charter is not renewed, the principal of that portion, amounting to about 7,200,000 dollars, must, at once, be remitted abroad.

Gallatin purposes, "That inconvenience might, perhaps, be removed, by a modification in the charter, providing for the repayment of that portion of the principal by a new subscription. . . . The renewal of the charter will, in that respect, operate, in a national point of view, as a foreign loan."[10] As we today would likely surmise the constitutionality of a central bank as an unquestioned norm we have grown accustomed to, Gallatin elsewhere drew upon the twenty year run of the bank in similar fashion:

> I have not adverted to the question of constitutionality, which is not a subject of discussion for the Secretary of the Treasury. Permit me, however, for my own sake, simply to state, that the bank charter having, for a number of years, been acted upon, or acquiesced in, as if constitutional, by all the constituted authorities of the nation, and thinking, myself, the use of banks to be at present necessary for the exercise of the legitimate powers of the General Government, the continuation of a bank of the United States has not, in the view which I have been able to take of the subject, appeared to me to be unconstitutional.[11]

Gallatin was not without his opponents. While Gallatin downplayed the influence of foreign stock holders who had no "influence . . . over the institution, since they have no vote," as if votes were the extent of their voice, there is evidence from this episode that affirms the argument of this paper that a paramount characteristic of modern banking is how vested interests prey upon governments to forge innovations. Reports from the Senate reference lobbying on behalf of the "memorial of the stockholders of the Bank of the United States, praying that an act of Congress might be passed, to continue the corporate powers of the Bank . . . as they thought proper to present through their agents."[12] Similar evidence is found in House reports that note, "representations of the gentlemen who have appeared in behalf of the said petitioners . . . to obtain an extension of their corporate powers."[13] Despite their efforts, the Senate committee reported to the Senate that, "holding the opinion (as a majority of the committee do) that the constitution did not authorize Congress originally to grant the charter, it follows as a necessary consequence of that opinion, that an extension of it, even under the restriction contemplated by the stockholders, is equally repugnant to the constitution."[14] The House committee also upheld this view stating, "believing, as your committee do, that, in granting the original charter to the stockholders, Congress transcended the legitimate powers of the constitution, the same objection now presents itself to the extension of any of their corporate capacities."[15] The said members of Congress resolutely rejected the attempts of the petitioners to sway them towards the wishes of the bank, and reported:

> The injurious effects of a dissolution of the corporation will be found to consist in an accelerated disclosure of the actual condition of those, who have been supported by the credit of others, but whose insolvent, or tottering situation, known to the Bank, has been concealed from the public at large. Your committee beg leave to present the following resolution: *Resolved*, That the prayer of the memorialists ought not be granted.[16]

Irrespective of the committee's convictions, history reveals that the manipulative frailty of democracy has made efforts to thwart the ambitions of bankers very difficult, and that Congress has never been able to resolutely vote down the "money men" Jefferson spoke of. When the rechartering of the Bank of the United States finally came up for a vote in 1811, it was defeated in the House by a slim margin of 65-64 on January 24, and deadlocked in the Senate (17-17) when on February 20, Vice-President Clinton cast the tie-breaking nay vote.

Within five months of the First Bank of the United States losing its charter, however, the United States was engaged in the War of 1812. This was the first time that the United States had declared war on another nation, and it was the closest Congressional vote to formally declare war in American history.[17] The war had tremendous consequences on the monetary system. An enormous expansion of banks and bank notes was spurred by privileging inflation upon a fractional reserve of bonds that were needed to finance the war, and from this the term "war bonds" came into use. Unlike future conflicts, however, these bonds were not aimed at the general public, but the rich. Alexander J. Dallas, friend of Gallatin who succeeded him as the Secretary of the Treasury, helped Gallatin obtain these funds to finance the war. With hindsight of the limited success that came from the policy of subscribing the rich to fulfill the immediate needs of the government, Dallas later wrote, "it is not impossible, that the Government, in the resources of its patronage, and its pledges, might find the means of tempting the rich, and the avaricious, to supply its immediate wants. But, when then wants of to-day are supplied, what is the new expedient, that supply the wants of tomorrow?"[18] Needless to say, the government's scheme to fund the war was short sided and spurred irresponsible banking. These circumstances prompted Thomas Jefferson to write of war time banks— despite the dangers imposed by the war and the invading army that sacked Washington, D.C. and burned the White House— "that banking establishments are more dangerous than standing armies."[19]

New England was strongly opposed to the war and more conservative in their banking practices which prevented them from purchasing public debt of the war. The federal government, however, had to buy manufactured goods from the region for the war and encouraged the formation of reckless inflationary banks in the Mid-Atlantic, Southern, and Western states, which were allowed to print huge amounts of new notes backed by their fraction of reserves in government bonds. The government, in turn, used these notes to purchase their needs from New England. New England banks did not inflate their credit, but were awash with inflated bank paper from outside the region. Soon, New England banks were calling upon other banks to redeem their notes in specie which not only threatened insolvency for the mass of inflationary banks, but also the war effort itself.

In August of 1814, the government allowed banks to suspend payments in specie and continue on in their reckless inflationary spree. While banks expanded their loans and operations under the protection of the government to waive their contractual obligations to pay in specie, they retained the power to force their debtors to repay their loans as usual. The expansion of banks and Treasury notes during the war increased wholesale prices from 1811 to 1815 an average of 35 percent, with different cities suffering a price inflation ranging from 28 to 55 percent, and since foreign trade was cut off during the war, prices of imported commodities rose to an average of 70 percent.[20]Amidst this chaos, a class of "money brokers" arose that would buy and sell bank notes that depreciated in value in proportion to their distance from their originating banks.[21]

Thomas Jefferson wrote Albert Gallatin out of concern of the mischief taking place. Jefferson wished to impress upon Gallatin his confidence that the problems brought upon the nation by the banking fiasco could be resolved by means that did not require new banking schemes under the guidance of benevolent acting bankers. To those ends, Jefferson wrote:

> We are undone, my dear Sir, if this banking mania be not suppressed. . . . Put down the banks. . . . Even the last half-bold, half-timid threat of the treasury, showed at once that these jugglers were at the feet of government. For it never was, and is not, any confidence in their frothy bubbles, but the want of all other medium, which induced, or now induces, the country people to take their paper . . . when nothing else is to be had, no

> man will receive it but to pass it away instantly, none for distant purposes. We are now without any common measure of the value of property, and private fortunes are up or down at the will of the worst of our citizens. Yet there is no hope of relief from the legislatures who have immediate control over this subject. As little seems to be known of the principles of political economy as if nothing had ever been written or practiced on the subject, or as was known in old times, when the Jews had their rulers under the hammer. It is an evil, therefore, which we must make up our minds to meet and to endure.[22]

The circumstances outlined by Jefferson not only produced enormous debt and chaos, but *enormous opportunity*. Stephen Girard, the largest stockholder in the First Bank of the United States and reputedly one of the two wealthiest men in the country, was a heavy investor in war debt. Towards the end of the war, when the financial credit of the U.S. government was at its lowest, Girard used nearly all of his resources to underwrite up to 95 percent of the nation's war loan, which enabled the United States to carry on the war. Alexander Dallas, who as a Philadelphia lawyer that served as counsel and financial associate of Girard, was granted an engineered appointment to Secretary of the Treasury. Dallas pleaded to Congress the short comings of the monetary system:

> Contemplating the present state of the finances, it is obvious, that a deficiency in the revenue, and depreciation in the public credit, exist, . . . from the inadequacy of our system of taxation to form a foundation for public credit. . . . The exigencies of the Government require a supply of treasure for the prosecution of the war, beyond any amount which it would be politic, even if it were practicable, to raise by an immediate and constant imposition of taxes.[23]

Conceding that, "The condition of the circulating medium of the country, presents another copious source of mischief and embarrassment," Dallas makes the case for another central bank that would bear very similar to the previous bank Girard was so heavily invested in:

> The recent exportations of specie have considerably diminished the fund of gold and silver coin. . . . But the benefit of even this paper currency is in a great measure lost, as the suspension of payments in specie, at most of banks, has suddenly broken the chain of accommodation that previously extended the credit and the circulation of the notes which were emitted on one State into every State of the Union. It may, in general, be affirmed, therefore, that there exists, at this time, no adequate circulating medium, common to the citizens of the United States. . . . Under favorable conditions, and to a limited extent, an

> emission of treasury notes would, probably, afford relief. . . . From this painful, but necessary development of existing evils . . . it is proposed that a national bank shall be incorporated for a term of twenty years.[24]

Dallas was not short sided that his proposal of another national bank would be met without opposition. "I cannot be insensible to the high authority of the names which have appeared in opposition to that measure upon constitutional grounds," he begins, "But, in the present case, a charge of private opinion is not material to the success of the proposition for establishing a national bank. In the administration of human affairs, there must be a period when discussion shall cease and decision shall become absolute."[25]

Dallas's proposal for a new national bank was put to a vote, but was vetoed by Madison in January of 1815 with the following message to the Senate: "The direct effect of this operation is simply to convert fifteen millions of treasury notes into fifteen millions of six percent stock . . . the bank would reap the full benefit of the grant whilst the public would lose the equivalent expected from it."[26] By year's end, however, Madison gave tepid support to the idea of chartering a new bank because it was obvious that the inevitable consequences of the irresponsible inflationary boom would somehow have to be reconciled. In his annual message to Congress, Madison addressed the first session stating:

> The arrangements of the finances . . . will necessarily enter into the deliberations of Congress during the present session. . . . essential to every modification of the finances that the benefits of an uniform national currency should be restored to the community. The absence of the precious metals will, it is believed, be a temporary evil, but until they can again be rendered the general medium of exchange it devolves on the wisdom of Congress to provide a substitute which shall equally engage the confidence and accommodate the wants of the citizens throughout the Union.[27]

There was substantial opposition to the creation of another central bank. Senator William H. Wells argued that the creation of the new bank was:

> ostensibly for the purpose of correcting the diseased state of our paper currency by restraining and curtailing the over issue of bank paper, and yet it came prepared to inflict upon us the same evil, being itself nothing more than simply a paper-making machine.[28]

The Old Republicans advocated the hard-money path that would force banks to redeem their notes in specie, or if they could not, force them to liquidate. This argument seems to be largely absent from modern critiques of central banks, leaving aside the historical account of human motives that are not a part of the contemporary narrative of why we have central banks. The New York Federal Reserve, for example, cites this historical episode as an evidence of how central banking was all but obvious, and alludes to the conclusion that the consequences the country suffered stemmed from not extending the charter of the First Bank of the United States:

> The First Bank of the United States was . . . in fact the largest corporation in the United States. As a result of its influence, the Bank was of considerable use to both American commerce and the federal government. . . . However, the Bank's influence was frightening to many people. The Bank's charter ran for twenty years, and when it expired in 1811, a proposal to renew the charter failed by the margin of a single vote in each house of Congress. Chaos quickly ensued, brought on by the War of 1812 and by the lack of a central regulating mechanism over banking and credit. . . . Finally, inadequate bank capital, risky loans and insufficient reserves against bank notes and demand deposits hampered the banking system. To its detriment, the American public had again opposed the idea of a central bank, and the country's need for such an entity was more apparent than ever before.[29]

While on the outset such reasoning seems sounds, a misleading basis of this contemporary narrative is the assertion that chaos ensued by a lack of government involvement to regulate banks, and it overlooks the controversy surrounding the history of the First Bank of the United States we have examined that dispels any portrayed benevolence of the institution. Actually, the government encouraged the reckless behavior of the banks to monetize the war debt, and it refused to honor its obligation to enforce contracts and defend property rights when it permitted the general suspension of specie payments. The course of action established the precedent that when a banking crisis was brought on by inflationary expansion, that instead of cracking down on the behavior of banks, that the government would support their inflationary course and buy up their mess at the expense of the taxpayer. When sources like the one examined by the Federal Reserve cite such episodes to argue that chaos inevitably ensues without a central bank, it is paramount to understand that we will lack a mature understanding of the issue if we overlook how vested interests characteristically preyed upon the manipulative characteristics of our governing systems. It is no mistake that banks, even in the absence of a governing central bank, have not been treated like other businesses. The allure of allowing banks to create more money from the practices of fractional reserve banking has been altogether too sweet for elites and deficit inclined governments to refuse. Like other businesses, banks could have been held to their contractual obligations with reserves under the threat of government enforced liquidation and immediate insolvency. Instead, the government adopted the tradition of allowing general suspensions of payments and picking up the liquidation tab of their failures.

Arguing with a Congress that was aware of the government's and Treasury Department's role in orchestrating the disaster, Dallas had to preface his call for another central bank by admitting, "Of the services rendered to the Government by some of the State banks during the late war, and liberality by which some of them are actuated in their intercourse with the Treasury, justice requires an explicit acknowledgment." To make his case for a new Bank of the United States, Dallas claimed that, "the danger which originally induced, and perhaps justified, the conduct of banks, has passed away, and the continuance of the suspension of specie payments must be ascribed to a new series of causes." Drawing upon that state of affairs he clarifies that, "the Treasury, yielding, from necessity, to the general impulse, has hitherto consented to receive bank paper in the payment of duties and taxes," thus establishing the crux of the problem that, "It is a fact, however, incontestably proved, that those institutions cannot, at this time, be successfully employed to furnish a uniform national currency." "The period approaches," he warned, "when it will probably become a duty to exact the payment either in Treasury notes, or in gold or silver coin." To dispel any notion that state banks could somehow be held to conduct characteristic of the examples we cited in New England to meet these ends, Dallas acknowledges that a vast array of interests amongst bankers would make their voluntary cooperation unlikely:

> The truth is, that the charter restrictions of some of the banks, the mutual relation and dependence of the banks of the same State, and even of the banks of different States, and the duty which the directors of each bank conceive they owe to their immediate constituents, upon points of security or emolument, interpose an insuperable obstacle to any voluntary arrangement, upon national considerations alone, for the establishment of a national medium through the agency of the State banks.

Dallas concluded that, "The establishment of a national bank is regarded as the best, and perhaps, the only adequate resource to relieve the country and the Government from the present embarrassments."[30]

The chartering effort for the new bank enjoyed southern and western support of Republican nationalists John C. Calhoun of South Carolina and Henry Clay of Kentucky who were eager for their regions to gain the advantage of their inflation sprees being absorbed by a national bank. Calhoun, Chairman of the Committee on the National Currency, proposed an "Outline of a Plan for the National Bank" that essentially mirrored the recommendations of Dallas. Finally, the charter was signed into law by Madison on April 10, 1816. In addition to the windfall advantages enjoyed by southern and western banks, Dallas's successful push to establish the Second Bank of the United States also resulted in the bank assuming the war debt which made his financial associate Stephen Girard—according to CNN Money and Fortune Magazine— the fourth richest American of all time (based on the ratio of his fortune to contemporary GDP).[31]

The Second Bank of the United States was comparable to the Bank of England and the Bank of France with the key exception that its charter called for United States government assuming one-fifth (20%) of its capital, whereas other central banks of that era were wholly private: "The United States will be the proprietors of one-fifth of the capital of the bank, and in that proportion, upon general principles, they should be represented in the direction."[32] Dallas was clear, however, to preface this agreement with the understanding that, "Under such circumstances the public interests cannot be too cautiously guarded, and the guards proposed can never be injurious to the commercial interests of the institution."[33] Along these lines, subsequent efforts by Calhoun and Clay to earmark the bank's annual dividends to fund internal improvements were put down.[34] The Bank actually had thin capital because investors borrowed from the government's specie in the Bank itself, with the agreement that they would pay their shares in installments. The government named only five of its 25 investors.[35] The Bank had a new rule to prohibit any shareholder from voting in proportion to ownership beyond thirty shares, but to circumvent the voting rules George Williams bought 1172 shares in the names of individuals he found on the streets of Baltimore that agreed to give him their proxy, while keeping their share of the interest. He purchased another 1000 shares in the same manner in partnership with James McCulloch, an impoverished employee of Williams and James Buchanan, who was president of the Baltimore mercantile firm Smith and Buchanan, partnered with the powerful Maryland Senator Samuel Smith. As a result the trio controlled operations in Baltimore and wielded national influence as well. Williams was made director of the parent bank in Philadelphia, and Buchanan assumed the presidency of the Baltimore branch with McCulloch as its manager. In 1819, McCulloch was employed by Williams for a salary of $4000 per year, yet in that same year the Bank of the United States would lend this same individual with a $4000 salary an astonishing half a million dollars for stock purchases.[36]

McCulloch began issuing notes to Williams, Buchanan, himself and a club of friends who needed money for their enterprises. As other bankers who bought stock in the Bank of the United States fell into financial burden, MuCulloch would issue them notes in exchange for their shares. The trio borrowed $1.9 million from the Philadelphia branch secured by their shares of bank stock, and borrowed an additional $1.5 million from the Baltimore branch secured by the pledge of the purported surplus value of the shares already in the Philadelphia bank. Loans made from the Baltimore branch were redeemed for specie in the Philadelphia, Boston, and New York branches until the shenanigans of the Baltimore branch came to light. In August of 1818, the Bank of the United States stopped redeeming in specie notes issued by other branches. McCulloch altered the records of loans to hide the nature of the schemes. When Langdon Cheves, who was most known for his work to defeat the rechartering of the First Bank of the United States as the Speaker of the House, was appointed President of the Bank's board of directors to restore faith in the Bank amidst scandal, he discovered that the Baltimore branch had lent out millions without any knowledge or authority from the parent bank. Not surprisingly, three-fifths of all loans from the Bank came from the Baltimore and Philadelphia branches. As the house of cards began to fall, criminal charges were brought up against Buchanan, McCulloch and Williams, although the defendants were tried in a court without a jury, and judges who were initially willing to dismiss the indictment found the defendants not guilty because they intended to pay the loans taken from the Bank.[37] The dissent, however, was not so charitable:

> The Traversers, in violation of a sacred trust and under false representations calculated to deceive those who were interested in the due execution of the trust, have taken from the

> funds of the office a large sum of money, which they converted to their own use, and have failed to return to the Bank a cent of their spoil.[38]

The General Assembly of Maryland passed an act entitled, "An act to impose a tax on all banks, or branches thereof, in the State of Maryland, not chartered by the legislature." McCulloch refused to pay the tax. The Bank of the United States was found guilty and when the case was appealed to the Maryland Court of Appeals the State of Maryland argued that "the Constitution is silent on the subject of banks." The court upheld Maryland's contention that because the Constitution *did not* specifically state that the federal government was authorized to charter a bank, the *Bank of the United States* was unconstitutional. The case was then appealed to the Supreme Court where McCulloch, twice indicted for conspiracy, became the center of the landmark Supreme Court case *McCulloch v. Maryland* for his role in giving himself loans for stocks. Supreme Court Justice John Marshall actually used Alexander Hamilton's arguments, word for word, in the decision to uphold the ideal of expanding federal power by maintaining that the Constitution "implied" the power to carry out vague national goals, while never mentioning the circumstances of a private bank run by shareholders for their own profit. The court invoked the Necessary and Proper Clause of the Constitution to say that it granted Congress implied powers (as it pertained to the Bank) to create a functional national government, and that states in turn could not impede such Federal power. The public blow to the defendants was only temporary and partially alleviated by the Supreme Court decision. They secured their assets in the hands of their relatives, and continued to rise in their lobbyist and political endeavors. Smith was involved in another bank scandal that resulted in popular Baltimore riots against the bank and its directors in 1835, although he organized a patrol that quelled the violence and later ascended to the office of mayor.[39]

What was occurring, however, was not unique to the United States, but symptomatic of modern inflation based economies. Dallas acknowledged in a report on the Treasury that:

> In other countries, as well as the United States, the effect of an excessive issue of paper money, to banish the precious metals, has been seen; and, under circumstances much more disadvantageous than the present, the effect of public confidence in national institutions, to recall the precious metals to their uses in exchange, has also been experienced.[40]

At relatively the same time, The Bank Charter Act in England also led to speculative euphorias, followed by sharp decreases. After a burst of inflation that led to a government intervention to prevent payments in gold, England witnessed economic crisis from drastic cuts enacted by the Bank of England from 1817-19 in preparation to return to payments of gold. The crisis gave rise to a debate over monetary theory and establishing rules of behavior for the Bank of England between the currency school that backed the hard money bullion tradition, and the banking school that favored inflation. Advocates of the currency school included Thomas Joplin, Samuel Jones Lloyd (Lord Overstone), and Robert Torrens. They maintained that based upon principle of "metallic fluctuation," the quantity of banknotes would have to vary in the same measures as gold reserves. Their argument was based upon their observations that during expansion phases, the Bank of England adjusted the supply to the demand of money, so fueling inflation, speculation, and euphoria. Then, when the crisis of panic arrived, the Bank, in order to protect its own reserves, was forced to take drastic measures that would deepen the crisis. Their opposition from the banking school that included Thomas Tooke, John Fullarton, James William Gilbart and John Stewart Mill, did not want to limit the powers of the bank in fear that it would weaken the political position of Britain during times when manipulations could assist national agendas. They maintained that rules should be applicable to infringement by the Bank of England that must reserve the right to adopt discretionary monetary policies. The course of the debate yielded a victory for the banking school and the course of inflationary policy with the passage of the 1844 Bank Charter Act, also known as the Peel Act. In addition to restricting the powers of British banks by granting an exclusive note-issuing monopoly to the central Bank of England, the definition of money in relation to what it was backed by became much less restrictive.

The trend of the currency and banking school arguments were also taking place in the United States. Within the first two years of the Bank of the United States operation, the total money supply rose by 40.7 percent.[41] The enormous inflation of the Bank aggravated by its massive fraud was dealt with by a series of contractions, forced curtailment of loans, and contractions in credit. This resulted in rash defaults, bankruptcies of businesses and manufactures, liquidation of unsound investments, mass unemployment and a sharp drop in property values that ushered in the first widespread economic and financial depression in the United States. The central bank's course of action – a clumsy expansion, then a sharp contraction of credit – indicated its weakness, not its strength. The artificially contrived rapid inflation of money succeeded by the planned contraction of money and credit brought with it the arrival of the "bust-boom" cycle in the United States.

Chapter VI: War Over the National Bank

Perhaps the most significant American development that emerged from the bitter experiences of the panic of 1819 was the rise of the Jacksonian movement that was dedicated to hard money and resented fractional reserve banking in general, while disdaining the Bank of the United States in particular. The core of the movement lay with Andrew Jackson, Senator Thomas Hart of Missouri, future president James Polk of Tennessee, and economists Amos Kendall and Condy Raguet. This group strongly favored free enterprise and free markets, while strongly opposing special subsidies and monopoly privileges conveyed by government to business and special interests. Meanwhile, Nicholas Biddle had ascended to the presidency of the bank. Biddle was an associate of Stephen Girard from Philadelphia, and later central to the establishment of Girard College under the provisions of the Girard's will. Initially, Biddle was a key lobbyist for the chartering of the bank, and according received an engineered appointment as a federal government director by President Monroe when the bank was established in 1816. Within three years the bank was nearly ruined by mismanagement.

Amidst the scandal, Langdon Cheves of South Carolina, who was most known for his work to defeat the re-chartering of the First Bank of the United States as the Speaker of the House, was elected President of its board of directors to restore the bank. Cheves scaled back the Bank's operation by reducing the its loans from $41 million to $31 million, and cut the amount of bank notes in circulation from $8 million to $3.5 million. Although his name helped to restore faith in the Bank and his policies increased its stability, the contraction reduced credit which jeopardized the solvencies of some businesses that were debtors of the bank, and the private stockholders resented their reduction in dividends. After just three years of being the government's key fiscal agent, Cheves resigned under pressure and accepted a lesser appointment as Chief Commissioner of Claims under the Treaty of Ghent that ended the War of 1812. The national bank was still in general disrepute among most Americans when Nicholas Biddle received President Monroe's appointment to head the bank in 1823. By the time of Jackson's inauguration in 1829, Biddle had steadily expanded credit with efforts to stabilize the nation's currency.

Although the Bank of the United States' charter was up for renewal in 1836, Andrew Jackson lost no time in denouncing the bank in his first annual message in 1829. Jackson began, "The charter of the Bank of the United States expires in 1836, and its stockholders will most probably apply for a renewal of their privileges." "Both the constitutionality and the expediency of the law creating this bank are well questioned by a large portion of our fellow citizens," he declared, "and it must be admitted by all that it has failed in the great end of establishing a uniform and sound currency." Accordingly, Jackson called upon Congress to inquire into the institution, "deemed essential to the fiscal operations of the Government."[1] In turn, the Senate Committee on Finance reported: "The resort to the issue of a paper money has been often the desperate expedient of the wants of a nation. . . . Such were the expedients of the Government of the United States during its two wars." The committee further confirmed their reservations, while insightfully identifying the emerging business cycle:

> One nation assumes one system, another a different plan. In one nation, a plan is devised, and succeeds for a time by prudent and restrictive emissions. Elated with success, larger and more extensive emissions are risqued; a rapid nominal rise of all property takes place; the people are not aware that such nominal rise is the effect of depreciation; the bubble bursts, and ruin to the unsuspecting, is the consequence. All history shows such a result in several nations, and particularly in that of the United States.[2]

A report of the House Committee of Ways and Means on the Renewal of the Charter of the Bank of the United States provides us further insight into the workings of the bank. It provides interesting evidence of lobbying on behalf of competing banking interests that upholds our findings about the nature of how bankers have come under the monopolizing favor of governments. The report reveals, "some of the new schemes brought forward in the memorials referred to the committee, are so utterly extravagant as to furnish just cause of alarm to all reflecting men." Establishing that, "Men of accumulated capital, not engaged in business, and stockjobbers, are invariably the first subscribers for the stock of a new bank," it warns, "If a new bank were created, it is almost certain that the stock would go into fewer and less meritorious hands." Elsewhere, it reveals the mischief of the bank. "If the withdrawl of specie from the community, and supplying its place with paper, be the *uniform currency* which the bank was intended to produce, then has it most happily effected the purpose." The committee revealed that bank branches evaded the provisions of their charter and issued common orders, "to the amount of 7,096,765 dollars. . . . During the same period, specie to the very large amount of 8,317,790 51 has been drawn from the same branches to the parent bank. These drafts or orders, instead of finding their way to the mother bank, where they purport to be payable, remain in the country where issued, and circulate as paper in place of the specie thus withdrawn."[3] The committee warned that the real danger of the bank stemmed from, "too great a power to rest upon *construction* and *implication merely*." In conclusion, it summarizes the bank as "one of the most stupendous engines of political power that was ever erected; capable of being exerted not only against the head, but every branch of the Government; corrupting by its money, and aweing by its power, the virtuous and independent action of the representatives of the people, in prostituting them to its base and sinister purposes."[4]

Biddle had failed with repeated overtures to Jackson and his cabinet to secure a compromise on rechartering the bank. Biddle, at the urging of Henry Clay, John C. Calhoun, and other Bank supporters, applied for the Bank's re-charter in January 1832. Although this was four years before the charter was scheduled to expire, the aim was to force Jackson into making an unpopular decision that would cost him the presidential election to Clay. Calhoun, who played a central role in the showdown, was already an entrenched enemy of the president. He had recently published their heated correspondence which effectively severed the men's social relations, his wife Floride Calhoun organized Cabinet wives against the Secretary of War's wife Peggy Eaton in a scandal that became known as the "Petticoat affair", and when Calhoun led South Carolina's Ordinance of Nullification, Jackson ordered armed forces to Charleston and privately threatened to hang Calhoun! As the issue of pushing early rechartering came to a head, it was Calhoun whose name was attached to the Senate bill entitled, "A Bill to Renew the Charter of the Bank of the United States." Once challenged, Jackson wrote his most trusted advisor, *"The Bank, Mr. Van Buren, is trying to kill me, but I will kill it."*

Clay argued his case for rechatering the Bank on the floor of the Senate for three days. Senator Thomas Hart Benton of Missouri rallied as his key opponent, telling the Senate that the bank had become too powerful, and that it made elite richer at the expense of the nation. When the Senate finally voted on the bank's new charter, 28 were for renewal and 20 against. The House approved the charter three weeks later, 107 to 85. When Congress sent the bill to the White House, Jackson debated it with members of his cabinet and was even advised to negotiate a compromise. Instead, Jackson decided to make it into an election issue by vetoing the bill and firing off a dramatic veto message to the Congress that identified the issue as "a bond of union among the banking establishments of the nation erecting them into an interest separate from that of the people, and its necessary tendency is to unite the Bank of the United States and the State banks in any measure which may be thought conducive to their common interest," in addition to being, "a self-elected directory whose interests are identified with those of the foreign stockholders." Jackson feared that if the bank were recharted, the "entire control of the institution would necessarily fall into the hands of a few citizen stockholders, and the ease with which the object would be accomplished would be a temptation to designing men to secure that control in their own hands by monopolizing the remaining stock." "It is easy to conceive," he continued, "that great evils to our country and its institutions might flow from such a concentration of power in the hands of a few men irresponsible to the people." Along the lines of the bank's irresponsibility to the public, Jackson protested, "It can not be necessary to the character of the bank as a fiscal agent of the Government that its private business should be exempted from that taxation to which all the State banks are liable." He proceeded to make the case that such privileges enjoyed by the bank stemmed from the elite's corruption of the government:

> It is to be regretted that the rich and powerful too often bend the acts of government to their selfish purposes. . . . when the laws undertake to add to these natural and just advantages artificial distinctions, to grant titles, gratuities, and exclusive privileges, to make the rich richer and the potent more powerful, the humble members of society--the farmers, mechanics, and laborers--who have neither the time nor the means of securing like favors to themselves, have a right to complain of the injustice of their Government. . . . Many of our rich men have not been content with equal protection and equal benefits, but have besought us to make them richer by act of Congress.

In conclusion, Jackson acknowledged the powers he was taking on: "if any private citizen or public functionary should interpose to curtail its powers or prevent a renewal of its privileges, it can not be doubted that he would be made to feel its influence." To these ends, he vows, "we can at least take a stand against all new grants of monopolies and exclusive privileges, against any prostitution of our Government to the advancement of the few at the expense of the many, and in favor of compromise and gradual reform in our code of laws and system of political economy."[5]

Jackson's stand effectively killed the Bank, and although it cost him votes from the wealthy, his gamble effectively mobilized his political base amongst common Americans who triumphantly re-elected him on the issue. Jackson's veto message tactfully spoke of the Bank's misconduct generalities. He asserted, "Suspicions are entertained and charges are made of gross abuse and violation of its charter. An investigation unwillingly conceded and so restricted in time as necessarily to make it incomplete and unsatisfactory discloses enough to excite suspicion and alarm." Elsewhere, he was more specific: "The old Bank of the United States possessed a capital of only $11,000,000, which was found fully sufficient to enable it with dispatch and safety to perform all the functions required of it by the Government. The capital of the present bank is $35,000,000— . . . This increase of capital is therefore not for public but for private purposes." While these excerpts from his veto message give us a basis to question the conduct of the bank, his course of action after reelection accompanied more insightful explanations.

The president took council from his former Attorney General, Roger B. Taney, to remove public deposits from the Bank. Jackson explained to his cabinet the reasons for his intended actions, stating: "A brief recapitulation of the facts which justify these charges, and which have come to the knowledge of the public and the President, will, he thinks, remove every reasonable doubt as to the course which it is now the duty of the President to pursue."[6] Jackson recounted, "The object avowed by many of the advocates of the bank was to *put the President to the test,* that the country might know his final determination relative to the bank prior to the ensuing election." Jackson expounded from this premise that from January, 1831, to May, 1832, the bank intentionally extended its loans from $42,402,304.24 to $70,428,070.72, an increase of $28,025,766.48 in sixteen months, to fortify its political stance that its charter was vital to the success of the economy, and that abandoning it would be reckless. Jackson explained:

> It is confidently believed that the leading object of this immense extension of its loans was to bring as large a portion of the people as possible under its power and influence, and it has been disclosed that some of the largest sums were granted on very unusual terms to the conductors of the public press. In some of these cases the motive was made manifest by the nominal or insufficient security taken for the loans, by the large amounts discounted, by the extraordinary time allowed for payment, and especially by the subsequent conduct of those receiving the accommodations.

To fortify how despicable the acts of the Bank were, Jackson exposed details of their actions to clarify that these loans could not be deemed usual business allowed by their charter. "We have seen that in sixteen months ending in May, 1832, the bank had extended its loans more than $28,000,000, although it knew the Government intended to appropriate most of its large deposit during that year in payment of the public debt." "Conscious that at the end of that quarter the bank would not be able to pay over the deposits," Jackson revealed:

> an agent was dispatched to England secretly to negotiate with the holders of the public debt in Europe and induce them by the offer of an equal or higher interest than that paid by the Government to hold back their claims for one year, during which the bank expected thus to retain the use of $5,000,000 of the public money, which the Government should set apart for the payment of that debt.

Elsewhere, Jackson discloses another foreign transaction with that establishes a pattern of deceitful business beyond the boundaries of the Banks charter. The Bank, he explains, "became the purchaser of a bill drawn by our Government on that of France for about $900,000, being the first installment of the French indemnity. The purchase money was left in the use of the bank, being simply added to the Treasury deposit." This episode was further detailed to establish how haphazardly the Bank handled government funds. "The bank sold the bill in England, and the holder sent it to France for collection, and arrangements not having been made by the French

Government for its payment, it was taken up by the agents of the bank in Paris with the funds of the bank in their hands."

The question arises, how did the bank skirt around its charter to do these things without the government knowing? This obstruction, Jackson contended, was part of the bank's scheme. Committees were formed in ways to exclude government directors, particularly the committee of exchange that Jackson explains is where, "the greatest and most objectionable loans have been made." When the Government directors made an effort to bring back the business of the bank to the board in obedience to the charter and the existing regulations, the board not only overruled their attempt, but Jackson conveyed the bank, "altered the rule so as to make it conform to the practice, in direct violation of one of the most important provisions of the charter which gave them existence." The bank's president also added to the secrecy of the bank by conducting its business with no oversight. Jackson accused that Biddle, "executes many of the most important measures connected with the management and credit of the bank, and that the committee as well as the board of directors are left in entire ignorance of many acts done and correspondence carried on in their names, and apparently under their authority."

Jackson further detailed disturbing evidence that the bank had acted to undermine the nation's democracy. "Many documents and articles were printed and circulated at the expense of the bank to bring the people to a favorable decision upon its pretensions." Worse still, bank funds were used to influence the press into promoting the political position of the bank:

> its faithlessness as a public agent, its misapplication of public funds, its interference in elections, its efforts by the machinery of committees to deprive the Government directors of a full knowledge of its concerns, and, above all, its flagrant misconduct as recently and unexpectedly disclosed in placing all the funds of the bank, including the money of the Government, at the disposition of the president of the bank as means of operating upon public opinion and procuring a new charter, without requiring him to render a voucher for their disbursement. . . . The fact that the bank controls, and in some cases substantially *owns* , and by its money *supports* some of the leading presses of the country

> is now more clearly established. Editors [were] loaned extravagant sums in 1831 and 1832.

Upon investigation, it became evident that Biddle had cleverly secured his secretive authority from committee resolutions that granted him the power to "take such measures . . . as he may deem most for the interest of the bank," which included the authority to, "communicate to the people information in regard to the nature and operations of the bank." Using these resolutions as evidence of the Bank's, and specifically Biddle's, resolve to tamper with the nations democracy to fix the outcome of the vote to renew its charter, Jackson condemned the bank for, "employing the whole press of the country in the service of the bank, to hire writers and newspapers, and to pay out such sums as he pleases to what person and for what services he pleases without the responsibility of rendering any specific account. The bank is thus converted into a vast electioneering engine." On the basis of the evidence provided, Jackson surmised, "The refusal to render an account of the manner in which a part of the money expended has been applied gives just cause for the suspicion that it has been used for purposes which it is not deemed prudent to expose to 'the eyes of an intelligent and virtuous people." To these ends, he resolved to remove public deposits from the Bank, and redisperse them amongst state banks. "From all these considerations the President thinks that the State banks ought immediately to be employed in the collection and disbursement of the public revenue, and the funds now in the Bank of the United States drawn out with all convenient dispatch." In addition to Jackson's plan to make the nation more secure from the mischief of misallocated power in a central bank, he forewarned that caution must be taken to prevent to the rise of banks exercising unwarranted influence over society:

> As one of the most serious objections to the Bank of the United States is the power which it concentrates, care must be taken in finding other agents for the service of the Treasury not to raise up another power equally formidable. . . . It is

> the desire of the President that the control of the banks and the currency shall, as far as possible, be entirely separated from the political power of the country as well as wrested from an institution which has already attempted to subject the Government to its will.

Jackson issued the order for the Treasury Department to withdrawal federal deposits from the Bank of the United States and place them in state banks. When Secretary of the Treasury William Duane refused, Jackson fired him and appointed his legal advisor and architect of the plan to dismantle the bank, Roger B. Taney, as the Acting Secretary during the final week of the congressional session. This prompted the Senate, led by Clay, Calhoun and Daniel Webster, to fire off a resolution of censure admonishing the president. Taney lost no time in carrying out his plan to dismantle the bank. In his report to Congress as the Secretary of the Treasury, Taney brought forth the accusation that, "There is sufficient evidence to prove that the bank has used its means with a view to obtain political power, and thereby secure the renewal of its charter." He disclosed the activities of the bank revealing that even after the renewal of the bank's charter was denied, they were still actively trying to rig the economy such that, "the country would be compelled to submit to its renewal, or to bear all the consequences of a currency deranged, and also a severe pressure for the immense outstanding claims which would then be due to the corporation." [7]

Biddle deliberately induced a short-lived financial crisis in an attempt to save the bank by showing that the terrible outcome of Jackson's executive action warranted a renewal of the banks charter. Taney's report to Congress called Biddle's bluff stating that his actions were deliberate "to bring distress upon any portion of the community whenever it may deem it useful to its interest to make its power felt." He detailed the particulars of the planned crisis that amounted to the bank calling in nine million dollars of due loans from state banks over the course of two months that was collected in specie and then hoarded in the bank's vaults. Based upon the evidence, Taney concluded that the bank, "had adhered to the oppressive system of policy which it pursued during the two preceding months, a widespread scene of bankruptcy and ruin must have followed." Calling into account the reason behind the bank's establishment, Taney contrasted its behavior with its intended purpose: "It was never supposed that its own separate interests would be voluntarily brought into collision with those of the public. And still less was it anticipated that it would seek, by its money, to obtain political power, and control the action of the Government, either by the favors it can shower, or the fear of its resentment." Taney concludes, "If, therefore, it sought to obtain political power, or increase its gains by means which would probably bring distress on the community, it violated its duty, and perverted, to the public injury, the powers which were given to be used for the public good."

He further elaborated on how the bank was able to carry out its sinister plans under the guise of faithfully fulfilling its charter under government oversight. Taney established the premise that, "being the fiscal agent of the Government, with such immense power to be exercised for good or for evil, the public safety requires that all of its proceedings should be open to the strictest and most rigorous scrutiny." The bank, however, was not. Taney proclaimed that, "there is sufficient evidence to show that the arrangement on the part of the bank was deliberately planned, and is still persisted in, for the purpose of concealment." This, Taney contends, was cleverly planned by the way the bank structured its committees: "it appears, designedly, and by regular system, so arranged, as to conceal from the officers of the Government transactions in which the public interests are deeply involved." "There is sufficent evidence to show that the bank has been, and still is," he continued, "seeking to obtain political power, and has used its money for the purpose of influencing the election of the public servants." Taney reported that the bank "was using its money for the purpose of obataining a hold upon the people of this country, in order to operate upon their fears, and to induce them, by the apprehension of ruin, to vote against the candidate whom it desired to defeat." These misdeeds were reportedly carried out by Nicholas Biddle who Taney said exercised the power to, "employ as many persons as he pleases, at such salaries as he thinks proper, either to prepare daily paragraphs for newspapers in favor of the bank, or to write pamphlets and essays to influence the public judgment. . . . One of the means of warfare is the destruction of the political standing of those who are opposed to the renewal of the charter."

Taney finally justified his actions for withdrawing the government's deposits from the bank. This, he explained, was necessary to confront, "the vast power of the Bank of the United States, and of its ability to bring distress and suffering on the country. This is one of the evils of chartering a bank with such an amount of capital." He further warned, "we ought not, perhaps, to be surprised if a corporation like the Bank of the United States . . . should deliberately plan and execute a course of measures highly injurious and oppressive in places where the directors who control its conduct have no local sympathies to restrain them." Carrying out Jackson's executive order, therefore, was necessary on the basis of saving the nation from the misallocated power of the self-serving interests Taney detailed. Although the bank was very active trying to manipulate circumstances before its charter expired in 1836, Taney's removal of government funds from the bank rendered it weak and ineffective before its time was up. By 1834, a general backlash against Biddle's tactics had developed and all recharter efforts were abandoned. When the Bank's charter expired in 1836, it continued for several more years as a private corporation under Pennsylvania commonwealth law. In 1839, the bank suspended payment, Biddle resigned from his post, and the bank was finally liquidated in 1841. Biddle was arrested and charged with fraud, although he was later acquitted. He died shortly thereafter while still involved in civil suits. Taney resigned as the Secretary of the Treasury when the Senate refused to confirm his recess appointment by a vote of 28-18, making him the first nominee to the executive cabinet to ever be rejected. Two years later, however, Jackson's gratitude for his actions against the Second Bank won him an appointment to the Supreme Court. Initially, the anti-Jackson Whigs in the Senate succeeded in preventing Taney's confirmation to the Court and the seat remained open for over a year. Once Jacksonian Democrats won control of the Senate in the next election which coincided with Chief Justice John Marshall being killed in a stage coach accident, Jackson nominated Taney as the next Chief Justice. After a bitter battle in the Senate from Henry Clay, Daniel Webster, and John C. Calhoun, Taney was finally was confirmed and received his commission the same day.

Once the bank had been killed, the elite would not be able raise another central bank in the United States for another 76 years. This was due, in part, to Jackson's continued criticism of national banking that helped foster entrenched anti-banking sentiments throughout the country. Jackson was particularly successful in this endeavor because more than any of his predecessors, he was elected by popular vote and esteemed by his supporters as the direct representative of the common man. "Events have satisfied my mind, and I think the minds of the American people," he stated, "that the mischiefs and dangers which flow from a national bank far overbalance all its advantages."[8] After Taney had addressed the Congress, Jackson went public with the same allegations against the bank: "Not only was the evidence complete as to the past application of the money and power of the bank to electioneering purposes, but that the resolution of the board of directors authorized the same course to be pursued in the future."[9] Amidst Biddle's engineered panic, Jackson defended his position. "To continue any business relations with the

Bank of the United States . . . after it has done all in its power to deride the public authority . . . [would] do much to destroy the confidence of mankind in popular governments and to bring into contempt their authority and efficiency."[10] Once the panic had been put down and Taney had undermined the effective power of the bank, Jackson addressed the Congress, "I am happy to know that through the good sense of our people the effort to get up a panic has hitherto failed, and that through the increased accommodations which the State banks have been enabled to afford . . . its efforts to spread groundless alarm, will be met and rebuked as they deserve."[11] A few years later, he continued, "The experience of another year has confirmed the utter fallacy of the idea that the Bank of the United States was necessary as a fiscal agent of the government."[12] In his seventh annual message to the congress, Jackson fired off accusations that summarized the anti-corporate legacy he left behind. "All the serious dangers which our system has yet encountered may be traced to the resort to implied powers and the use of corporations clothed with privileges, the effect of which is to advance the interests of the few at the expense of the many."[13] While elaborating on the wake of corruption caused by the bank, Jackson's conclusion encapsulated the meddling of the elite that not only summarized the aliments of past and present, but of despotism yet to come:

> corporations with exclusive privileges . . . the means by whose silent and secret operation a control would be exercised by the few over the political conduct of the many by first acquiring that control over the labor and earnings of the great body of the people. Whenever this spirit has effected an alliance with political power, tyranny and despotism have been the fruit.[14]

He promptly removed the public Treasury deposits from the Bank of the United States placed them in state banks throughout the country which became known as "pet banks." The Jacksonians had no intention of permanently depositing funds in state, or "pet" banks. After the retirement of Jackson, his successor, President Martin Van Buren, pushed for an Independent Treasury System in which the government would confer no special privileges on any bank, but kept its own funds, purely in specie, in its own vaults. His idea was before Congress for several years, and a bill was finally passed establishing an Independent Treasury System in 1840. Momentarily, the federal government was separate from private banking and placed their finances on a purely hard-money, specie basis, but economic troubles would unseat the hard-money party and undo the work of the president.

A major recession was touched off just five weeks after Van Buren's inauguration from circumstances outside of the United States, and from policies that had been enacted under Jackson. The Jacksonians had passed two coinage acts that legalized the circulation of all foreign silver and gold coins, which flourished in circulation until the 1850s. This coincided with a manipulation of Mexican currency by the Santa Anna regime to finance its deficits. This grossly overvalued copper and undervalued silver and gold which drove valuable Mexican specie to the United States where it circulated as legal tender. From the beginning of 1833 to the beginning of 1837, specie in circulation rose 141.9 percent, or 35.5 percent per annum. Meanwhile, the transition away from the practices of the central bank left a vacuum that allowed state-chartered banks in the West and South to relax their lending standards to dangerous reserve ratios that proved ruinous once market realities liquidated unsound investments, largely related to cotton, driven by British inflation, and the misleading confidence that came from the influx of specie. Andrew Jackson had also issued the Specie Circular of 1836, an executive order mandating that western lands could only be purchased with gold and silver coin. The intent was to restrain the speculation of public lands, but it resulted in a real estate and commodity price crash because the transitioning market had not adjusted to buyers fronting the sufficient specie to payment. Additionally, the Deposit and Distribution Act of 1836 that placed federal revenues in "pet banks" across the country resulted in the movement of specie to many western region banks. These two policies effectively transferred specie away from the nation's main commercial centers on the East Coast which compromised the monetary reserves of major banks and financial institutions, and forced them to scale back their loans. This all coincided with the Bank of England tightening its money supply and raising interest rates in 1936 to control inflation and offset an alarming decline in its monetary reserves. The effect rippled through the interconnected global economy, and put further strain upon major American banks. Lending was scaled back in the United States and Britain alike, which also caused the international demand for American cotton to plummet. When the specie boom came to an end with Mexican policy changes in 1837, and the cotton boom collapsed as a result of the Bank of England, many banks that invested heavily in speculation were eliminated. The plight was made worse by state governments that borrowed heavily from British and Dutch capitalists to fund rash public works projects. As a result, specie payments were sent abroad to meet heavy interest payments. These factors severely strained the economy and added to a widening pessimism that compromised the popularity of the president, and unseated the Democratic majority in Congress. Whigs repealed the Independent Treasury System in 1841, and deposited the government's funds back into state banks.

In the absence of a central bank in the United States, other European central banks continued to develop in ways that the United States would later model once its special interests prevailed in their persistence to bring the finance of the United States back under the control of a central bank. Their aspirations of piling government spending atop a banking system, while granting a monopolizing privilege to a select few, was part of a growing trend among prominent Western nations that continued to influence the United States. The Banque de France, for example, was established by Napoleon in 1800 to stabilize French currency in wake of the French Revolution's hyperinflation of paper money, and support government finance. At the time, France's financial power was in the hands of about ten to fifteen banking houses whose Swiss founders, all Protestant, were deeply involved in the agitations leading up to the revolution. Once the chaos of the Terror got out of hand, they orchestrated the rise of Napoleon to restore order, and it was these bankers Napoleon granted a monopoly of finance via the Banque de France. These practices spread to Germany once Napoleon incorporated the southern side of the Rhine Valley into France. Despite France's economic shortcomings compared to England and Belgium, it was still more advanced in its development of centralized banking than Germany. The forced integration of the Rhine Valley during the Napoleonic period stimulated economic change that the region retained once it became independent from France in 1815, which in turn proved influential to the development of central banking ideas throughout the rest of Germany.[15] Later bankers that were monumental in the development of American finance, such as J.P Morgan and Paul Warburg, would draw from their German educations and familiarity with continental banking to forge new systems in the United States.

Aside from the developments on the continent, the Bank of England and British bankers had ties with finance in the United States which were greatly influential during the time in between American central banks. During the time leading up to the American Civil War, the British were the world's primary exporter of manufactured goods and service, British capital was the leading source of foreign investment around the world, and pound sterling became the standard currency used for over 60% of international commercial transactions. The British pound remained the reigning international currency until American economic dominance took over during the second half of the 20^{th} century. Nonetheless, the history of cooperation between international bankers tends to blur national lines in ways reveal distinct preferences towards private interests. Upon examination we will discover that British banking, particularly Rothschild interests, were intimately linked with American moguls such as the Cooke's and J.P. Morgan that forged banking innovations in the United States. Just how influential was the Rothschild's dynasty in the development international banking? Through their collaborative efforts, the Rothschild's rose to prominence in a variety of banking endeavors including loans, government bonds and the trade of bullion. Nathan Mayer Rothschild was instrumental in almost single-handedly financing the British war effort against Napoleon, providing bullion to the Duke of Wellington's armies across Europe, in addition to bankrolling the continental allies of Britain. In what is now regarded as one of the most audacious moves in financial history, Nathan used the opportunity of the crisis surrounding the war to buy up the government bond market for pennies on the dollar, and in the wake of the Waterloo victory leveraged the bonds for an enormous profit which elevated the family to possess what is believed to be the largest private fortune in modern world history.[16] To put into perspective the influence of the Rothschild dynasty was within the theme of our examination of how instrumental the rich have been to the development of modern banking, Niall Ferguson wrote in his acclaimed examination of the Rothschild enterprise, "one has to imagine a merger between Merrill Lynch, Morgan Stanley, J.P. Morgan and probably Goldman Sachs too — as well, perhaps, as the International Monetary Fund...."[17] It will come as little surprise, therefore, that our study reveals that innovations in American banking were in close association with these British influences.

The support of hard money and drive towards outlawing anti-fractional reserve bank notes that was championed by Democrats was increasingly challenged by Whigs who supported the expansion of bank credit. In 1857, for example, the Jacksonian coinage program was repealed by Congress that eliminated the use of foreign coin as legal tender. The battle over banking practices shifted largely to state governments, and by the eve of the Civil War, 18 of 33 states were heavily engaged in pro-Whig banking practices.[18] The most pernicious aspect of these practices was that bank notes and expansion of credit was tied directly to state government securities much as they were in Britain. Essentially, state government bonds became the reserve base upon which banks were allowed to pyramid their expansions. As the Bank of England explains, "Most of the money in circulation is created, not by the printing presses of the Bank of England, but by the commercial banks themselves: banks create money whenever they lend to someone in the economy or buy an asset from consumers."[19] Herein lies the motivation for bankers the world over to imitate such a system: when money becomes a commodity that is sold to consumers by way of loans, bankers enjoy the unique privilege of being able to create and sell their good out of nothing but a fractional reserve of interest bearing securities that are guaranteed by tax money governments collect. When American bankers earnestly pursued this avenue of exchange it not only provided for the open practice of fractional reserve banking, but it also tied the expansion of bank credit to public debt. Bank inflation was intimately linked to state spending and public improvement projects which encouraged state governments to go into debt. New laws, pushed by Whigs and opposed by Democrats, allowed the government to lavish these banks with privileges of allowing their notes to be accepted in taxes, and allowing periodic suspension of specie payments. "Wildcat" banks, referring to rash establishments that distributed currency backed by questionable securities like mortgages and bonds, became increasingly common. Mark Twain referenced his disdain for Wildcat currency in his autobiography: "The firm paid my wages in wildcat money at its face value."[20] It's noteworthy that his writings provide us additional historical insight to this era which helps us understand the social setting of the economic issues examined. Twain was outspoken that the American middle and upper class' imitation of British Victorian Culture was a facade— that Americans were actually driven by "money lust." Twain famously wrote, "What is the chief end of man? —to get rich. In what way? — *dishonestly if we can; honestly if we must.* Who is God, the one only and true? *Money is God.* God and Greenbacks and Stock—father, son, and the ghost of same—three persons in one; these are the true and only God, mighty and supreme."[21] Bray Hammond, assistant secretary of Board of Governors of the Federal Reserve System, conveys: "The wild cats lent no money to farmers and served no farmer interest. They arose to meet the credit demands not of farmers but of states engaged in public improvements."[22]The end result was that credit became excessively cheap for risky borrowers and the lure of easy money once again encouraged inflation and speculative expansions that resulted in periodic panics brought on by misleading signals of expansion in the economy. In order for dream of fractional reserve banking to be fully realized, experience dictated that it would require a coordinated effort amongst banks to overcome the problems the American market was experiencing. As is often the case, the catalyst for this innovative change came with the bitter experience of war.

Chapter VII: The Chaos of War as a Pretext for Inflation

The Civil War brought about an even more fateful impact on the history of banking than the War of 1812. The trend of modern thought had led states to become stronger in relation to their citizens, social roles, associations, and regional power structures than ever before. Conflicts erupted amidst these winds of change that witnessed a series of civil wars in Germany, Japan, Italy, and of course, the United States. The outcome of these conflicts resulted in the expansion of government to unprecedented heights. Each of these wars was won on behalf of more centralization, in addition to government backed monopolies that enhanced inflation. In the United States this resulted in an evolution of banking that not only incorporated the practices of the Second Bank of the United States to tax through inflation, but Congress also eliminated state chartered banks as competition in their inflation of currency. Lincoln's Republican Party was born from the Whig Party and essentially monopolized for the Federal government the Whig practice of encouraging bank inflation. This was done through the expansion of credit atop of government securities that served as the reserve base for pyramiding expansions. The banking system born from these policies forged a symbiosis between the federal government and private banks, and created a new fractional reserve banking system that paved the way for the return of an outright central bank that would be embodied in the future Federal Reserve System.

From the onset of the war, the government, banks, and public eagerly sought to back their uncertainties with the security of specie. Banks suspended their payments in specie, which enforced the publics well-deserved lack of confidence in the banks and encouraged them to hold on to what specie they had It was in this environment of needed wartime credit and want of money expansion that Jay Cooke, investment banker and canal and railroad developer from Ohio, and his brother Henry, editor of the leading Republican newspaper in Ohio, operated the newly founded private banking house of Jay Cooke & Company that stood poised to capitalize on the nation's financial desperation. Jay Cooke was one of many American bankers that also established a London house in the 1860s, and through this foreign endeavor he established connections with the House of Rothschild and Barings Brothers.[1] The Cookes were close to Ohio Senator Salmon P. Chase, and when Chase had fought for and lost the Republican presidential nomination in 1860 to Abraham Lincoln, the Cookes lobbied heavily to make Chase Secretary of the Treasury. After Chase accepted the appointment, the Cookes pushed the Ohio Legislature to elect John Sherman to Chase's vacant seat, and Sherman assumed a position on the Senate Finance Committee. Eleutheros Cooke, the Cooke's father, a Whig lawyer, Ohio Congressman from 1831-1833, and member of the Ohio General Assembly wrote:

> I took up my pen principally to say that H.S.'s [Henry's] plan of getting Chase into the Cabinet and [John] Sherman into the Senate is accomplished, and that now is the time for making money, by honest contracts out of the government.[2]

Soon after the war began, the new firm began by floating a war loan of $3 million to the state of Pennsylvania. Like Nathan Rothschild before him, Jay Cooke also aspired rapid ascension to mogul status from the circumstances surrounding wartime bonds, although Cookes avenue to these ends were more intricately linked to securing a government monopoly. Chase engaged Jay Cooke as a special agent for the sale of the bonds the Treasury Department had previously failed in selling. Cooke was granted a commission of one half of 1 percent of the revenue generated from the first $10 million worth of bonds, and three-eighths percent of all subsequent bond sales. Cooke financed a nationwide bond-marketing campaign that hired approximately 2,500 sub-agents to travel through every northern and western state and territory, as well as the Southern states as they came under control of the Union Army. In addition to his far-reaching band of agents, Henry Cooke also secured the support of most Northern newspaper editors to feature lengthy articles extolling the virtues of buying government bonds, and purchased an extensive amount of ads through advertising agencies. The Cookes perhaps invented the art of public relations and mass propaganda as they threw themselves into the task of persuading bond sales.[3]

No sooner had Cooke secured the monopoly of underwriting government bonds that he used Secretary of the Treasury Chase and Senator Sherman to drive a measure for a new national banking system through Congress.[4] The wartime grounds for the establishment of this new system was to structure banks so they had to purchase large amounts U.S. government bonds as a security basis of credit expansion. To circumvent any opposition that might arise from questions of constitutionality, Chase cleverly began his proposal to Congress from the premise, "it is too clear to be reasonably disputed that Congress, under its constitutional powers . . . possesses ample authority to control the credit circulation." To secure this new innovation of, "a provision for circulation," Chase proposed, "Two plans for effecting this object are suggested. The first contemplates the gradual withdrawal from circulation of the notes of private corporations and for the issue, in their stead, of United States notes . . . to be secured . . . by the pledge of United States bonds and other needful regulations." He additionally called for, "a moderate tax, gradually augmented, on bank notes," in order to, "relieve the national from the competition of local circulation." Chase succinctly summarized that, "The central idea of the proposed measure is the establishment of one sound, uniform circulation, of equal value throughout the country, upon the foundation of national credit combined with private capital." It cannot be underestimated just how "central" the aspect of "private capital" was to the design of this new program. Chase continued, "Such a currency, it is believed, can be secured through banking associations organized under national legislation." The interests of these "banking associations," however, were unmistakably private. The government backed monopolies they would fight to secure, and the influence these private interests would exert over government, played out to become a paramount foundation of what we know as modern banking. Chase expounds on the nature of the associations he was proposing for the new system by outlining that any persons with sufficient capital could form them through the purchase of United States bonds, and then "having deposited these bonds with the proper officer of the United States, can receive United States notes in such denominations as may be desired, and employ them as money in discounts and exchanges."

The success of the proposed innovations are apparent in the foresight of those who produced the bill, and how large the scale of their ambitions were. The picture of the system Chase conveyed provided a remarkable window into the future of world banking: "The imprint of the national seal authenticating the declaration borne on each that it is secured by bonds which represent the faith and capital of the whole country, could not fail to make every note as good in any part of the world as the best known and best esteemed national securities." To the delight of the Cookes, the path to these ends that Chase laid before Congress would, in Chase's words, produce, "A steady market for the bonds would thus be established and the negotiation of them greatly facilitated."

Chase acknowledged that these innovations would not come to pass without opposition. His salesman tone becomes increasingly apparent as he closes his argument, reminding Congress that the real problem at hand was not the risk they faced implementing these innovations, but the risk they faced if they did not take a chance with them. "It is not easy to appreciate the full benefits of such conditions to a government obliged to borrow. . . . Rash innovation is not less dangerous than stupefied inaction." Chase then lavished the bankers with praise, as if their actions stemmed from their patriotic convictions to serve the country. "The promptitude and zeal with which many of the existing institutions came to the financial support of the government in the dark days which followed the outbreak of the rebellion is not forgotten. They ventured largely, and boldly, and patriotically on the side of the Union and the constitutional supremacy of the nation over States and citizens." Although it's very difficult to overlook the tremendous profit the bankers achieved through their "promptitude and zeal" they undertook "patriotically", Chase attempted to accommodate their profits stating, "It does not at all detract from the merit of the act that the losses, which they feared but unhesitatingly risked, were transmitted into unexpected gains." Continuing with his plea, Chase concedes, "The Secretary forbears extended argument on the constitutionality of the suggested system . . . of the organization of banking associations to supply circulation secured by national bonds," but then countered with patriotic rhetoric: "Twice already she has paid off a national debt contracted for the defense of her rights; the obligations of that which she now incurs for the preservation of her existence will be not less sacredly fulfilled." In closing, he pleads, "The immediate advantage to the government will be found in the market created for bonds and the support thereby given to the national credit."

Initially, there was substantial opposition to Chase's proposal, but Senator Sherman—whose efforts would one day render him the Secretary of the Treasury— worked tirelessly to win support for the bill. After Sherman delivered a decisive speech to the reluctant Senate, Henry Cooke, who now headed the Cooke's Washington office, wrote his brother:

> It will be a great triumph, Jay, and one to which we have contributed more than any other living man. The bank had been repudiated by the House, and was without a sponsor in the Senate, and was thus virtually dead and buried when I induced Sherman to take hold of it, and we went to work with the newspapers.[5]

The Cookes expounded great energy and large sums of money in advertising to induce newspapers to flood the press with articles and editorial support that praised the merits of the new national banking system. Cooke stated:

> For six weeks or more nearly all the newspapers in the country were filled with our editorials condemning the state bank system and explaining the great benefits to be derived from the national banking system now proposed.[6]

Every day the Cookes had the relevant editorials put on the desks of every member of Congress from their respective districts. Upon passage in the Senate by a narrow 23-21 vote, the Act created a single national currency to eradicate the problem of notes from multiple banks circulating all at once. The Act established national banks that could issue notes which were backed by the United States Treasury and printed by the government itself.

The government quickly took advantage of being on a fiat standard and passed the Legal Tender Act of 1862 that authorized Congress to print $150 million of United States currency that soon became known as "greenbacks" to pay for the growing war deficit.[7]

The Act mandated that paper money be issued and accepted in lieu of gold and silver coins. President Lincoln addressed Congress with a special message about financing the war.[8] "I have signed the joint resolution to provide for the immediate payment of the army and navy . . . The joint resolution is a simple authority . . . to a direction to the Secretary of the Treasury to make an additional issue of one hundred millions of dollars in the United States notes." Despite his actions, the President had reservations about the path the nation embarked on:

> While giving this approval, however, I think it my duty to express my sincere regret that is has been found necessary to authorize so large an additional issue of United States notes, when this circulation and that of the suspended banks together have become already so redundant as to increase prices beyond real values, thereby augmenting the cost of living to the injury of labor, and the cost of supplies to the injury of the whole country. . . . It seems very plain that continued issues of United States notes . . . must soon produce disastrous consequences. And this matter appears to me so important that I feel bound to avail myself of this occasion to ask the special attention of Congress to it.

The address of the president reveals that he was in line with the recommendations of Chase and Sherman on how to proceed with the economy. "In order to raise money by way of loans most easily and cheaply . . . a currency can be furnished by banking associations. . . . The securing of this circulation, by the pledge of United States bonds, as therein suggested, would still further facilitate loans by increasing the present and causing a future demand for such bonds." The rate of inflation produced by the private associations in their infant stage, however, would not be enough. Although it was resolved that the emergency issue the president referenced would be the first and last, the siren song of the government producing its own money led to a second issue of $150 million in July, and still a third $150 million in early 1863. Greenbacks began to depreciate in terms of specie almost as soon as they were issued. The bills were backed only by the national government's promise to redeem them in exchange for specie sometime in the future, and their value was dependent on public confidence in the government which was often dictated by news from the outcomes of battles. Greenbacks depreciated by half by the middle of the Civil War. Over the entire war, the money supply rose from $45.4 million to $1.773 billion.[9]

The new system needed to be refined, and in this effort the Cookes gained a valuable new insider. The National Currency Act of February 25, 1863 established:

> *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That there shall be established in the Treasury Department a separate bureau, which shall be charged with the execution of this and all other laws that may be passed by Congress respecting the issue and regulation of a national currency secured by United States bonds. The chief officer of the said bureau shall be denominated the Comptroller of the Currency.[10]

The first Comptroller of the Currency was Midwest banker Hugh McCulloch, whose family name bore the title of the landmark Supreme Court decision *McCulloch v. Maryland* that sided in favor of the Second Bank of the United States. The court invoked the Necessary and Proper Clause of the Constitution to say that it granted Congress implied powers (as it pertained to the Bank) to create a functional national government, and that states in turn could not impede such Federal power. You will also recall that our examination previously revealed that James McCulloch ran the hustle for the trio at the Baltimore branch of the Second Bank of the United States that scandalously redeemed millions in specie from Philadelphia, Boston, and New York branches for loans made in Baltimore. Hugh McCulloch was also an insider that had Cooke and London connections. In his first annual report as Comptroller, McCulloch set out to rectify parts of the National Currency Act that did not serve bankers.[11] McCulloch complained about the parts of the act, "which confers banking powers upon the banks," that, "bankers find it difficult to interpret. . . . It has been found difficult to give a precise meaning to the language." From this premise he recommended revisions, amendments, and striking out sections of the legislation that he deemed, "hardly just to the banks." Key amongst his objections, were the sections that advocated consumer protections against usury. McCulloch states, "Few questions have been more frequently and thoroughly discussed, or in relation to which there has been a greater difference of opinion among intelligent men, than the question of usury." He surmised that many of the differences between himself and the members of Congress with opposing views came from where they were from and their scope of experiences: "The opinion of one who has lived in Germany or England, where capital is abundant, and no usury laws have existed for years, will, of course be very different." Regardless of their backgrounds, however, McCulloch maintained that the one thing they shared in common was that their banker constituents held united opinions on the matter: "There is scarcely a banker or money-lender in the country who has not often been restrained in his charges, for the money he has loaned, by the usury laws which have been in force." To these ends, McCulloch proposes, "I further recommend that the Secretary of the Treasury, or a commission to be created by Congress, be authorized temporarily to relieve the national banks in the cities of Philadelphia, New York, Boston, &c., from all penalties for usury." In this way, he advocated that "The judicious use of the power possessed by the Bank of England," should be the, "same power, prudently and resolutely wielded by the banks of New York."

President Lincoln reciprocated the conclusion that the new banking laws and the private associations of bankers were correct in their scope, but that more needed to be done to perfect the system they were out to establish. "The enactment by Congress of a national banking law has proved a valuable support of the public credit . . . Some amendments may be required to perfect existing laws, but no change in their principles or general scope is believed to be needed."[12] Salmon P. Chase's Annual Report of the Secretary of Treasury that followed pushed for a new National Bank Act enhancing the principles that the entire nation's currency be based upon, "the authorization of national banking associations, to which the capital of corporations now issuing notes for circulation might be transferred . . . to have a national currency secured by a pledge of national bonds."[13] The Secretary requested Congress for "the repeal of the section which connects the issues of national currency in any degree with State banks." The National Bank Act of June 3, 1864 that followed read, "AN ACT TO PROVIDE A NATIONAL CURRENCY, SECURED BY A PLEDGE OF UNITED STATES BONDS, AND TO PROVIDE FOR THE CIRCULATION AND REDEMPTION THEREOF."[14] It established a system of fractional reserve banking that "every association," required, "an amount equal to at least twenty-five per centum of the aggregate amount of notes in circulation." The system the bankers contrived to facilitate this scheme of inflation upon a twenty-five percent reserve proved brilliant. "*And be it further enacted*," the law Act continued, "That each association organized in any of the cities named in the foregoing section shall select, subject to the approval of the Comptroller of the Currency, an association in the city of New York, at which it will redeem its circulating notes at par. And each of such associations may keep one half of its lawful money reserve in cash deposits in the city of New York."

The new national banking system provided for the chartering of national banks by the Office of the Comptroller of the Currency. McCulloch also advocated the same proposition favoring New York banks advocated by Chase. All banks, he concluded, "should redeem in New York. The banks ought to be compelled by law to retain a part, if not all the coin received by them, for interest on their gold-bearing bonds."[15] The national banking system created three sets of national banks: *central reserve city*, which was only New York; *reserve city*, for cities with large populations; and *country*, that included all other national banks. The provisions of the system created an inverted pyramid of country banks keeping reserve ratios on top of reserve city banks, which in turn expanded on top of New York City banks. This meant, for example, if New York City banks inflated by expanding their notes and deposits, they would not be limited by having to pay out of their reserves when their money was used and deposited in other banks that would eventually call upon the bank of origin for redemption. Instead, when reserve city banks received these funds they would bolster their reserves by increasing their deposits in New York City banks so that they could pyramid on top of their increased deposits. Country banks, in turn, would similarly bolster their reserves so they could pyramid their loans by depositing with reserve city banks that would in turn deposit with a New York City bank to increase their loaning potential. This created a propensity of all banks to be "fully loaned up," or to expand as much as legally possible in accords with the limits imposed by the legal reserve ratio. Previously, any expansion or pyramiding of notes was severely limited by a bank's reserves that had to back redemption in specie by other competing banks and the general public. But now, this revolution in American banking established that reserve city banks could keep half of their reserves as deposits in New York City banks, and country banks could keep most of their deposits with reserve city banks, so that all national banks in the country could now inflate uniformly and relatively unchecked by pyramiding in layers on top of a relatively small base of reserves in New York banks. Every national bank was obliged to redeem the obligations of every other national bank at par, agreeing to receive all notes and deposits for dues and taxes with the exception of payments in custom duties which had to be paid in gold to secure a government fund to pay interest on government debt. The amount of bank notes a national bank was allowed to issue depended upon its capital (regulated by the act) and the amount of bonds it deposited with the Comptroller. Under the original acts, the minimum capital requirement for national banks was $50,000 for banks in towns with a population of 6000 or less, $100,000 for banks in cities with a population ranging from 6000 to 50,000, and $200,000 for banks in cities with populations exceeding 50,000. [16]

It is noteworthy to examine just how rapidly bankers moved upon the new legislation to overhaul the banking system. President Lincoln addressed Congress stating, "Changes from State systems to the national system are rapidly taking place, and it is hoped that, very soon, there will be in the United States no banks of issue not authorized by Congress, and no banknote circulation not secured by the government."[17] We also gain insight from the reports of Hugh McCulloch of how the new system was falling into place. [18] McCulloch proudly reported, "It is an interesting fact, that this great change is taking place- this great financial revolution, if I may so call it, is being accomplished."

He details the scope of the financial revolution by conveying, "Since my last annual report two hundred and eighty-two banks have been organized, and one hundred and sixty-eight State banks have been changed into national ones. Of the one hundred banks last organized, sixty-seven have been conversions of State banks, and nearly all the papers now being filed are for the change of state banks into national associations." The success of implementing the sought after system is reflected in the Comptrollers statement, "the indications are now unmistakable that the time is not far distant when the people of the United States will be everywhere . . . supplied with one uniform credit and as solvent as the nation." More remarkable still, we learn that the new innovation the bankers were concocting was moving the nation towards the unfathomable notion of backing the currency- not upon specie and precious metals- but upon *faith*. McCulloch reveals, "Of course this system depends for its success upon the maintenance of the faith and credit of the nation." To further advocate the sobering truth of this statement- that the backing of money was being replaced in the collective faith of the new system engineered by the bankers themselves- McCulloch consoles us that "If these fail, the national banking system will fail; but it will go down with all other important interests, and will be but a part of the general wreck."

We further learn the extent that these architects of the new financial system favored the private interests of the banking community over the whole of the nation. McCulloch confronted the common worries of citizens about the new banking system stating, "It is a common objection to the national banking system . . . the field it might profitably occupy, by the continued circulation of its own notes. Why, it is asked, should not the government . . . save the interest which otherwise will go to the banks?" In an answer that borders on recklessness, he concedes, "Banks of issue, badly and dishonestly as many of them have been managed, and disastrous as have been the failures which bad management and dishonesty have produced, have still been of unquestionable advantage to the people." Harkening the same tone Chase adopted to plea that the actions of bankers were based upon their sacrificing notions of patriotism, profit thought they did, McCulloch also defends the interests of bankers: "It is an interest which has stood by the government in its struggles." According to McCulloch, it is the government that is in need of the symbiosis that emerged with bankers. "Governments should not be bankers. None has existed which could be safely trusted with the privilege of permanently issuing its own notes as money. . . . Under popular institutions like ours no more dangerous, no more corrupting power could be lodged in the hands of the party in possession of the government." While conceding that, "The enormous expenditures of the government, and the great advances in prices since the commencement of the war, have made many persons suddenly rich," McCulloch voices concern that government action within the sphere now occupied by banking associations would be dangerous: "What guaranty would there be that this authority would be honestly and judiciously used?" While his argument seems to have a somewhat convincing conclusion, there is an all too obvious absence of a suitable counter of how vesting authority in private interests within the new system would more anymore trustworthy to be "honestly and judiciously used." Actually, McCulloch was outspoken of how much he wanted the business of the nation's currency removed from political influences. "It is of the greatest importance that the national currency system should be independent of politics and freed from political influences. To effect this, and to facilitate the business of the banks with the Comptroller, I am clearly of the opinion that the bureau should be made an independent department, and removed from Washington to Philadelphia or New York." In December of 1863, McCulloch circulated a letter to bank officials across the nation as a guide in the management of the new national banks that advocated his conviction that bankers manage their banks and businesses with no political partiality, and that the management of the banks become increasingly distanced from the influence of Washington. The direction of the banking in the United States continued in that direction over the years to the extent that the letter was reproduced and circulated by the American Exchange National Bank of New York in 1923.[19] Not surprisingly, the Office of the Comptroller of Currency continued to becoming increasingly independent of government oversight throughout the years.[20]

The successive acts of legislation passed to establish the new system effectively wiped out all competition. An act passed on March 3, 1865 entitled AN ACT TO AMEND AN ACT ENTITLED, "AN ACT TO PROVIDE INTERNAL REVENUE TO SUPPORT THE GOVERNMENT, TO PAY INTEREST ON THE PUBLIC DEBT, AND FOR OTHER PURPOSES," effectively ended the businesses of state banks by imposing a 10 percent tax on their notes to effectively force all non-federal currency from circulation: "*And be it further enacted,* That every national banking association, state bank, or state banking association, shall pay a tax of ten per centum on the amount of notes of any state bank or state banking association."[21] It provided, however, that banks could be exempt, "which shall apply before the first day of July next for authority to become a national bank under the act entitled "An act to provide a national currency secured by a pledge of United States bonds, and provide for the circulation and redemption thereof." This increased the number of banks that became national banks through their necessity to remain functional in the new monopolized system, while the remaining state banks kept deposit accounts at national banks to redeem national bank notes in order to survive.[22] Essentially, state banks that could not produce the capital for the reserve requirements to become a national bank intensified the national banking system by their reserves becoming deposits at national banks in order to redeem their outstanding obligations in cash. The number of national banks rose from 66 immediately after the Act, to 7473 by 1913.[23] Through these measures, the Republican Party used the wartime emergency to fulfill the Whig-Republican dream of a federally controlled central banking system capable of inflating a uniformed supply of money and credit.

The new system that required banks to purchase large amounts of bonds to inflate upon not only tied the nation's banks and the federal debt in a close symbiotic relationship, it also made the Cookes substantially rich. Perhaps as much as $2 billion in bonds were bought and underwritten by Jay Cooke during the war, spawning the popular motto, "as rich as Jay Cooke." In addition to Sherman and Chase whom acted as insiders for Cooke interests, Hugh McCulloch resigned his office as Comptroller on March 8, 1865 and also assumed the office of the Secretary of the Treasury. After serving as the Secretary of the Treasury from 1865 to 1869, he then became the head of the Cooke's operation in London. The Cookes forged a lucrative relationship with Ulysses Grant that wielded great influence during the Grant administration. The significance of the new banking system they lobbied into existence cannot be understated. While the inflationary effect of greenbacks were eliminated by the resumption of specie payments fourteen years after the war, this system that remained in place until 1913 paved the way for the founding of the even more encompassing Federal Reserve System. As inflation from the new banking system rose, it encouraged a "race to the bottom," that is, lower and looser standards to avoid the inevitable reckoning of malinvestment from the easy money banks loaned, or to put it differently, the money they *sold.* The centralization of the system was limited and provided no governmental central bank to coordinate inflation, to act as a lender of last resort, or bailing out banks in trouble. Bank-created booms turned into recessions, which forced banks to contract their loans and assets and deflate in order to save themselves. Accordingly, the efforts of the banking lobby, coupled with attempts to steer the economy at large, resulted in changing the laws that governed the relationship between bank capital, bonds held, and note issuing in 1874, again in 1882, and yet again in1900.

Chapter VIII: Blame it on the Business Cycle

The Railroads were the first wave of large-scale government backed cartels whose carcinogenic growth was cultivated by banks that provided the enormous inflationary created capital. The directors of the Union Pacific Railroad had formed a construction company called Credit Mobilier of America that received contracts from Union Pacific to build its transcontinental railroad. In 1869, Jay Cooke expressed his monetary philosophy of indulging in bank-created money as it pertained to the expansion of his Northern Pacific Railroad:

> Why should this Grand and Glorious Country be stunned and dwarfed- its activities chilled and its very life blood curdled by these miserable "hard coin" theories- the musty theories of a by gone age- These men who are urging on premature resumption know nothing of the great growing west which would grow twice as fast if it was not cramped for the means necessary to build Rail Roads and improve farms and convey the produce to market.[1]

Just two years after the completion of the first transcontinental route in 1869, allegations arose that Union Pacific gave or sold shares of stock to members of Congress in exchange for massive federal land grants and subsidies for the cost of railroad construction. Credit Mobilier had overcharged Union Pacific by more than $20 million which handsomely benefitted shareholders in Congress, including Schuyler Colfax, who was then Speaker of the House. Amidst the scandal, confidence in railroad financing was weakened.

European investors, who had played a large role in financing American railroads and spurring their artificial boom, were also key to instigating the financial crash that was reckoned by the realities of the market. After the United States emerged from the Civil War, European investors made large purchases of American railroad securities. These investments reached their peak with an influx of German funds that were available for overseas investment after French indemnity payments from the Franco-Prussian War (1870–1871) provided an artificial lift to the German economy. This upsurge also led to an artificial real-estate frenzy in central Europe that made investments closer to home seem increasingly handsome compared to the scandal-ridden American railroads. When the real estate bubble in the capitals of Central Europe finally burst, it resulted in a European banking panic in 1873. American financiers, like Cooke, who anticipated continued European investment, found it difficult to stay solvent when their European funds failed to materialize. Cooke's overbuilt Northern Pacific—in addition to help from Cooke's rival, the Philadelphia based Drexel, Morgan & Company— brought about the crash and bankruptcy of the House of Cooke and ushered in the Panic of 1874.[2]

While Cooke had strongly aligned his banking interests with the Republican Party, J.P. Morgan was prudently connected in both parties and rose to control the prominent investment firm in the United States. By the turn of the century, the political economy of the United States was dominated by two competing financial aggregates: the Morgan group that began in investment banking and then expanded into commercial banking, railroads, and mergers of manufacturing firms; and the Rockefeller forces that began in oil refining, then ascended into commercial and investment banking through an alliance with Harriman interests and the Kuhn, Loeb & Company. Even the political history of the United States from the late 19th century until World War II can be viewed in relation to each administration's ties to one of the sometimes cooperating, more often conflicting, financial groupings: Cleveland (Morgan), McKinley (Rockefeller), Theodore Roosevelt (Morgan), Taft (Rockefeller), Wilson (Morgan), Harding (Rockefeller), Coolidge (Morgan), Hoover (Morgan), or Franklin Roosevelt (Harriman–Kuhn, Loeb–Rockefeller).

Like the London-based Rothschild and Barings banks, Morgan became part of the power structure not only in the United States, but in many countries throughout the world it became increasingly plain that the dealings of American bankers and their agitated designs for American government were linked with the larger interests of international bankers. By 1890, Morgan was lending to Egypt's central bank, financing Russian railroads, floating Brazilian provincial government bonds and funding Argentine public works projects. Indeed Morgan's own father, Junius Morgan, was linked to European banking through his partnership with George Peabody who was the largest trader of American securities in the world and ran the premier American banking house in London. Although there is no statue of George Peabody on Wall Street, there is one in London opposite the Bank of England. After Julius' death, J. P. Morgan continued his father's operations and took on a British partner, Edward Grenfell, who was a long time director of the Bank of England. Like Morgan, Grenfell also secured his influence and prosperity through the stature of his influential father, Henry Riversdale Grenfell, who served as Governor of the Bank of England.

To the press and public at large, J.P. Morgan was not outwardly an agent of European banking powers. August Belmont (Schönberg), for whom the prestigious Belmont Stakes held at New York's Belmont Park racetrack is named after, was a famous and well established apprentice to the Rothschild's from his youth in Germany. When Belmont participated in a financial operation, everyone knew it was a Rothschild's transaction, whereas when J.P. Morgan & Co., and/or the Kuhn, Loeb Co. handled the transaction it was assumed to be an American endeavor that the Rothschilds were not involved in. Actually, it is evident that August Belmont, J.P. Morgan, and the Rothschilds worked with one another on numerous occasions. Some historians have even concluded that Morgan was a mere front man like Belmont based upon how out of proportion his assets were after his death compared to the enormous wealth his business wielded in his lifetime. Such conclusions, while not definitive, are nonetheless common for historians who are left to deduce the motives and actions of key figures whose propensities to protect their endeavors lead them to cloak their true ambitions behind lofty ideals, to be secretive, or flatly dishonest. It is further clear that these interconnected interests, while often in competition against one another, also cooperated amongst themselves in the interests of securing the favor of governments to implement and expand their global ambitions.

These bankers collectively discovered that the cartelization of the national banking system was still not sufficient for their ambitions. Inevitably, they pushed the limits of fractional reserve banking, but when the realities of the market rendered their investments unsound, it induced depositors to withdraw their money at rates the banks were hard pressed to keep up with. Through the course of the historical episodes we will investigate, speculation failures on behalf of bankers- first with the railroads, and later with Wall Street- became such a regular occurrence that it was deemed the "business cycle," although we will come to see that the regularity of this cycle actually testifies to the unyielding behavior bankers exhibit practicing fractional reserve banking. Rather than altering their course, bankers sought innovations to establish a mechanism to assure a greater expansion of the money supply- especially during panics and depressions- when they needed to be bailed out and avoid contraction.

The causes of the banks ailments were more readably identifiable before bankers could come to a unified consensus about what had to be done about it, or who to blame. John Jay Knox, Comptroller of Currency, admitted in his annual report:

> During the past few years great corporations have been organized by authority of law, with the advantages of immense subsidies, but almost wholly without restrictions, the

> law-making power having been led to believe that the corporations authorized would contribute as much to the public good as to their own profit. But it has been found that overgrown corporations are conducted . . . chiefly for the benefit of the few officers and directors . . . and it is the great economical problem of the day how to correct a monstrous evil.[3]

While admitting that the general atmosphere of business held these qualities, more or less reaffirming the social consensus in wake of the railroad debacle, he fell short of attributing the same of bankers. Given the circumstances surrounding the recent bank failures, Knox's report explains, "The bankers of the city of New York, who were burdened with the load, could not respond to the demands of their creditors, the numerous holders of similar securities became alarmed, and the panic soon extended throughout the country." Knox maintained that the banks had the money on their books, but they could not access their funds when their customers wanted them. "The banks of the city of New York, are to a large extent invested in call loans," Knox explained. However, had they, "been invested in funds convertible into cash upon demand, the disastrous results of the late panic would have been largely avoided."

Knox, while bringing about some minor criticisms of how banking was conducted, largely defended the position of the bankers in the wake of the crisis. This comes as little surprise once we learn of his banking background, and how he ascended to his position through being a staunch supporter of Secretary of Treasury, Salmon P. Chase. Chase appointed Knox to a clerkship in the Treasury Department after reading an essay Knox wrote in 1862 that advocated a national banking system. Knox's report as Comptroller defended the integrity of bankers stating, "A private banker solicits and obtains business on the strength of his good name, and it is well understood that the funds placed in his hands are to be used at his discretion, the depositors relying upon his business sagacity and judgment." While conceding, "The Bank of Amsterdam is said to have been bankrupt for fifty years prior to the announcement of its failure," Knox upheld the contention that industry players were apt to exercise a monopoly on policies that would steer banking policy. "The banks of England, of Scotland, and other countries of Europe, are managed by men who have had long experience in that branch of business." Furthermore, Knox advocated, "unless corporations shall unite and insist upon legitimate methods of conducting business," this was a point he was adamant about- *that the corporations must be in charge-* then, "the laws of congress in reference thereto will be likely soon to become inoperative- such enactments being observed in their true spirit by the few, while the many evade them and thus invite a repetition of similar disasters." As we will see through the course of our study, governing posts related to banking continued to be held by men like Chase and Knox; bankers who foremost upheld the interests of the industry and persistently argued that what was good for the banks was good for the whole of society. This helps explain the unaltered course of government action that sought to modify circumstances to help the industry uphold its connections to Wall Street and speculation, rather than question fundamentals about how the industry operated.

Finally, Knox's explanation of banking difficulties addresses a key issue that is fundamental to fractional reserve banking. "While the law permits banking corporations to use a certain portion of the deposits of each creditor, and realize a profit therefrom," he begins, "it provides also that they shall keep a certain other portion of such deposits on hand for the prompt payment of the creditor whenever it shall be demanded." While identifying this key principle, he went on to maintain the same position that would prove impossible for bankers to answer: "The correctness of this principle of law is evident, but the difficulty is to ascertain the exact amount necessary to keep on hand." This argument would be reiterated until such time that bankers installed a governmental mechanism that ended the debate by providing for an expansion of money when the need of banks exceeded their reserves. Exactly how much security banks need until they will be held responsible has been a question the industry has not been forthcoming in answering. Their preference, supposedly for the betterment of the economy as a whole, has been to have an open ended commitment of the government to bailing out banks in need.

The origins of the banker's drive to establish such a system are more readily identified through the actions and writings of the Secretary of Treasury, William Richardson. During the panic of 1873, Richardson controversially released $26,000,000 in paper money reserves as an inflationist measure to stem effects of the general panic. Debate ensued whether Richardson had the authority to do so, although his defense was that Congress had not passed a law that explicitly forbid him from doing it. Richardson's annual report as the Secretary of Treasury, however, raises doubts about the origins of his inflationist measures, in what seems to be a rebuttal to his critics that under the pressure of bankers he was foremost concerned with staying within the authority of the Treasury Department. He detailed how great pressure was brought upon the Treasury to afford relief by issuing United States notes. [4] "The first application came from a number of gentlemen in New York, suggesting that no measure of relief would be adequate that did not place at the service of the banks of that city twenty millions of dollars in United States notes." These bankers pledged to back their loan from the government with a pledge of clearing-house certificates that they would jointly be responsible for. Subsequently, the New York Produce Exchange made a proposition to accomplish the same result in a different form, and also requested, as others had before, that the Secretary should pay at once the twenty-million dollar loan. Richardson, despite his controversial release of funds, did not explicitly admit that he was against using the government's tax revenue for these purposes, but only stated that Congress had not granted him the power to do it on a wide scale:

> Should this request be granted a hundred other places in the country might, with equal propriety, ask for the same relief . . . and the public money, raised by taxation only for the purpose of carrying on the Government, would be employed to a very large amount in a business which Congress has not given the Secretary of the Treasury any authority to engage in.

While the Secretary may have agreed with the sentiments of the banking community and in fact acted in an inflationary manner, there were no shortage of banks that wanted additional cash that the Treasury did not have. Richardson reported, "There is a prevailing sentiment that more elasticity should be given to the volume of the currency, so that the amount in circulation might increase and diminish according to the necessities of the business of the country." To those ends, the Secretary advised that in cases of emergency the Treasury should be able to enlarge the paper-money circulation with national banks by a pledge of United States bonds "bearing no interest while so pledged, or subjecting the banks to special taxation."

Richardson's tenure as the Secretary of the Treasury ended in scandal, and with his resignation President Grant quietly appointed him Justice to the United States Court of Claims, where he served for the rest of his life. Secretaries came and went, but the cycle of bank troubles persisted. The Department of the Treasury equivocates, "Such cycles of expansion and panic continued for the next thirty years, and were the basis for the creation of the Federal Reserve in 1913."[5] Henry Cannon, Comptroller of the Currency and banking insider that later ascended the presidency of Chase National Bank of New York, confronted the next national panic that occurred in 1884. [6] Cannon's annual report emphasizes with the plight of the banks: "All stocks and securities called upon the New York Stock Exchange were greatly depreciated under the pressure to sell, and it was practically impossible for the banks to collect their call loans, as their borrowers could not obtain money by sale of their securities except at ruinous rates." His attention to the particulars of the panic not only confirms that the banks unabatedly continued the same fundamentals that caused the last monetary crisis, but as we will see, they would share the same characteristics of crises to come.

> It is apparent, however, that a repetition of some of the same circumstances which brought about the monetary crisis of 1873 has been largely influential in causing the present crisis. . . . There is little doubt that one of the causes which led to the local disturbances among the banks . . . was their intimate relation in many instances to the New York Stock Exchange. . . . Lines should be closely drawn between legitimate business and speculation. . . . The proper relation of the New York Stock Exchange to the business of the United States is yet to be determined.

Such are the circumstances of the industry that proved futile to rely upon policing their actions as a deterrent to over speculation and disaster. Cannon admitted, "bank examiners throughout the country were directed to exercise the utmost vigilance in the districts to which they were assigned . . . None of the disclosures made by the examiner's reports, however, gave the Department an adequate idea of the dangerous character of the business which was being carried on."

As a forerunner to the Federal Reserve, bankers created a Clearing-House Association to bring order to a tangled web of exchanges, using specie certificates to replace gold as the means of simplifying the process of settling bank balances. As crisis, panics, and suspension of payments became increasingly common, members of the Clearing-House Association worked together to devise a plan to shorten the duration of the panics–and more importantly, maintain the public's confidence in the banking system. Essentially, the Clearing-House produced a quasi-currency bearing the words "Payable Through the Clearing House," backed not by gold, but as a joint liability of all the member banks. Although they represented a potential violation of federal law against privately issued currencies, their ability to rescue banks and stem panics- not to mention the relation bankers enjoyed with the Treasury Department and government insiders- induced the government to overlook prosecution. From innovations these organizations devised and the roles they played in sheltering the industry, we begin to recognize the movement of bankers urging the government to assume responsibilities modeled on the burden of clearing houses.

Cannon's report praises the role of the clearing house and highlights its importance: "By the cooperation of all the members of the Clearing-House Association . . . the prompt action of the associated banks in May of last in issuing these loan certificates had a most excellent effect not only in the city of New York but throughout t the country. . .. The total amount issued was $24,915,000." Cannon reckons, however, the behavior that led to the burden assumed by the clearing-house: "It appears that the president of the Metropolitan National bank had the credit, at least, of being a very large speculator." He explains:

> The trouble at the Second National Bank of the city of New York grew out of a defalcation amounting to $3,185,000 by the president of the bank. The amount of this defalcation was immediately guaranteed and the money paid in by the directors. Owing to this prompt assistance the bank did not suspend, and is going on with its business in a solvent condition. As far as the office is advised, the president used the money in speculations in Wall Street . . . It appears that the president had access to these securities without check or hindrance, and used them to obtain money for his own private speculations.

Before a powerful consensus emerged amongst bankers to have the government assume the burden of clearing houses national banks, Cannon's report permitted insight to the problems of these responsibilities before they were buried in political rhetoric. Cannon wrote, "The comptroller hopes that the recent troubles growing out of Wall Street speculations will force bankers and brokers of New York, for their own protection, to agree upon a stock clearing-house system, and he believes that the present is an excellent time for the conservative bankers in the city of New York to make a move in this matter." What is fascinating about Cannon's observations is his candid explanation of how futile it would be to try and hold bankers accountable to laws that run counter to the nature of how the industry functions:

> Notwithstanding their vigilance, the most competent examiners are liable to be deceived, and sometimes find it impossible to discover and remedy in time even gross mismanagement of the affairs of national banks. . . . No laws or system of examinations will prevent dishonest men from keeping false accounts and rendering untrue statements, and by means of these and other devices they can conceal from the examiner the fact that they are using the money entrusted to their charge in private speculations until final disaster makes longer disguise impossible. It is thus exceedingly difficult to detect violations of law or misuse of the funds of banks.

Cannon, expounding on the intent behind the provisions of the National-Bank Act, explains, "It contains provisions bestowing certain privileges upon the banks organized under it, and provides many safeguards for the public by imposing on these banks such restrictions as the history of banking throughout the world has seemed to indicate were of a character to create a safe and permanent banking system." In conclusion, however, Cannon explains, "There are many ways of evading this law, and it is physically impossible for the Government to maintain constant espionage over the affairs of the national banks which alone would prevent the violation of this statute." If bankers are to behave, he explains, it can only come from a conviction that it is in their interest to do so: "The surest preventive is to have an honest, active, and competent board of directors. A rouge or a dishonest man, who acquires the confidence of his associates to such an extent that he can appropriate the funds of a bank for his own use without their knowledge or that of the board of directors, can have but little trouble in deceiving the examiner and hiding his peculations from him." This leads him to the crux of the problem with the banking industry that has remained vague, and without clear boundaries or the resolve to establish them, has continued to produce disastrous results. Cannon concedes, "The exact line at which the Government shall interfere and the point at which Government discipline shall commence is a matter of some delicacy to determine."

The emerging trend of national banks seeking to become a subsidized cartel was spurred by the growth of state and non-national banks that began to outpace large Wall Street banks who feared losing financial control of the nation. Cannon's report observed that the circumstances surrounding the panic induced depositors, "to withdraw their accounts from the national banking associations and has largely increased the business of certain State banks." As panics persisted and depositors turned more and more to non-national banks, Wall Street increasingly turned to the government seeking centralization to exert effective control of the monetary system through the power of Washington.[7]

The nation underwent another panic in 1891, and as we might have suspected, the reports of the Comptroller of Currency, Edward Lacey, confirms, "Overtrading and unhealthful expansion were everywhere apparent." The Treasury involved itself in the crisis to such an extent that Lacey wrote, "To relieve this severe monetary stringency the Secretary of the Treasury increased his purchase of United States bonds to such an extent as to almost entirely exhaust the available surplus in the Treasury." The Treasury alone could not stem the panic, and the Comptroller's report conveys that, "the machinery [of the clearing-houses] was kept standing during the whole intervening period ready for immediate use whenever required," and how once again, "it was decided by the associated banks that the exigency made necessary a resort to the issuing of clearing-house loan certificates, for the purpose of settling clearing-house balances."[8]

Just a month after James H. Eckels assumed the office of the Comptroller of Currency in 1893, the country was plunged into another deep financial crisis with the panic of 1893. Eckels annual report for the year expounded upon the magnitude of the panic: "The fright among depositors of the present year appears to have affected all classes of banking institutions alike." This panic successfully consolidated a consensus on the paramount role that an organization like the clearing-houses would have to assume if the financial markets were to carry on in the same manner. Furthermore, it became apparent that the burden of these interventions would need to be regular and while Wall Street and American financial tycoons were not ready to alter their course, the responsibility of banks bailing out banks was becoming too taxing an enterprise, all while the public's faith in the banks was dwindling. Eckels, recognizing the paramount role of the clearing-houses under these circumstances, stood poised to praise their efforts and champion their cause. "The unprecedented condition of the money market," he explains, "called for extraordinary remedies, not only to avert general disaster to the banks but to prevent commercial ruin. This remedy was the issuing of clearing house loan certificates, which were brought into use as in 1873, 1884, 1890-'91, by the associated banks." Eckels proceeded to expound on their role:

> Briefly stated, they were temporary loans made by the banks associated together as a clearing-house association, to members of such association, and were available to such banks only for the purpose of settling balances due from and to each other, these balances under normal conditions of business being always settled in coin or currency.

Working to restore faith in the worthiness of banks, Eckels reported, "The clearing-house Association of New York, in particular, rendered the country a great service," and that as a whole the fundamentals of the system were protected by the safety net the clearing-houses provided: "the weak banks of the association would be, so far as depositors and other creditors were concerned, as strong as the strongest."[9]

Chapter IX: Establishing a Pseudo-Gold Standard

Amidst the turbulent ups and downs of banking and finance that rallied the call of bankers for easier access to money, and the shift of depositors away from national banking to state banks, money and banking were central political issues to the American public. Key to debate was the issue of silver that not only related to inflation and hard currency in the American economy, but also how American banks would fit into the growing trend of international banking that was promoting a gold standard which would be key to implementing a camouflage behind which bankers could change a hard-money system into a less nakedly inflationist system. Bankers sought to create an international gold-exchange standard that would effectively establish a system in the name of gold, while installing a coordinated international inflationary fiat currency that banks would keep in their reserves. Eventually, bankers imposed this fateful system upon the world by the hands of the British in the 1920s, and again by the United States with the Bretton Woods system after World War II. The wealth of nations, thereafter, would be measurable in British pounds or American dollars, not in their reserves of precious metals. While in practice the base currency was purportedly redeemable in gold, Britain or United States would inflate their currency while client states would gladly pyramid their own inflation on top of the United States, or Great Britain. This pseudo-gold standard, however, while fronting the prestige of gold only worked so long as the world held faith in the United States or Britain. During the 1920s most countries maintained their reserves in British pounds, and after World War II in American dollars. This temporarily gave the base country the privilege of exerting a form of economic imperialism over client states using the key money, but both systems failed as the British and Americans lost the reigns of the global economy. To initiate these systems, however, bankers first needed governments to unfetter their ambitions by establishing central banks and basing their currencies solely upon gold to unchain them from the restrictions of silver that could anchor their inflationist schemes. If American bankers were to follow this European trend, it would require an undoing of the public's traditional conception of wealth being tied to precious metals, and a political storm would no doubt ensue.

While Wall Street fought to steer that national economy towards their ambitions, agriculture suffered in winds of change and food prices in the United States tumbled as the supply farmers produced soon exceeded demand. Farmers commonly took out loans against their farms to purchase even more land and more efficient machinery to keep pace with the falling prices of the market. The result of farmers producing more to maintain their standard of living, however, was a higher supply which precipitated the drop of demand— and profits. Under these circumstances there were resonating calls from farmers across the country to expand the money supply by basing America's currency on a bimetallist standard which would allow reserves of silver to expand the money supply. Consequently, higher prices resulting from inflation would favor famers in paying their debt.

The danger for bankers surrounding Populist and Republican calls for silver was that although they too wanted inflation, using silver as the means to back to inflation meant side stepping the bankers' control and keeping inflation within the government's sphere of power. Silver had been demonetized in France, Germany, England and Holland, but in the United States it would not be such an easy sell. In his 1881 inaugural address, President James Garfield promoted bimetallism stating, "By the experience of commercial nations in all ages it has been found that gold and silver afford the only safe foundation for a monetary system." While he clearly understood that there was strong movement to promote a sole gold standard at home, as it was being implemented in Europe, the president asserted, "I confidently believe that arrangements can be made between the leading commercial nations which will secure the general use of both metals." Garfield continued, "Grave doubts have been entertained whether Congress is authorized by the Constitution to make any form of paper money legal tender. . . . These notes are not money, but promises to pay money. If the holders demand it, the promise should be kept."[1]

Garfield aspirations for the nation's monetary system and fighting corruption were dashed by an assignation that ended his presidency shortly after he was inaugurated. Garfield's statement, "Grave doubts have been entertained whether Congress is authorized by the Constitution to make any form of paper money legal tender," was part of a larger debate that was playing out in the nation's courts. While Article I, Section 10 of the Constitution explicitly forbids the states from issuing "bills of credit" (paper or "fiat" money) or making anything but gold and silver coin legal "tender," the argument was made that the Constitution lacked explicit prohibitions against the federal government doing the same. The countering argument was that the national government was powerless to do something that it was not authorized to do by the people. While the Federal government holds the power to do things that are not expressly granted in the Constitution, their actions must be incidental to it; the United States Congress has the power to coin money, but the power of coining money was distinctly different from the power of assigning worth to paper as legal tender. The argument that carried the day was pegged on the outlook that if the government was threatened by the war that inflating legal tender provided a means to wage war; thereby legitimizing the incidental power to create fiat money by Congress's power to carry on war. Justice Field's dissenting opinion stated, "From the decision of the Court I see only evil likely to follow," recognizing the historical trend that once other evils in the past were dispelled, "other measures equally dishonest and destructive of good faith between parties were adopted. . . . They entailed the most enormous evils on the country, and introduced a system of fraud, chicanery, and profligacy which destroyed all private confidence and all industry and enterprise." His dissenting opinion continued:

> History cannot name a man who has gained enduring honor by causing the issue of paper money. Wherever such paper has been employed it has in every case thrown upon its authors the burden of exculpation under the plea of pressing necessity. . . . And why should there be any restraint upon unlimited appropriations by the government for all imaginary schemes of public improvement if the printing press can furnish the money that is needed for them?[2]

Despite the political climate and conventional wisdom surrounding to issue of money and monetary policy, the American populous was characteristically slow to warm up to what had been imported from Europe. The aspirations of international bankers and their counterparts in the United States quickly aligned themselves with these ideas, but in addition to overcoming resistance to implementing a new type of economics that few understood, they also had to attend to the popular appeal of producing more wealth from the abundance of silver in the United States. The Bland-Allison Silver Purchase Act of 1878 that began a shift of Treasury balances from gold to silver was enhanced by the Sherman Silver Purchase Act of 1890 that roughly doubled the Treasury purchase requirement of silver. Greenback treasury notes of 1890 were full legal tender and were redeemable in either gold or silver at the discretion of the Treasury. These acts effectively aggravated foreign financial circles that were based on gold, and were met with disdain amongst the financial elite in the United States. Banks began to insert clauses in loans and mortgages requiring payment in gold. Once the panic of 1893 ensued and bank suspensions occurred, the Cleveland administration used the political climate as a pretense to repeal the Sherman Silver Purchase Act. The Treasury then turned to a J.P. Morgan and August Belmont formed syndicate to prop up government reserves with a shipment of $62 million worth of Rothschild gold. Author Gabriel Kolko referenced the Morgan-Rothschild connection stating, "Morgan's activities in 1895-1896 in selling US gold bonds in Europe were based on an alliance with the House of Rothschild."[3]

The movement towards a gold standard was received by many as plot to enrich the elite at the expense of the common man. The social current of these sentiments were witnessed through an array of discontent, including Frank Baum's *The Wonderful Wizard of Oz*. In the story, a tornado sweeps Dorothy from her farm to Oz ("Oz" is the abbreviated form of ounce, a standard measure of gold), which symbolized the turbulence of the bimetallism monetary policy debate of Baum's time. The Yellow Brick Road represented the gold standard that leads to the Emerald City, Oz's political center. Dorothy wears silver shoes that symbolize the popular desire to overcome the evil of a gold standard with a bimetallic system, and to achieve this she musters the support of a scarecrow that represents farmers, a woodman made of tin that represents workers dehumanized by industrialization, and a cowardly lion represents politicians (most likely William Jennings Bryan) that cower to the witches of the west and east, symbolizing railroad and banking moguls, and the Wizard, likely the president or political establishment, that can magically manipulate circumstances behind closed doors.

Political resistance played out in the emergence of the Populist Party. At the formative convention of the Populist (or People's) Party held in Omaha, Nebraska on July 4, 1892, the party adopted the agrarian concerns of the Farmers' Alliance with the free-currency monetarism of the Greenback Party that explicitly endorsed the goals of the urban based Knights of Labor. Their principles, that came to be known as the Omaha Platform, included a call for the abolition of national banks. In the climate of these national sentiments, William Jennings Bryan arose to challenge the gold standard that symbolized for so many the plot of Wall Street to enslave Main Street. When he delivered the famous "Cross of Gold" speech at the momentous Democratic Convention of 1896, he won the nomination and gained the support of the Populists that abandoned their Omaha Platform on the basis of a single-plank free silver platform. In his compelling speech, Bryan fired against the gold standard aspirations of the bankers, who he claimed, were out to "crucify mankind upon a cross of gold":

> What we need is an Andrew Jackson to stand, as Jackson stood, against the encroachments of organized wealth. . . . If they say bimetallism is good, but that we cannot have it until other nations help us, we reply, that instead of having a gold standard because England has, we will restore bimetallism, and then let England have bimetallism because the United States has it. If they dare to come out in the open field and defend the gold standard as a good thing, we will fight them to the uttermost. Having behind us the producing masses of this nation and the world, supported by the commercial interests, the laboring interests and the toilers everywhere, we will answer their demand for a gold standard by saying to them: You shall not press down upon the brow of labor this crown of thorns, you shall not crucify mankind upon a cross of gold!

Bryan called for inflating greenbacks atop of increased silver reserves and appealed to evangelicals through his rhetoric to stamp out personal and political sin. This did anything but draw upon the party's traditional base, and changed the dynamics of the traditional platforms that stemmed from Whigs v. Democrats from about 1832 to 1854, and then Republicans v. Democrats from 1854 to 1896. Traditionally, Republicans were anti-immigrant prohibitionists, favored tariffs and inflation, and referred to themselves as "the party of great moral ideas." Democrats dismissed Republican ideals, upholding that the Democrats had the party of "personal liberty." Drawing upon a large base of Catholic and Lutheran immigrants, the party rejected the Republicans as religious bigots that were trying to restrict immigration of Germans and Irish, take away their liquor and beer parlors, parochial schools, and ruin their savings through inflation and tariffs that restricted access to cheap foreign goods. Democrats, who under

Cleveland were the party of hard-money and laissez-faire capitalism, stood in shock alongside Catholics and Lutherans who looked on as the party of their fathers was lost to cries for inflation atop of silver, and overt Protestant pietism with strong Southern evangelical overtones that even began to call for prohibition. The party of Jefferson, Jackson, and Cleveland was tattered. The ensuing power vacuum provided the opportunity the financial elite needed to forge a new corporate statist ideology of cartelization through partnerships with big government and business that set the mold for the rest of the twentieth century. Prior to 1896, the voter turnout was remarkably high, sometimes between 80 to 90 percent of eligible voters. More remarkable still, was that average citizens exhibited intense interest and understandings of economic issues that included banking, monetary policy, and tariffs. Prior to this election, candidates did not, as we are accustomed to today, obscure their ideologies with centrist rhetoric to appeal to independent voters. During this era there were very few independent voters. To win an election you brought out your vote by intensifying your ideology during campaigns whereby any centrist rhetoric would have isolated constituents to stay home in disgust.

Morgan forces, whose ambitions held no loyalties to any political party, opposed the Bryanites and their anti-Wall Street bank platform, and approached the McKinley-Rockefeller forces through their young proxy, Congressman Henry Cabot Lodge of Massachusetts. Lodge offered Morgan's support for McKinley provided he pledged himself to a gold standard—Cleveland's basic economic issue— and drop the Republican Party's silver and greenback tendencies. McKinley struck the deal, and dually modified Republican hostility to immigration and remained quiet on the issue of prohibition. In doing so, the Republicans changed with the demographics of the electorate that was growing in the Democrats favor due to immigration and higher birthrates. After dropping the prohibitionists and adopting gold, the Republicans moved rapidly toward the center becoming a centrist party that would dominate until the depression election of 1932. Bryan lost when many dismayed Democrats stayed home or voted for Republicans for the first time in their lives. The election of 1896 began a new era in Americans politics where once entrenched parties moved towards the center, and in addition to marking the beginning of a great downslide of voter turnout rates that persists to the present day, both parties fell in line behind the bankers and economics faded from being the political issue it once was.

As the proponents of inflationary banking stood poised to assert their aspirations in the wake of their gold standard victory, we will notice that their arguments were notably advocating the superiority of a system based upon science. As G.K. Chesterton observed, "The rich men want a scientist to write them a *letter de cachet* as a doctor writes a prescription."[4] Before we proceed into an examination of their works, it would benefit us to understand the intellectual climate of the day that increasingly championed science as a "progressive" means to supersede the limitations of outdated institutions. While science has obvious benefits, and it is not our intent to down play its usefulness, there is another argument to be made about relying upon scientific methods in fields where it is incompetent. Because the study of economics is notably hinged upon human behavior we should readily caution its use to understand factors that are ultimately based upon motives that cannot be scientifically measured. It would warrant sufficient suspicion to learn that the movement we are examining was based upon advocating a new "scientific" approach to banking, although studying the intellectual climate of the time reveals that economics was actually part of a broader reliance upon science that characterized the Progressive Era. We will learn that at the same time that parties with vested interests were trying to sell their new approach to banking in scientific terms, a paradigm shift was occurring as economic scholars were bringing new ways of conceptualizing economics to American shores.

Thomas Kuhn, whose influential 1962 *The Structure of Scientific Revolutions* popularized the term "paradigm shift" which has since become an English-language staple, argued that this new revolution of scientific thought was identifiable by a "paradigm shift" that changed our ways of looking at the world through the construction of new imagery, language or assumptions that describe it. Victorians were excited by the increasing use of statistics, even from a philosophical point of view, because their worthiness was perceived as being modern, intellectually astute, and they suggested iron clad conclusions about government action. Even today statistics do not hold the exciting ring they once had, but suffice it to say that our modern welfare state is unthinkable without them. Irrespective of how statistics were and still are used to trump arguments on scientific grounds, Kuhn argued that the perspective of the inquirer developed science, not objective facts. Put another way, the hype of persuasive statistics and numbers is countered with the famed expression, "There are three kinds of lies: lies, damned lies, and statistics."[5]

These arguments of persuasion were incorporated by the prominent financial powers of the time that used their powers to establish a cartelized economy of grants and exclusive privileges from the government that won them far greater fortunes then they could have possibly achieved on the free market. Government was steered by big business that promoted the ideas pouring out from the graduate schools of Germany that glorified a larger state implementing a harmonious "middle way" between dog-eat-dog laissez-faire capitalism and proletarian Marxism— allegedly for the benefit of all. The evolution of inflationary banking schemes and the economic schools of thought that accompanied them followed the common trend of originating in Europe, then making their way across the Atlantic to the United States where vested interests who were connected to European finance were all too eager to implement them.

The neoclassical school of economics was imported and came to dominate economic thought in the United States. Together with Keynesian economics, it grew to form the neoclassical synthesis which still dominates mainstream economics till today. Henry Thornton created the roots of the English monetary-theory tradition that passed through John Stuart Mill, Alfred Marshall and eventually culminated in the Keynesian revolution. Thornton was not an academic, but a successful banker. His book, *An Enquiry into the Nature and Effect of the Paper Credit of Great Britain* (1802), proved greatly influential to the development of 19th century monetary theory. Mill's *Principles*, first published in 1848, became one of the most widely read economic texts of its era, and surpassed Thornton's influence to dominate economic teaching. Mill, who frequently exchanged written correspondence with his friend Auguste Comte, the founder of positivism and sociology, was taken by his methods and applied them to his study of economics. One of the notable contributions of both Mill and Comte has been that their philosophies advocating positivism have been so well received that the contemporary scholars of their fields are not at all as philosophical as these pioneers of modern academia once were. Mill's philosophy and atheism, for example, has led to common references of him being the godfather to— not an economist that one might expect— but the philosopher Bertrand Russell. Like Comte's *sociologie* that was more of an early philosophy of science than the sociology we now recognize, Mill's prose was also far removed from the dry economics we know today, and devoid of the mathematical graphs and formulae that are now standard. These norms in economics were only developed after his death, principally by Cambridge's Alfred Marshall, whose text replaced Mill's *Principles* as the new standard of economics.

Alfred Marshall's main contribution to economics is the *Principles of Economics* published in 1890, although the first draft dates back to the 1870s. It displaced Mill's *Principles* as the basic text book of universities, and a great deal of the methodology it used continues to dominate microeconomics textbooks today. Marshall initially began his academic endeavors in the fields of mathematics and physics, but through a series of mental crises he became increasingly concerned with personal questions that aroused interests more in line with some of the primary questions of philosophy and religion. This in turn altered his trajectory more towards broader interests in social sciences, which economics played an important, but limited role. He concluded, however, that in the real world economics was central to ethical, social and political problems that he could not ignore. Marshall envisioned dramatic social change that harnessed the use of mathematics and science to gear economics towards the elimination of poverty and inequality through the improvement of material conditions.

The dominant scientific ideology of his day was Newtonian physics, whose logical coherence and theoretical strength nobody doubted. Marshall, therefore, set out to make a science of economics that conformed to the dominant Newtonian outlook, and the universality of its principles. He maintained that supply and demand was not the scientific basis of economics, but that it was the "science of activities" that resulted from the "science of wants". In *Principles* we gain insight to a fundamental change in thought that Marshall shared with the prevalence of science admiration that accompanied the rise of science at the expense of classical thought and historical inquiry. Between the science of activities and wants he defined, Marshall maintained that if one of these two "may claim to be the interpreter of the history of man . . . it is the science of activities and not that of wants."[6] This, in and of itself, is a contradiction of classical logic that maintains that a cause is always greater than its effect.

In line with the tenants of progressivism, *The Present Position of Economics*, his inaugural lecture for 1885-6 academic year, put forth that the main duty of economics should be the calculation of the social benefits and industrial change to maximize collective welfare. As a strong advocate of government intervention in the economy, however, Marshall cautioned that human nature developed slowly over centuries of war, violence, and "sordid and gross pleasures." He believed that man's nature could not be changed in a single generation without bringing harm from being too fast, and too radical. Accordingly, the first page of his *Principles* it reads: "Natura non facitsaltus" (Nature does not jump).

It was John Bates Clark and Irving Fisher that brought neoclasical economics theory to America from their studies in Europe. Clark attended the University of Zurich and the University of Heidelberg where he studied under Karl Knies, a leader of the German Historical School. Ironically, Clark came to conclusions more in-line with the German Historical School's rival, the Austrian school. Clark made of name for himself by popularizing the theory of marginal utility, and marginal productivity that accounts for the distribution of incomes. Clark's work was no doubt influenced by the conclusions of Carl Menger who had previously presented the theory in his *Grundsätze der Volkswirtschaftslehre.* While initially influenced by German socialism, Clark's views gradually shifted to support of capitalism, and he later became one of its leading advocates. In addition to his contribution of spreading the economic ideas popular in Europe as a professor at Columbia University (1895–1923), he was also monumental in establishing international respect for economic works emerging from the United States.[7]

Irving Fisher studied at Yale, where he showed remarkable mathematical ability, graduated first in his class, and was elected member of the Skull and Bones society. After graduating from Yale, Fisher studied in Berlin and Paris. While Fisher had an established talent and inclination for mathematics, he took a fancy towards economics that offered greater promise for his ambition and social concerns which has been attributed to the influence of his father who was a congregational minister that earnestly preached the idea that Christians must be a useful members of society. Despite the influence of religion in his early life, however, Fisher ultimately became an atheist. His *Mathematical Investigations in the Theory of Value and Prices* won him praise in the United States, although Léon Walras and his continental European disciples had already reached similar conclusions. Nonetheless, Fisher's work elevated him to become perhaps the first celebrity economist, and he became recognized and praised in Europe as well. The ideas he developed about the purchasing power of money in relation to variations in the money supply, its velocity, and how the volume of transactions in the economy can generate variations in price levels, provided a mathematical basis for monetary theory which became the basis of the theoretical apparatus of modern monetarism. This theoretical system became increasingly popular in the 1960s thanks to the works of Milton Friedman who called Fisher "the greatest economist the United States has ever produced."[8] According to Joseph A. Schumpeter, the 1890's witnessed the emergence of modern economics in the United States, thanks largely to John Bates Clark and Irving Fisher:

> At least two Americans were prominent builders of the "temple," John Bates Clark and Irving Fisher. They and others brought neoclassical theory into American journals, classrooms, and textbooks, and its analytical tools into the kits of researchers and practitioners. Eventually, for better or worse, their paradigm would dominate economic science in this country.[9]

Yet another trend that arose in these trans-Atlantic exchanges was the familiar pattern of these new ideals coming up against resistance in the United States that had traditionally been slow to warm up to European practices. While economics in Europe had become increasingly complicated and scientific, bearing all the symptoms of progressive thought, we have also examined how common people in the United States kept abreast of economic issues due largely to their perception of money remaining tangibly within the bounds of precious metals. Despite the advances American bankers made establishing the political foundation for a gold standard which would be key to implementing a camouflage behind which they could change a hard-money system into a less nakedly inflationist system, it would take time before the common American's notion of equating wealth to precious metals would be subdued.

Along these lines, it is noteworthy that as the new trends in economic science made their way from Europe to the United States, even the most influential ideas to counter them were being founded in Europe and would also find their way to American shores. Philosophy in the Catholic Austrian-Hungarian Empire was dominated by Aristotelian realism, which surely appeared old-fashioned to those influenced by the popularity of Kant, Hegel, or Nietzsche and the ideas coming out of Germany. Carl Menger arose from Austria as the key opponent to the new scientific economics, arguing that math based approaches to the study of economic phenomena fundamentally lacked the necessary examination of the motives behind the involved agents. Menger's work contributed to the formation of what has become known as the Austrian school of economics.[10] His book, *Grundsatze*, provided a way of looking at economics and answered the same questions prevalent in the economic science of German universities. Menger's work brought him into a harsh dispute with the German Historical School. Gustav Schmoller, the most important economist of imperial Germany, was a tenacious opponent to this new "Austrian" outlook, maintaining that a pure science must remain value-free. Menger retorted that the so-called "ethical orientation" of the political economy promoted by Schmoller was merely a vague postulate devoid of any deeper meaning in respect both to the theoretical and to the practical problems of economics, and dismissed it as, "a confusion in thought."

Chapter X: World Ambitions and Agitation for a Government Clearing-House

Following the election of President McKinley, the silver issue seemed well under control and was finally laid to rest with the passage of the Gold Standard Act of 1902. Thereafter, the Indianapolis Monetary Convention was convened under the guise of being a grassroots movement of businessmen from across the country urging monetary reform to improve the economy by establishing a central bank based upon science. The movement was deliberately focused in the Mid-West to avoid public suspicion of Wall Street and banker control. Any organization, however, whose executive committee is headed by leading Morgan lieutenant Henry C. Payne and George Peabody, amongst the names of other notable bankers with well-established ties to banking powers, leaves little doubt as to whose interests were being promoted. Rather than being the grassroots spontaneous outpouring of Mid-West businessmen the convention was made out to be, it was actually a joint effort of Morgan, Rockefeller and Kuhn, Loeb forces that put aside their financial competition to enthusiastically collaborate on what they considered essential monetary reform. The national banking system, they charged, did not provide sufficient "elasticity" of the money supply; that is, the banks could not expand money and credit as much as they wished. To these ends they pressed for a coordinated gold standard, like the one in place in Europe, as a hard-money decoy behind which they could enact a coordinated inflation far more sinister than any inflationist free-silver or greenback Bryanism. The Monetary Convention sent a proposal to President McKinley to (1) continue the gold standard, (2) create a new system of "elastic" bank credit, and (3) appoint a new monetary commission to prepare legislation for a new monetary system. McKinley sent a message to Congress to create a new monetary commission and the bill for a new monetary commission initially passed the House of Representatives, but died in the Senate.[1]

Undaunted by the setback, the committee appointed its own commission to prepare legislation. The executive committee raised an impressive sum of $50,000 from the banking and corporate community to rent office space in Washington, D.C. to actively lobby government, and enact methods of molding public opinion for the recommendations of the commission. Hugh Hanna, who had served as chairman of the executive committee at the at the Indianapolis Monetary Convention, hired as his Washington assistant financial journalist Charles A. Conant to propagandize and organize public opinion for the recommendations of the commission.[2] Conant summarized the direction of their ambitions as follows:

> The decision which has been made by the majority of the voters in favor of the gold standard is in some senses only a negative decision and merely clears the ground for the radical reforms which are needed in order to place our currency system upon a scientific basis and make it responsive to the legitimate needs of business.[3]

McKinley's Secretary of the Treasury, Lyman J. Gage, worked closely with Hanna and Conant and proposed legislation on their behalf. Prior to his appointment to the cabinet, Gage was president of the First National Bank of Chicago, one the leading Rockefeller commercial banks. In 1901, Gage called for an outright establishment of a central bank in his annual report as Secretary of the Treasury, although the political climate was still years off from being receptive to the agitation for such a bank. Banking and corporate powers, however, lost no time in asserting their growing influence over government to advance their growth abroad.

The banking community as a whole was not united on the aspirations that Wall Street envisioned for a new monetary system. Non-national, small rural banks, in particular, preferred the status quo as their share of the nation's depositors surpassed the large national banks. The

Comptroller testified in his annual report, "Many excellent institutions have already gone back to the State systems, under which they were originally organized, on account of the enforcement of burdensome restrictions."[4] Letters by officers of the National City Bank of New York to the Banking and Currency Committees of the Congress evidence the nervousness of Wall Street bankers to these growing trends. Frank Vanderlip, who was brought to Washington as the personal secretary of Secretary of Treasury Lyman J. Gage, and then promoted to Assistant Secretary of the Treasury just six weeks later, eventually became the President of the National City Bank. Vanderlip wrote:

> On the whole, bank investors have in recent years favored the state charter over the national charter. The evidence of that is found in the far more rapid growth in the number of state banks as compared with national banks. In 1896 the number of state banks and national banks was exactly the same. There were 3,700 banks under each form of charter. Thirteen years later the number of national banks was 7,000, the number of state banks over 11,300.[5]

A. Barton Hepburn of Morgan's Chase National Bank headed a commission of the American Bankers Association to draft legislation that favored national banks. The bankers presented their bill in late 1901 to Representative Charles N. Fowler of New Jersey, chairman of the House Banking and Currency Committee. Hepburn's proposal was reported out of committee in April 1902 as the Fowler Bill. The Bill contained three basic clauses; the first addressed expanding national bank notes based on broader assets than government bonds, the second would allow national banks to establish branches abroad which was illegal under the existing system due to fierce opposition by the small country bankers, and the third proposed a new board within the Treasury Department to supervise the creation of the new bank notes and to establish clearinghouse associations. This provision was designed to initiate movement towards the establishment of a full-fledged central bank. Despite the lobbying efforts of the executive committee and staff of the Indianapolis Monetary Convention, country bankers that fiercely opposed the competition that would result from permitting big banks to practice branch banking managed to kill the Fowler Bill in the House in 1902. After the defeat of the Fowler Bill, Senator Nelson W. Aldrich of Rhode Island, Republican leader of the US Senate and Rockefeller's man in Congress, submitted the Aldrich Bill the following year that would have allowed large national banks in New York to issue emergency currency based on municipal and railroad bonds, but it too was defeated.[6]

Despite the setbacks leading bankers faced trying to change the function of the nation's domestic banking system, they were simultaneously working to use American economic strength to force open export markets and investment outlets that they would finance, as well as guarantee bonds to foreign governments. *Bankers' Magazine* concluded that if "we could wrest the South American markets from Germany and England and permanently hold them, this would be indeed a conquest worth perhaps a heavy sacrifice."[7] Longtime Morgan associate, Secretary of State Richard Olney, declared, "it behooves us to accept the commanding position . . . among the Power of the earth." He added, "the present crying need of our commercial interests is more markets and larger markets."[8] When revolution loomed in Cuba, the United States initially tried to pacify the threat and sided with Spanish rule to protect its property interests in Cuba. When Olney concluded that Spain could not win, however, the United States embarked on a path towards the Spanish-American War with the eager backing of Edwin F. Atkins, millionaire sugar grower in Cuba and partner of J.P. Morgan and company, his fellow Bostonian political contact Senator Henry Cabot Lodge, and August Belmont on behalf of Rothschild banking interests. The House of Rothschild, which had been long-time financiers of Spain, refused further credit to Spain, and then underwrote Cuban Revolutionary bond issues assuming full obligation for the unsubscribed balance.

In the years that followed, the United States forcibly established hegemony over Hawaii, Cuba, the Philippines, Puerto Rico, and Guam, while Secretary of State John Hay insisted that other nations recognize an "open door" for American products and capital. In this manner the United States used its economic strength to develop a new world system based on unfettered trade and investment that marked the establishment of a "new empire," not only because the United States forcibly took territory outside the continent, but also because it established a different form of imperialism. This new form of dominance based on open access to markets and investment houses around the world essentially used American corporations and banks to conquer economies, rather than traditional administrative control and military occupation.

The military was used, however, to secure and back American financial interests with the executive branch leading the way. When American business looked upon the Philippines as an avenue to Asian trade, President William McKinley ordered 5,000 troops to occupy it in 1898, and in 1900 sent in 5,000 troops to counter the Boxers in China. As international interventions required more centralized power in the executive branch, McKinley effectively set the stage for future presidents. President William Taft and Secretary of State Philander Knox continued the overseas conquest of markets with a foreign policy characterized as "dollar diplomacy". Taft shared the view of Knox, a corporate lawyer who had founded J.P. Morgan's giant conglomerate U.S. Steel, that the goal of diplomacy should not only improve financial opportunities for

American banks and corporations, but their use of private capital should also further U.S. interests abroad. As a result, nationalist revolutions were spurred and the United States used its military might to promote American financial interests. U.S. Marines intervened in Nicaragua to remove Jose Zelaya and insert a dictatorial regime to protect New York banking interests, and disorder pervaded in Honduras in support of Sam "the Banana Man" Zemurray to reinstate deposed Honduran president Manuel Bonilla to gain land concessions and low taxes. Knox secured the entry of an American banking conglomerate in China, headed by J.P. Morgan, into a European-financed consortium to finance the construction of a railway from Huguang to Canton. The American use of bankers in lieu of armies to gain power and influence was just as nefarious as traditional imperialism, albeit more subtle and effective than formal empires.[9]

President Theodore Roosevelt prompted disorder, upheavals, and revolutions through his attempt to spread "civilization." The Roosevelt Corollary expressed that if Latin American countries could not keep peace, America would intervene. In the Dominican Republic, Roosevelt ordered naval intervention when an indigenous insurrection threatened U.S. economic interests. Through the course of this era's military intervention abroad, two-time Medal of Honor recipient, Marine General Smedley Butler, became something of a folk hero when he offered a compelling critique of American imperialism when he called himself a "racketeer, a gangster for capitalism":

> I spent 33 years and four months in active military service and during that period I spent most of my time as a high class muscle man for Big Business, for Wall Street and the bankers. In short, I was a racketeer, a gangster for capitalism. I helped make Mexico and especially Tampico safe for American oil interests in 1914. I helped make Haiti and Cuba a decent place for the National City Bank boys to collect revenues in. I helped in the raping of half a dozen Central American republics for the benefit of Wall Street. The record of racketeering is long. I helped purify Nicaragua for the international banking house of Brown Brothers 1909-12. I brought light to the Dominican Republic for

> American sugar interests in 1916. I helped make Honduras 'right' for American fruit companies in 1903. In China in 1927 I helped see to it that Standard Oil went its way unmolested. . . Looking back on it, I feel that I could have given Al Capone a few hints. The best he could do was to operate his racket in three districts. I operated on three continents.[10]

The leap into economic imperialism by the United States in the 1890s was accompanied by monetary imperialism. While the developed Western world had come under a gold standard, most other nations were still on a bimetallist standard. After conquest, the economies of client states would be tied to the economy of the United States. The challenge would be to pressure and coerce countries to adopt not a genuine gold coin standard, but a "gold-exchange" or dollar standard. A country's monetary reserve would be held in dollars— allegedly redeemable in gold— and not held within the country itself, but as dollars in New York banks. In this way American banks could inflate their credit without the danger of losing their gold abroad, as would happen under a genuine gold standard. Meanwhile, Great Britain was imposing gold-exchange standards in its own colonies which would eventually flourish into imposing a gold-exchange standard on all European currencies that would hold their reserves in British pounds and pyramid on top of British inflation during the 1920s. Under this context, President Roosevelt secured congressional approval to appoint a Commission on International Exchange "to bring about a fixed relationship between the moneys of the gold-standard countries and the present silver-using countries," in order to promote "export trade and investment opportunities."[11]

Although vested interests had forged progress in international banking and commerce, the failures of banking interests with Congress left the domestic system vulnerable to run into trouble late into artificially created inflationary booms. When people started calling on banks to redeem their notes and deposits in specie, banks were still prone to rapidly contract their loans to stay in business, causing a financial crisis and system-wide contraction of money and credit. Bankers were still at work to enact a system that would allow them to keep expanding credit during recessions as well as booms. After initial setbacks with Congress to enact their scientific banking system, the big bankers exerted their influence with the Secretary of the Treasury and Comptroller of Currency, both of which acted extraordinarily on their behalf. Morgan and Rockefeller interests met with Comptroller of the Currency William B. Ridgely in January 1903, in an attempt to restrict the volume of loans made by the country banks in the New York money market. Morgan interests were represented by J. P. Morgan himself and George F. Baker, Morgan's closest associate in the banking.[12] Rockefeller interests were represented by Frank Vanderlip and James Stillman, long-time chairman of the board of the National City Bank. The close Rockefeller-Stillman alliance was cemented by the marriage of the two daughters of Stillman to the two sons of John D. Rockefeller's brother William, long-time board member of the National City Bank.[13] This meeting, and other episodes like it, evidence the influence these banking interests enjoyed with the executive branch. It is no coincidence that Ridgely, particularly after the events of 1907, would become one of the most outspoken advocates in government for the establishment of the same banking system promoted by Morgan, Rockefeller, Stillman, and Vanderlip.

Within the Treasury Department, Secretary Leslie M. Shaw upheld the views of his predecessor, Secretary Lyman Gage, that a central bank was needed to allow banks to keep inflating in times of difficulty. As the former Governor of Iowa, Shaw was appointed Secretary of the Treasury by President Roosevelt due to his support of the gold standard during the Presidential campaign of 1896, and his support of Roosevelt in 1900. After attempts to create a central bank through Congressional law failed, Secretary Shaw acted on the banker's behalf to expand the experiments of Lyman Gage by making the Treasury function like a central bank. To infuse money into the economy and keep its supply more "elastic," Shaw bought back government bonds from commercial banks, increased the number of government depository banks, and, in 1902, told the banks that they no longer needed to keep cash reserves against their holdings of public funds. In his last annual report of 1906, Secretary Shaw urged that he be given total power to regulate all the nation's banks. Shaw violated the Independent Treasury statutes confining Treasury funds to its own vaults, and deposited Treasury funds in favored large national banks during recessions. Shaw's attempt to use the Treasury like a central bank marked the height of Government intervention in the money market and resulted in an inflationary boom that ended with the Panic of 1907. Shaw resigned his office and became a banker in New York. He was replaced by George Cortelyou, who like Shaw did not have a background in banking, but shared the conviction that it was the Treasury's duty to protect the banking system.

On July 27, 1907,*The Commercial & Financial Chronicle* noted that "the market keeps unstable ... no sooner are these signs of new life in evidence than something like a suggestion of a new outflow of gold to Paris sends a tremble all through the list, and the gain in values and hope is gone."[14] Earlier in the year, Jacob Schiff of Kuhn, Loeb & Co.—who served as director of many important corporations including the National City Bank of New York (now Citibank), Equitable Life Assurance Society, Wells Fargo & Company, the Union Pacific Railroad, and key financer of the Japanese military in the Russo-Japanese War— warned in a speech to the New York Chamber of Commerce that "unless we have a central bank with adequate control of credit resources, this country is going to undergo the most severe and far reaching money panic in its history."[15] True to his forecast, the New York Stock Exchange fell almost 50% in October from its peak the previous year. An attempt to corner the market on United Copper Company stock failed, and banks that had lent money to the cornering scheme suffered runs that later spread to affiliated banks and trusts that lead to the downfall of the Knickerbocker Trust Company— New York City's third-largest trust. On October 22, the Knickerbocker faced a classic bank run with *The New York Times* reporting, "as fast as a depositor went out of the place ten people and more came asking for their money [and the police] were asked to send some men to keep order."[16] Shortly after noon, Knickerbocker was forced to suspend operations. The collapse of Knickerbocker spread fear across the nation as customers withdrew their deposits from regional banks, and regional banks withdrew their reserves from New York City banks.

While the government allowed major banks in New York and Chicago to suspend payments in specie, a chain of failures gutted smaller institutions: Twelfth Ward Bank, Empire City Savings Bank, Hamilton Bank of New York, First National Bank of Brooklyn, International Trust Company of New York, Williamsburg Trust Company of Brooklyn, Borough Bank of

Brooklyn, Jenkins Trust Company of Brooklyn and the Union Trust Company of Providence. Because the pyramiding scheme of credit makes banks inherently insolvent, and their ability to continue their business is based fully upon the faith their customers put in them, the financial elite did everything in their power to secure the public's trust to save their banks.[17]

Morgan consulted George F. Baker, president of First National Bank, and James Stillman of the National City Bank of New York (now Citibank). Morgan called upon the Secretary of the Treasury, George Cortelyou, to come to New York on the October 22nd, four o'clock train. Cortelyou did not rise to the position of Secretary through banking like many of his predecessors. His career began as a stenographer, and served as the secretary of President Cleveland, and later President McKinley. He was appointed the Secretary of the Department of Commerce and Labor when it was created in 1903, Roosevelt made him Postmaster General, and it was only shortly before the Panic, when Secretary of the Treasury Leslie M. Shaw resigned after violating Treasury statutes, that he received the appointment to head the Treasury. Cortelyou arrived to a suite Morgan had secured at the Manhattan Hotel around midnight, and amongst those waiting with Morgan were James A. Stillman of the National City Bank, John A. Stewart, president of the United States Trust Company, August Belmont, US Steel moguls Henry C. Frick and Elbert H. Gary, and railway magnate E. H. Harriman. Cortelyou was clearly eclipsed by the financial experience and status of the attendees that prodded him to action. He initially hesitated, but in the fashion of Secretary Shaw before him, Cortelyou finally agreed to deposit $25 million of government funds in various New York banks. Having secured this pledge, Morgan went off to bed and left his partner, George Perkins, and Oakleigh Thorne, president of the Trust Company of America, to draft the formal agreement.[18] Somewhere in the early hours of the morning, Perkins gave a statement to the *New York Times* that read in part:

> The chief sore point is the Trust Company of America. The conferees feel that the situation there is such that the company is sound. Provision has been made to supply all the cash needed this morning ... The company has $12 million cash and as much more as needed has been pledged for this purpose. It is safe to assume that J. P. Morgan and Company will be leaders in this movement to furnish funds.[19]

On Thursday morning Cortelyou deposited around $25 million into a number of New York banks, while Morgan assembled the presidents of the other trust companies to secure additional millions in loans.[20] John D. Rockefeller backed James Stillman's National City Bank with a $10 million deposit to give them the deepest reserves of any bank in the city.[21] At 1:30 p.m., Ransom Thomas, president of the New York Stock Exchange, warned Morgan that he would have to close the exchange early, although Morgan believed that such a move would only entrench the public's fear. Morgan immediately summoned the presidents of the city's banks to his office and told them that as many as 50 stock exchange houses would fail unless they immediately pumped $25 million into the market. By 2:16 p.m., 14 bank presidents had pledged $23.6 million, and by 2:30 p.m. the money reached the market to finish the day's trading.[22]

Maintaining public confidence in the nation's banking system was one of the key elements to avert disclosing the insolvency of the banks. To secure public confidence, statements from the best-known names on Wall Street including John D. Rockefeller, J.P. Morgan, Secretary of the Treasury George B. Cortelyou, and Lord Rothschild, flooded the media to restore faith in the financial system. Rockefeller phoned Melville Stone, the manager of the Associated Press, and told him that he would pledge half of his wealth to maintain America's credit.[23] Morgan, who usually avoided the press, made a public statement to reporters: "If people will keep their money in the banks, everything will be all right."[24] On Oct. 26, 1907, The *New York Times* printed:

In conversation with the New York Times correspondent, Lord [Nathaniel] Rothschild paid a high tribute to J.P. Morgan for his efforts in the present financial juncture in New York. . . . I called on the famous London financier for the purpose of learning his opinion on the American situation, but, exercising his usual caution and reserve, he said he preferred not to make a statement. "I do not care," said he, "to discuss the situation at the present time. . . . I might say, however, . . . I would like to add a word concerning the unselfish remedial action of Mr. Morgan. . . . He is worthy of his reputation as a great financier and a man of wonders. His latest action fills one with admiration and respect for him."[25]

Chapter XI: A New Central Bank

The conventional historical account of the formation of the Federal Reserve characteristically credits the panic of 1907 as the watershed event that brought the nation's bankers to the conclusion that an American central bank was desperately needed. While it is true that the event reinforced their determination and provided them with an exploitable event to enhance their propaganda, their agitation for more control over the economy is overtly noticeable from at least the 1896 election of McKinley. What changed, however, was from 1907 the same players followed Jacob Schiff of Kuhn, Loeb & Co.'s lead in calling for the frank imposition of a central bank.

Cortelyou called for reform, "to provide under Government guaranty a greater elasticity to the currency . . . elasticity without the necessity of intervention on the part of the Secretary of the Treasury."[1] Joseph T. Talbert of the National City Bank of New York told Congress:

> That the time is ripe and the need pressing for the establishment of a third Bank of the United States, whether it be in the form of one great central bank or of a dozen regional banks under central control, there is no reasonable doubt. But that the affairs of such a bank, or banks, should be beyond the reach of politicians and without the bounds of political intrigues, ambitions or entanglements, there can be no question whatever.[2]

After the events of 1907, the Comptroller of Currency, William B. Ridgely, became one of the most outspoken government advocates for the establishment of the same banking system that Morgan, Rockefeller, Stillman, and Vanderlip had earnestly promoted to him. Ridgely concluded that the actions taken by key bankers and the clearing houses were key to stemming the disaster that the New York banks were a victim of:

> Although examinations by the national bank examiners and the New York clearing house committee showed this bank to be entirely solvent . . . runs developed in New York City on a number of other banks and trust companies. The national banks of New York City were all found to be solvent by the clearing house committee, and being supported by the clearing house banks none failed.[3]

In Ridgely's annual report, he called for an outright central bank under a section entitled "CENTRAL BANK OF ISSUE AND RESERVE."[4] The rhetoric he used extended beyond an objective consideration of the matter, and his agenda becomes apparent. The Comptroller warned, "There is no citizen of the United States who is free from the dangers." According, he advised, "There can be no higher duty of government than the passing of the necessary laws and the adoption of a system . . . The best way, and in fact the only thoroughly efficient and good way . . . is through a central Government bank." Knowing that Ridgely kept company with the most prominent bankers of his day, it comes as little surprise that he lavished the banking community as the basis of the economy's stability, and narrowly focused on the ailments of government:

> It speaks volumes for the credit of the banks that they have done as well as they have, and shows the confidence of the people in their ultimate solvency and strength. It is the greatest possible evidence of the wisdom, patience, forbearance, and sound, conservative sense of our businessmen. It does not, however, speak well for our political wisdom that this condition has been allowed to stand unchanged without any attempt to improve our laws.

Ridgely's bottom line concludes, "It is useless to try to evade the question or dodge the issue. . . . The only way to make our system what it should be is through the agency of a national governmental bank. The experience of all other countries has demonstrated this." His focus on Europe assured Congress that such a system was of little risk to implement. "This is the system which has been adopted and found to work most satisfactorily in the great commercial countries of Europe and is the one that gives the surest promise of satisfactory operation in this country." Ridgely continues, "That is the way it is done in France . . . the admiration of the world. . . . It has worked with great satisfaction and benefit to all the German people . . . And our problem is so similar to theirs that we should take profit from their experience and learn from them how to perfect our system." An important aspect of the German system that Ridgely felt obliged to argue for was, "After providing for the accumulation of a moderate surplus . . . the surplus should be divided as in Germany- a small portion to the shareholders." To those ends, the Comptroller was resolute to join in the chorus of bankers that any new system, "should be kept out of politics," and that, "It could be done through the means of the central bank better than through the Treasury Department." While making the plea that implementing a new system required little risk because essentially the United States was following Europe's lead, he provided little detail as to how these banks he cited, "the admiration of the world," actually functioned. It is insightful that the more in depth explanations he provides are actually based on the recent actions of the American bankers he kept company with:

> The use of clearing-house certificates by the banks has been found a very efficient means for their defense . . . the inevitable and logical conclusion and lesson to be drawn from it, which is that we should have a national central bank of issue and reserve. . . . it would have none of the disadvantages of the other system, and would have all its advantages, and more besides.

Ridgely's conclusion called upon the key points being pushed by the bankers he sided with. One, that economic fluctuations, deemed a natural "business cycle," were not to blame on Wall Street speculation or banks issuing reckless credit; and two, that a new scientific approach to banking would ease these unavoidable fluctuations, just as science off sets other "natural" challenges faced by man. The people, Ridgely argued, were more in need of this scientific system than the bankers:

> We shall have panic after panic until we learn the plain lesson from experience and adopt the only efficient, scientific, and proper means to protect our people in business from such disasters. This is a matter that is of even greater interest and importance to business men, and people generally, than it is to the banks themselves.

Finally, the Comptroller reiterated the point the prestigious bankers were stressing in the climate following 1907's panic; that the issue at hand was too important to lose time arguing over, and action must be taken at all deliberate speed: "Opinions are still too diverse to bring about quickly any such agreement as is necessary to accomplish a definite and final result . . . Any measure of this kind, however, to be of any assistance in this emergency must be adopted very promptly."

Franklin MacVeagh, who had been director of the Commercial National Bank of Chicago for 29 years before succeeding George Cortelyou as the Secretary of Treasury, proved another assertive insider that clamored for the formation of a new central bank. "The necessity for such reform is universally recognized," MacVeagh argued, and vowed, "Neither political partisanship nor special interest nor pride of opinion should be allowed to obstruct a purely economic reform of such great significance to the nation in both its national and international relations."[5] The Secretary sold the proposed system in such simple terms that just a little familiarity with the history of how Wall Street speculation and bank credit played out in the economy leaves one baffled as to how he could argue in the following terms:

> The whole financial history of our country is a long series of troubles and agitations. . . . They are avoidable; but not under our system. . . . It is for the Government to say whether it will have panics in the future or whether it will not. It is a mere matter of choice. We can continue to have panics or we can stop having panics, exactly as we prefer. It will not

> cost a penny to prevent them; and it has cost us untold millions and untold suffering every time we have had one.[6]

Another central figure in the agitation for a central bank was Paul Moritz Warburg.[7] In addition to adding to the chorus of MacVeagh, Ridgely, and other key Washington insiders, Warburg proved to be more of a leader and innovator than a mouth piece. Warburg married Nina Loeb, an American citizen, and began to live between New York and Germany in 1895. He took up permanent residence in the United States after accepting a position as a partner at his father-in-law's firm, Kuhn, Loeb and Co. His depth of experience in European central banking proved influential in the establishments bid to establish a central bank in the United States. "The United States," he said, "is at about the same point that had been reached by Europe at the time of the Medici's."[8] Warburg ceaselessly rallied for the formation of a central bank through a series of publications and lectures. In 1907, *The New York Times Annual Financial Review* carried Warburg's first official reform plan, entitled "A Plan for a Modified Central Bank." He followed his first *New York Times* article with a speech at Columbia University on "American and European Banking Methods and Banking Legislation Compared," and privately published a new, more complete proposal for a US banking system, entitled "A Modified Plan for a Central Bank"; a system similar in principle, if not exactly alike in form, to European central banks. Central to his thesis was that no central bank could be effective that "vests the powers of a central bank in political officers alone. That power clearly defined, ought to be vested in political officers and businessmen combined."[9]

In January 1908, J.R. Duffield, secretary of the Bankers Publishing Company, wrote: “It is recognized generally that before legislation can be had there must be an educational campaign carried on, first among the bankers, and later among commercial organizations, and finally among the people as a whole."[10] With the strategy well under way, Senator Nelson W. Aldrich, head of the Senate Finance Committee and father-in-law to John D. Rockefeller, Jr., introduced the Aldrich Bill that focused on a relatively minor interbank dispute about the role of national banks issuing special emergency currency.[11] After compromise, the bill was finally passed as the Aldrich-Vreeland Act. What got little public attention, however, was that the Act provided for the formation of a National Monetary Commission that would investigate and suggest proposals for comprehensive bank reform. Examining the reports of the commission reveals insightful evidence of the direction that legislation was headed in attaining the monetary system bankers sought, and provides yet another source of the rhetoric employed in the agitation for banking reserves.[12] The commission reported, "We have undertaken in as thorough and scientific a manner as possible to investigate banking and currency conditions in this and other countries." The sources of their investigation, however, seem hardly "scientific": "the Western Economic Society at Chicago and the American Bankers Association and its affiliated organization . . . have been utilized by the commission as a means of securing opinions of political economists and bankers respectfully."

While science defines itself by dealing with objective facts, the additional sources the commission cited raises doubt of how free from subjectivity their conclusions could have possibly been, if not outwardly manufactured to desired ends: "Bankers, government officials, and university professors in Europe and America and in the Orient, were employed to prepare papers upon the actual operations of banks." The conclusion the commission reached upon review of its "scientific" sources was, "Perhaps the most important defect in our monetary system is to be found in its unscientific treatment of the reserves of individual banks." Elsewhere, the commission stressed, "The methods by which our domestic and international credit operations are now conducted are crude, expensive, and unworthy an intelligent people." Perhaps the most insightful admittance of the commission was their comments that briefly touched upon the important role banks could provide in securing American aspirations abroad:

> The status of the United States as one of the great world powers is now universally recognized, but we have yet to secure recognition as an important factor in the financial world. This condition of affairs is likely to remain unchanged as long as practically all our purchases and sales abroad are financed by foreign bankers. We anticipate that the changes in the currents of trade which will follow the opening of the Panama Canal will tend to the enlargement of our international commerce.

At stake in the development of the United States becoming a new world power was the role bankers would fill in the interplay of using economic, diplomatic and military power to open up foreign markets. While bankers worked in conjunction with the State Department by offering substantial loans to regimes abroad to increase the financial leverage the United States could exert over a country, they simultaneously sought support for their domestic ambitions by promoting their prosperity as being one in the same with aspirations of American power. The commission reminded Congress, "The important place which the Bank of England holds in the financial world is due to the wisdom of the men who have controlled its operations and not to any legislative enactments." While balancing the examples of European banks that America could model, and promoting the role American banks could play in establishing a world power that had the potential to surpass the powers of Europe, the enticing call began to emerge that the United States could actually build a superior system. Amidst all of the cited references to Europeans in the larger debate for bank reform, it is interesting to find the commission reporting, "The plan we propose is essentially an American system, scientific in its methods."

The official members of the commission were an equal number of senators and representatives including Arsène Pujo from Louisiana who would eventually break from the commission and form his own committee to rally against it. The real work, however, was carried out by a staff appointed by Aldrich, who told his counter-part in the House, Republican Theodore Burton: "My idea is, of course, that everything shall be done in the most quiet manner possible, and without any public announcement."[13] Aldrich divided the commission into two groups: one would study the American banking system and compile a report, and the other, headed by the senator himself, would travel to study the central banking systems throughout Europe including London, Paris and Berlin. According to commission member Sen. Theodore Burton, the concept of currency backed by commercial assets began to take hold in Aldrich's mind in London, and the interviews in Berlin finally convinced him. Commission Assistant George Reynolds concurred, noting that "the experience and practice of German bankers in meeting the needs of commerce in their country demonstrated to Aldrich the validity of the use of commercial assets as a basis for currency. The idea, formerly so obscure, came home to him in great force from its demonstration in a non-political, practical atmosphere."[14]

Behind the façade of congressman and senators on the commission, Aldrich formed his inner circle which included Paul Warburg, Henry Davison, and Frank Vanderlip. Vanderlip revealed, "Of course we knew that what we simply had to have was a more elastic currency through a bank that would hold the reserves of all banks."[15] In December, the commission hired none other than Charles Conant for research, and public persuasion. The opinion-molding class of society who in centuries past had been the Church, were now the media, intellectuals, academics, professors, and educators, as well as ministers, who were enlisted in the cause of pressing for a central bank. On September 22, 1909, the *Wall Street Journal* began Conant's ubiquitous unsigned 14-part series on "A Central Bank of Issue." Conant wrote, "Nearly every crisis that has arisen in this country has grown worse within a short time because of lack of leadership. . . . These evils would not merely be cured, but they would in large measure be prevented, by the existence of a responsible central banking authority. " To those ends, Conant conveys, "Such leadership has ultimately been found through the private initiative of the captains of finance."[16] As Conant's articles were geared towards swaying public opinion, in following articles he addressed the suspicion that lurked around "the private initiative of the captains of finance." While conceding that, "monopoly control of a central bank might be within the range of possibility if the new law were deliberately planned to that end," Conant assured readers that it would, "be a rather barren undertaking if the character of its loans and the share of the Government in its control were properly regulated in its charter." After all, he conveyed, there were numerous examples indicating how a new central bank could actually be profitable to the government: "We can find plenty of examples among the European banks of allotting a large share of net earnings to the government after a moderate dividend has been paid to the stockholders. . . . Such a distribution of stock . . . would not be without precedent. The Banco Central of Mexico is organized partly upon this basis."[17] On the academic front, Warburg corresponded and met frequently with leading academics and economists including professors from Harvard, Yale, MIT, the University of Chicago, and Columbia which only reinforces the doubt of how thoroughly "scientific"' and objective the National Monetary Commission's citation of "Bankers, government officials, and university professors," really was. If anything, it seems to reinforce As G.K. Chesterton's observation, "The rich men want a scientist to write them a *letter de cachet* as a doctor writes a prescription,"[18] only in this case if the sources were not purely scientific, the solution was to cite them as such.

Once the theoretical and scholarly ground work had been laid it was time to formulate the legislation for the central bank. As Warburg stated, "Advance is possible only by outlining a tangible plan."[19] Upon Aldrich's return from Europe, he was resolute to establish a central banking system like the ones he had observed. On the evening of November 22, 1910, Warburg and a small party of men from New York quietly boarded Sen. Aldrich's privately chartered railway car in Hoboken, New Jersey, for a trip to an exclusive hunting club for a private meeting on Jekyll Island off the coast of Georgia. The facilities for their meeting were arranged by club member and co-owner J.P. Morgan. In addition to Aldrich and Warburg, the others from the New York banking community included Frank Vanderlip, McKinley's Assistant Secretary of the Treasury that negotiated the government's $200 million loan to finance the Spanish American War with National City Bank of New York (now Citibank, which he later became president of after James Stillman); Henry Davison, a senior partner at JP Morgan & Company; Benjamin Strong, J.P. Morgan emissary, vice president of Banker's Trust Co., and future President of the Federal Reserve Bank of New York; Charles D. Norton, president of the Morgan-dominated First National Bank of New York; and A. Piatt Andrew, former secretary of the National Monetary Commission and Assistant Secretary of the Treasury. The real purpose of this historic "duck hunt" was to formulate a bill for banking and currency reform that Aldrich could present to Congress. The plan was undertaken in secrecy, as the public would never approve of a banking reform bill written by bankers; much less of a plan for a central bank. Aldrich believed the word "bank" should not have even appeared in the name of the bill. Warburg wanted to call the legislation the "National Reserve Bill" or the "Federal Reserve Bill" to give the impression that its purpose was not to stop bank runs, and conceal its monopolistic character.

Warburg and the others were keenly aware that regardless of whatever theoretical justifications were put forward for a European modeled central bank, the political climate of the United States would require some sort of compromise and concessions that would provide the ambience of government influence and representation. Aldrich, yielding somewhat, conceded that the government should be represented, but a majority of the directors were to be chosen, directly or indirectly, by the banking sector. It is interesting that the bankers were more politically astute than Aldrich about the sensitivity of cloaking their ambitions under the guise of "decentralization," nonetheless, Aldrich got what he was after—a banking scheme based on a consensus representing the most powerful bankers in the country; two Rockefeller men (Aldrich and Vanderlip), three Morgans (Davison, Norton, and Strong), one Khun, Loeb representative (Warburg), and an economist friendly to each camp. No one person was completely responsible for the final draft they came up with, although Vanderlip maintained that Warburg contributed the most influential and significant role in formulating their final result: "As a philosophical student of banking, he was first among us at that time."[20]

The financial elite's bill came to be known as the "Aldrich Plan," that called for the establishment of a central bank in Washington, to be named the "National Reserve Association." The proposed central reserve organization would provide for the issuing of elastic notes based on a quasi-gold standard, with 15 branches at strategic locations throughout the country. The bank was to serve as the government's fiscal agent by mobilizing the reserves of its member banks, with the capacity to serve as the lender of last resort to bailout the American banking system. Aldrich presented the plan to the National Monetary Commission in January of 1911, but instead of immediately presenting the bill to Congress, its drafters waited a full year, until January 1912, to present it. The problem stemmed from the Democrats sweeping the 1910 congressional elections, and the looming probability that they would win the White House in 1912. It would now require regrouping and applying intense agitation and propaganda before the Aldrich Plan would stand a chance of passing.

MacVeagh, as would be expected, stepped up in support of the plan that was attributed to the Monetary Commission.[21] "The tentative plan of the commission, in its main features, has satisfied very much the larger part of the expert opinion of the nation." Turning towards politics, the Secretary reported, "The fact confronts us, that whereas our country has not before in many years even approached a consensus of opinion on monetary matters it has now largely and mainly agreed." MacVeagh's report, aside from being addressed to the Congress, was clearly out to win congressional votes in favor of the new legislation. "Legislation traditionally complex and laborious presents itself with its chief problems so clearly solved, with its complexity so smoothed out and with its provisions so generally approved that the final work of the Congress can now go forward without delay." The Secretary would definitely fell short, however, trying to sell the bill as follows: "The nation took Congress at its word; and in all its dealings with this question has been led by nonpartisan instincts and standards." One of the provisions of the proposed bill that would provoke backlash from supporters of state banking was how it would finally provide a leveled field of competition between the large national banks, and the smaller institutions. MacVeagh's account of this provides evidence of the political rhetoric used by supporters of the bill to sell the monopoly large banks were attempting to secure:

> We must provide, too, and without reservation, for a perfect equality of privilege and opportunity between national and state banks. State banks must have every advantage national banks have; and national banks must have every advantage state banks have. And this equality cannot be attained unless national and state banks are on the same footing as to trust company banking and as to savings bank functions.

The system devised at Jekyll Island was not merely a central bank, but an institution inspired by clearing-houses that would provide bankers unfettered access to government reserves. Addressing these new qualities, MacVeagh explained, "The thing required as a central institution must be something new, but also something normally evolved from our present system. The idea of a national reserve association has therefore grown up; and it follows the clearing-house as a sequence on a far larger and more important scale." Many who were expecting something different of a central bank, particularly one that was run by the government, were surprised. MacVeagh tried to smooth over this key point that was so vitally important to bankers, "It was natural to think, at first, of a central bank. But this institution need not be and should not be a central bank. It must be surely and only a central agency of banks."

On this very point, Frank Vanderlip wrote to the members of the Banking and Currency Committee to reinforce the notion that bankers themselves must be in control of the proposed system. [22] Vanderlip first established, "It is well frankly to recognize that broad powers and great authority are necessary to the successful operation of the plan and that those powers must, in effect, be the sort of powers that would be granted to the management of a central bank." From this premise he argued:

> The trouble lies in separating the management of a financial institution from its ownership. A management so separated, no matter how appointed, could not remain intelligently in touch with conditions and perform the vastly important and extremely complicated functions that are entailed under this plan, and which must be inherent in any plan which will successfully mobilize the banking reserves of the country. We might as well expect legislators not responsible to their constituency to represent wisely the interests of their constituency.

While the obvious rebuttal to letting bankers run the nation's monetary system would stem from a conflict of interests, Vanderlip consoled Congress, "It should be recognized, too, that the men who have invested money in the banking business are intelligent enough to know that continued success in banking can come only when accompanied by continued prosperity of the whole country. The interests of the general public and the interests of the bank owners are identical."

Secretary of the Treasury MacVeagh kept pressure upon Congress to act. In his next report he warned, "As long as the financial system created by our Federal laws remains unchanged and unreformed, the government will be exclusively responsible for the commercial, industrial and social disasters which flow from panics. . . . The people are helpless."[23] In an attempt to reduce the factors at play to a scientific argument, he equated, "A panic is as unnecessary and as avoidable as an epidemic of smallpox. You can have an epidemic of smallpox if you disregard all that science has provided as a preventive." The Secretary pleaded:

> This relief which is so urgently needed by the legitimate business and enterprise of our people is not relief from a financial situation built up by the financial world itself, but is from a system and conditions superimposed by the government; and forced upon the business community and upon American society. The banking and currency system is the product of Federal law. And there can be no relief from it until Congress acts. And this is why Congressional action is urgent.

MacVeagh also reiterated Vanderlip's argument that the government should not have control of the new system. First, on scientific terms, he appealed that, "Taking large sums of actual money out of the ordinary financial use and locking it up as a dead mass in the vaults of the Treasury is a proceeding as unscientific and unreasoned as any other part of our unseasoned and unscientific banking and currency system." Finally, the Secretary used his post to endorse the call for removing the Department of Treasury from the business of banking:

> But the general features of a new system . . . must include, among its necessary features, provisions for never-failing reserves and never-failing currency, and for the perfect elasticity and flexibility of both . . . for the scientific development of exchanges- domestic

> and foreign; for foreign banking as an adjunct of our foreign commerce; and for taking the Treasury Department out of the banking business.

Despite the pressure applied upon Congress to act, Warburg understood that it would not suffice to limit their agitation to Congress alone. He wrote, "beyond doubt, unless public opinion all over the United States could be educated and mobilized, any sound banking reform plan was doomed to fail."[24] In January of 1911, the National Board of Trade held a "Business Men's Monetary Conference" where the New York Chamber of Commerce, the Merchants' Association of New York, and the New York Produce Exchange, each of which had been actively pursuing banking reform over the past five years, introduced a joint resolution supporting the Aldrich Plan and proposed the establishment of an organization to lead the public struggle for a central bank. The National Board of Trade appointed Warburg to head a seven-man committee to set up a national group to promote reform. The group was to be called "The National Citizens League for the Promotion of Sound Banking." The committee shrewdly followed the lead of the Indianapolis convention by centering the organization in Chicago to promote the aura of another "grassroots" heartland movement. The official heads of the organization were Chicago businessmen, and James Laughlin; returning from his post of supervising the operations of the Indianapolis Committee, head professor of political economy at the Rockefeller founded University of Chicago, and editor of its Journal of Political Economy. Laughlin directed the new organization, assisted by his former graduate student, Professor Willis. Over a decade later, Willis frankly conceded that the Citizens' League had been a propaganda tool of the nation's bankers. The League established effective organizations in 45 states, printed vast amounts of educational materials and pamphlets for the businessman and layman alike, and produced a flood of essays and newspapers articles. Much of the banker's propaganda, under the auspices of the

National Citizens' League, was performed by college professors. Two of the most tireless propagandists for the Aldrich Plan were Professor O.M. Sprague of Harvard, and of course Laughlin of the University of Chicago. Congressman Charles A. Lindbergh, Sr. observed:

> as professor of political economics in the University of Chicago . . . Professor Laughlin was given a year's leave from the university, that he might give all of his time to the campaign of education undertaken by the League . . . The reader knows that the University of Chicago is an institution endowed by John D. Rockefeller, with nearly fifty million dollars.[25]

Meanwhile, a joint campaign was launched to bring the nation's bankers on board. Aldrich organized a closed-door conference of an inner circle of 23 top bankers in Atlantic City. Gabriel Kolko concludes:

> the real purpose of the conference was to discuss winning the banking community over to government control directly by the bankers for their own ends. . . . It was generally appreciated that the Aldrich Plan would increase the power of big national banks to compete with the rapidly growing state banks, help bring the state banks under control, and strengthen the position of the national banks in foreign banking activities.[26]

The Aldrich Plan was finally introduced to the Senate by Theodore Burton in January 1912, but died a quick death with the overtly Republican partisan name that aroused suspicion of the "Aldrich Plan" actually being the "Wall Street Plan". A resolution was introduced by Congressman Charles Lindbergh Sr., for a probe on Wall Street power associated with the drive for a central bank. Arsène Pujo who had been appointed to chair the House Committee on Banking and Currency in 1911 and left the National Monetary Commission in 1912, obtained congressional authorization to form a subcommittee of the House Committee on Banking and Currency, which came to be called the Pujo Committee, to investigate what came to be labeled as the "money trust." Attorney Samuel Untermyer, who headed the Pujo investigation, defined a money trust during the Pujo hearings:

> We define a money trust as an established identity and community of interest between a few leaders of finance, which has been created and is held together through stock-holding, interlocking directorates, and other forms of domination over banks, trust companies, railroads, public service and industrial corporations, and which has resulted in vast and growing concentration and control of money and credits in the hands of a few men.[27]

The committee issued a scathing report on the powers behind finance and banking, and discovered that the officers of J.P. Morgan & Co. concurrently sat on the boards of directors of 112 corporations with a market capitalization of $22.5 billion (the total capitalization of the New York Stock Exchange was then estimated at $26.5 billion).[28] The Pujo Committee Report concluded that a cartel of influential financial leaders had gained control of the major manufacturing, transportation, mining, telecommunications and financial markets in the United States. It was further revealed J.P Morgan, George F Baker and James Stillman controlled no less than eighteen different major financial corporations through the resources of seven banks and trust companies (Banker's Trust Co., Guaranty Trust Co., Astor Trust Co., National Bank of Commerce, Liberty National Bank, Chase National Bank, Farmer's Loan and Trust Co.) that controlled an estimated $2.1 billion. The report identified that a handful of elites maintained manipulative control of the New York Stock Exchange, attempted to evade interstate trade laws, and singled out individual bankers including Paul Warburg, Jacob Schiff, Felix M. Warburg, William Rockefeller, Frank E. Peabody, and Benjamin Strong.[29] Pujo coordinated hearings to investigate the alleged money trust on Wall Street. Morgan was called to trial, although his testimony resolutely defended Wall Street and he denied having the influence that was attributed to him. Morgan testified, "I do not feel that I have vast power. I do not think I have power in any department of industry; I am not seeking it, either," and, "Without actual control, you can do nothing. I want to control nothing." Morgan countered the assertion that Wall Street and speculation were to blame for the ups and downs of the "business cycle." Morgan firmly testified, "I have absolute faith in the patriotism and public spirit of the Stock Exchange," and, "I would not favor legislation that would reduce the volume of speculation."[30] In the end, Pujo exited Congress in 1913 and the work of the committee to thwart the schemes of money interests were bypassed anyways. The committee's report, however, was widely publicized and cited in Supreme Court Justice Louis Brandeis's book, *Others People's Money—and How the Bankers Use It*, that criticized investment bankers for controlling the money of middle-class people, using industry in concert with the government to prevent competition, and directing the resources of their banks to promote their interests over society's. Down, but not out, the bankers fought on.

In 1913, Carter Glass became Chairman of the House Committee on Banking and Currency, where he worked with newly elected President Woodrow Wilson, a fellow Virginian who would latter appoint Glass to Secretary of the Treasury, to reintroduce and pass the Aldrich Plan as the Glass-Owen Federal Reserve Act. Glass's sons had taken economics at Washington and Lee University from Professor Henry Parker Willis and had recommended him to their father when Democrats had taken control of the House. Willis worked in concert with Laughlin and the banking interests to win over Glass and the newly empowered Democratic Party that won control of the White House and both chambers of Congress with the party's anti-Aldrich bill platform. Their new bill was similar to the previous Aldrich Plan with the obvious exception of dropping Aldrich's name, and more palatable provisions that allowed for presidential and congressional appointments. While bankers would have preferred to appoint the Federal Reserve Board themselves, they realized that the same results could be reached by having the president and Congress appoint the board— which elites were successfully swaying anyways— while bankers would enjoy a substantial measure of autonomy by electing most of the officials of the regional Federal Reserve Banks, and elect the advisory council to the Fed. Unlike the Aldrich plan, however, membership of nationally chartered banks would be mandatory, not optional, and new Federal Reserve notes would be an obligation of the U.S. Treasury. As debates ensued, Congressman Lindbergh protested:

> This Act establishes the most gigantic trust on earth.... When the President signs this Act, the invisible government by the Money Power, proven to exist by the Money Trust Investigation, will be legalized.... The money power overawes the legislative and executive forces of the Nation and of the States. I have seen these forces exerted during the different stages of this bill.[31]

Despite opposition and the little substantial difference between the Aldrich and Glass bills, the Federal Reserve Act passed the House on December 22, 1913, the Senate on December 23, and was swiftly signed into law by President Wilson.[32] A. Barton Hepburn of the Chase National Bank aptly summarized the far reaching effects of the bill in his speech to the American Bankers Association in 1913: "The measure recognizes and adopts the principals of a central bank. Indeed, if it works out as the sponsors of the law hope, it will make all incorporated banks together joint owners of a central dominating power."[33]

Chapter XII: Ushering in an Age of Uncertainty

J.P. Morgan died months before the bill was passed that formed the Federal Reserve; his partners blaming his death on the stress of testifying in the Pujo hearings. There would have been no point for Morgan to have worked so hard to set up a cartel and defend his actions if in the end it were to fall into the wrong hands. While many historians who are not geared towards power elite analysis narrowly focus on how such systems were formed, it is paramount to follow through with who assumed command of them afterwards. The Federal Reserve was promptly headed by Morgan men, and led by Benjamin Strong who had worked his entire career in the Morgan ambit and assumed control of the Federal Reserve Bank of New York. Initially, the power of the Fed's open market purchases was not controlled by the Open Market Committee as it has been since the 1930s, but laid with the Governor (now called "President") of the Federal Reserve Bank of New York.[1] Since the U.S. bond market is located on Wall Street, the Governor of the New York Fed originally controlled nearly all of the Fed's open market purchases and sales, and hence the Federal Reserve itself. When the Fed came into existence, it cut the average legal minimum reserve requirements imposed on the old national banks in half. Before the onset of the Fed, these banks were required to keep an average minimum of 20 percent reserves to demand deposits, which allowed them to pyramid inflationary money and credit at a ratio of 5:1. Now that a monopoly established that all reserves would be deposited with the Fed, there could be even more inflationary credit pyramided atop centralized supply, backed by the Fed's ability to create more money if need be. Accordingly, the Fed set the new deposit to loan ratio at 10:1.[2] Thereafter, if the Fed wanted to increase the money supply it could prompt a purchase of assets, generally U.S.

government securities, on the open market with money created from *nothing*. As a Federal Reserve Bank of Boston publication explains:

> When you or I write a check there must be sufficient funds in our account to cover the check, but when the Federal Reserve writes a check there is no bank deposit on which that check is drawn. When the Federal Reserve writes a check, it is creating money.[3]

When commercial banks deposit such money in a Federal Reserve branch, they are allowed to loan out 10 times that amount which results in a tenfold increases of newly created money from Federal Reserve open market purchases. Questions arose as to whether Congress even had the Constitutional authority to delegate its power to coin money or issue paper money to a public cartel. Paper money was still physically printed by the Bureau of Engraving and Printing which is part of the Treasury Department, but now it would continue to do so under authority of the Federal Reserve— not the Treasury Department. In contrast to paper money, coins continued to be physically produced by the U.S. Mint, and still within and under authority of the U.S. Treasury.[4] While the U.S. Treasury remained restricted by law to a certain maximum amount of coinage in circulation, the Federal Reserve won a free hand to authorize as much paper money as it saw fit, although the overwhelming stock of money created by the Federal Reserve doesn't exist in cash at all, but is an accumulation of digits and data that comprise checking accounts, savings accounts, money market funds, and CDs.[5] This power won by the banks that comprise the Fed cannot be understated. Congressman Ron Paul explained:

> The Fed today has ominous power that Congress barely understands. There is essentially no oversight, no audit, and no control. And the Fed is protected by the Federal Reserve Act. That's why the Federal Reserve chairman has no obligation to answer questions that relate to Federal Open Market Committee meetings and

> actions taken in conclusion with other central banks. Trillions of dollars can be created and injected into the economy with no obligation by the Fed to reveal who benefits. Lawsuits and freedom of information demands will not shake this information loose.[6]

It appeared that things couldn't be better for Morgan interests. They enjoyed the influence of Wilson in the White House, who had served several years on the board of the Morgan-controlled Mutual Life Insurance Company; Wilson's son-in-law, William Gibbs McAdoo, who served the Morgan's as president of New York's Hudson and Manhattan Railroad, was appointed by his father-in-law to Secretary of the Treasury; and the posts secured by their strong men in the Federal Reserve made them seem invincible. By 1914, however, the Morgan empire was facing increasing financial problems. Morgan interests had long been committed to the railroads, but by the turn of the century the highly subsidized and regulated railroads were in permanent decline. Furthermore, they were not as active in the capital market for industrial securities that began in the 1890s as their rival Kuhn, Loeb & Co. who were beating them in the race for industrial finance. As if that were not bad enough, the $400 million Morgan-run New Haven Railroad went bankrupt in 1914. At the moment that great financial danger loomed, however, the advent of World War I revived Morgan interests in the twilight years of their domination.

It is no coincidence that the century of total war coincided with the burgeoning of modern central banking. When governments once had to fund wars with the resources of the state and taxes of its citizenry there were more incentives for diplomatic solutions to prevent wars to begin with, and the necessity then, to end wars as soon as possible. Ludwig von Mises wrote, "one can say without exaggeration that inflation is an indispensable means of militarism. Without it, the repercussions of war on welfare become obvious much more quickly and penetratingly; war weariness would set in much earlier."[7] The advent of World War I, just a year after the formation of the Federal Reserve, would not only provide the United States the means to fund much of the war, but it also solidified the power of the new central bank and laid the basis for its enormous experiment in national and international economic planning. The advent of war promoted the United States to becoming the world's foremost creditor nation.

True to his ties to Morgan interests, Benjamin Strong followed through to parallel the actions of the Federal Reserve with British banking interests. The Morgan's had long been intimately associated with the British government and the Bank of England through their Rothschild connection and subsidiary Morgan Grenfell & Co. in London. Throughout the 1920s, Governor Strong promoted more effective cooperation among the world's central banks, and he traveled extensively to carry out this objective. As soon the war broke out in Europe, Henry P. Davison— the right hand of Morgan, Strong's protégé and neighbor from Englewood, New Jersey who raised Strong's children after the death of Strong's first wife— was sent to England where he used his Morgan ties to secure the House of Morgan as the sole purchasing agent in the United States of war material for Britain and France, and the sole underwriter of all British and French bonds floated in the United States to pay for the enormous imports of arms and other goods from the United States.[8] J.P. Morgan & Co. took on an enormous stake in the British and French winning the war, and played what was perhaps the most decisive role in maneuvering the supposedly "neutral" United States into the war on the British side. As J.P. "Jack" Morgan, Jr. said, "We agreed that we should do all that was lawfully in our powers to help the Allies win the war as soon as possible."[9]

To these ends, other Morgan figures contributed to pivoting the United States towards war. "Colonel" Edward M. House, who headed the Trinity and Brazos Valley Railway in Texas in collaboration with Morgan financial interests, became a key advisor to President Wilson, particularly in the area of foreign affairs. House's protégé, Walter Hines Page, was appointed as Ambassador to Great Britain where he received a handsomely subsidized salary through Colonel House by copper tycoon Cleveland H. Dodge, another prominent advisor to Wilson who benefitted greatly from munitions sales to the Allies.[10] In addition to swaying Wilson to enter the war, House was a stern advocate of promoting an "open door" policy to break down existing empires to establish a monetary hegemony that would position the United States to use its economic strength to gain footholds in new capital markets that could be brought into the fold of a new international financial system.

To mold the American public into accepting the war, the National Security League was formed in December of 1914 to propagate the prospect of danger Americans faced from a German invasion. As ridiculous as it sounds, its founding members were by no means ill of their wits or men of little stature, and they swayed the war debate considerably. Key amongst its founding associates were Congressman Augustus P. Gardner, son-in-law of Henry Cabot Lodge; and Henry L. Stimson, a Wall Street lawyer in the Morgan ambit, and pupil of Morgan's personal attorney, Elihu Root. Stimson rose to become Secretary of War for William Taft, Herbert Hoover's Secretary of State, and Secretary of War again in Franklin Roosevelt's World War II administration. The NSL advocated universal military training, conscription, and propagated anti-German hysteria through its Committee on Patriotism through Education, directed by Princeton University professor Robert McNutt McElroy.[11] To further the hysteria, Henry Davison, the representative of JP Morgan & Co. at the secretive Jekyll Island meeting, set up the Aerial Coast Patrol in 1915 to search the skies for German planes. It would be Davison who, on the outbreak of World War I, would rush to England as a senior partner of JP Morgan & Company to cement close ties with the Bank of England, and receive an appointment as monopoly underwriter for all British and French bonds to be floated by the United States during the war.[12] Other Morgan-affiliated leaders of the war movement included the NSL's Fredric R. Coudert, Wall Street attorney for the British, French, and Russian governments; munitions businessman T. Coleman DuPont; a host of Morgan oriented financiers including former Morgan partner Robert Bacon, Henry Clay Frick of Carnegie Steel, Judge Gary of U.S. Steel, Morgan partner George W. Perkins who had been termed "the secretary of state" of Morgan interests; and the political personages of Henry Cabot Lodge, Elihu Root, and Theodore Roosevelt. For these interests that combined arms production with investment banking, maximum destruction also meant maximum opportunity for profits from reconstruction after the war.[13]

The profiteering success of Morgan interests in World War I was matched by the misfortune of Khun, Loeb & Co. that were left out of the wartime bonanza. Murray Rothbard wrote:

> The Kuhn, Loebs, along with other prominent German-Jewish investment bankers on Wall Street, supported the German side in the war, and certainly opposed American intervention on the Anglo-French side. As a result, Paul Warburg was ousted from the Federal Reserve Board, the very institution he had done so much to create. And of the leading "Anglo" financial interests, the Rockefellers, ally of the Kuhn, Loebs, and bitter rival of the Anglo-Dutch Royal Dutch Shell Oil Company for world oil markets and resources, was one of the very few who remained unenthusiastic about America's entry into the war.[14]

Down, but not out, Paul Warburg resigned as a director of Wells Fargo & Co. to represent Kuhn, Loeb & Co., while Fredric A. Delano, uncle of Franklin D. Roosevelt and president of the Rockefeller-controlled Wabash Railway, allied Warburg with his representation of Rockefeller interests.[15]

When the United States finally did enter the war, Strong seized the opportunity to entrench the power of the Fed. Prior to the war, the Secretary of the Treasury continued the lawful practice established from the time of Andrew Jackson of depositing all government funds in its own sub-treasury vaults, and making all disbursements from those branches. Secretary of the Treasury William Gibbs McAdoo— director of the United States Railroad Administration, and by virtue of his position as Secretary of the Treasury served on the first Federal Reserve Board in Washington, DC.— lavished the Fed under conditions of "wartime necessity" with a power Benjamin Strong all too eagerly desired: from that point forward the Federal Reserve became the sole Fiscal agent of the U.S. Treasury that would deposit all of its funds with the Federal Reserve.

Those who played a leading role in bringing the United States into the war made handsome profits through export orders, loans to the Allies, and domestic and Allied military sales. Accordingly, the Special Committee on Investigation of the Munitions Industry was established on April 12, 1934, and chaired by Senator Gerald Nye to investigate the financial and banking interests that influenced American involvement in World War I. The committee documented the huge profits arms factories made during the war, and concluded that bankers had pressured Wilson to intervene in the war to protect their international loans. The investigation came to an abrupt end early in 1936 after Nye suggested that President Wilson had withheld essential information from Congress as it considered a declaration of war. Democratic leaders unleashed a furious response against Nye for "dirtdaubing the sepulcher of Woodrow Wilson." Foremost amongst them was Carter Glass who introduced the Federal Reserve Act to Congress. Senate history cites that Glass pounded his fist on his desk before the Senate Chamber until blood dripped from his knuckles.[16] Central to all of the spending investigated was the Fed who supplied the money the Allied governments needed to carry out their armament needs and wartime ambitions. Atop of this, banks created even more money by extending credit to the public to purchase government bonds.

The other nations, however, did not fare so well. Warring governments, with the exception of the United States that entered the war late, inflated their paper and bank currencies beyond their redeemability to pay for the new scale of conflict. The inflation was so severe that it was impossible for the warring governments to keep their pledges, and accordingly declared their own bankruptcy by going off the gold standard. The United States partially shared in the financial madness involved in the war by barring the redemption of dollars for gold to foreigners, while the Fed significantly hoarded gold. The gold reserves of the Federal Reserve nearly tripled during the war from holding 28 percent of the nation's gold stock before the war, to 74 percent by wars end.[17] This not only helped the Fed spur a nationally-coordinated inflation, it also marked a change in the habit of average Americans that previously used gold their daily lives, and now resorted to the sole use of paper and checking accounts. Although the United States fared better than other nations, make no mistake, it also endangered its own currency through its own massive inflation. The stock of money by June of 1920 was roughly double its September

1915 level, and more than double the level of November 1914, when the Federal Reserve Banks opened for business.[18]

The end of the war brought sweeping changes to world of finance and banking during a time that popular thought ran a fascinating parallel in what has become termed the "Age of Uncertainty." It was Ambroise-Paul-Toussaint-Jules Valéry, French poet, essayist, and philosopher, that linked the phrase of uncertainty with the period after WWI with his observation that the war had left a "terrible uncertainty" that resulted in the rejection of ideas about progress and the rational mind. Works in philosophy, physics, psychology and the arts encouraged this general crisis. The high tide of progressivism had passed, and as it receded a noticeable anxiety prevailed. The prevalent moods of pessimism, relativism, and alienation found expression in literature and abstract art that matched the era's turbulence of thought. From the time of the Renaissance, Western art was characteristically identifiable by a logic of perspective that expressed a visible reproduction of reality. In the wake of the fundamental changes taking place in technology, science and philosophy, a new kind of art emerged that reflected the social and intellectual preoccupations of Western culture that encompassed new outlooks towards a world that lacked meaning. The rise of these popular notions also challenged the convictions of the faithful with the assertion that any faith was just as good as another, and that no one path could possibly possess any monopoly on an objective truth— if in fact, that existed outside of what science and math could verify. Freud told us man had false perceptions of God: "At the bottom God is nothing more than an exalted father."[19] The rise and acceptance of such trends was a fatal concession to secularism that not only promoted no reason to prefer any one religion over another, but also raised the possibility that secular philosophies were equally good. Albert Schweitzer, famed theologian and recipient of the Nobel Peace Prize for his philosophy, was deeply affected by WWI and acknowledged the prevalent doubt of popular thought: "The future of civilization depends on our overcoming the meaninglessness and hopelessness that characterizes the thoughts of men today."[20] This whirlwind of uncertainty laid the foundations for an environment that was conducive to overhauling the basic tenants of economics and ideas about precious metals and money that, like our slipping ideas about objective reality and purpose, had been with us for a long time.

The shakeup of uncertainties that would come about from the manipulations that governments would embark on to create the illusion of new wealth with complex monetary policies did not come about independent of changes in the way people saw the world. The "Age of Uncertainty" that is used to explain the unsettling way man looked upon his world could just as easily double as the title of the new era of economics the world stumbled into under the guise that what was not understood about the new money could be safely deferred to governments that must know what coordinated banks were doing. The war briskly ushered in a norm of regularly freely-fluctuating or flexible rates (now called "dirty floats") where governments became accustomed to allowing the value of their currencies to fluctuate with periodic interventions of buying or selling currencies in the foreign exchange market to "plan" their desired outcomes. Wars have historically been opportune times to hatch inflationary schemes; desperate times call for desperate measures. The problem for banking and inflationary ambitions had always been sustaining wartime practices to amass profane amounts of money and spending in the absence of national emergencies. Wars themselves, and World War I in particular, brought about boom bust cycles that resulted in volatile markets, uncertainties and fears of currency depreciation. These uncertainties led to the increased popularity of forward, futures, and option contracts on foreign currencies. Amongst rival nations, competitive devaluations, warring currency blocks, exchange controls, and tariffs and quotas fostered the dawn of conceiving money in a whole new light. Governments embarked on complex monetary policies to create the illusion of new wealth.

The upsurge of these planned wartime economies were largely influenced and run by banking interests would serve as the model, precedent, and the inspiration for state corporate capitalism in the twentieth century, and established a seemingly permanent symbiosis between business and government in the United States. While the ensuing chaos left many unsure about the future, banking interests seized the opportunity to forge a new world. Frank Vanderlip's statements during the war about the future of banking reveals the foresight bankers had for the post-war world. Vanderlip revealed, "The future is going to be very different from the past. Precedent will no longer be a guide. We are going to do things in new ways. We have seen the Government occupy a new relation toward business; toward our affairs."[21] The end of old monarchies in Europe left a vacuum in Eastern Europe that the Allies sought to exploit at Versailles by forging a new world monetary system based upon coordinated inflation. The new independent states that emerged from the war would become client states of Britain and France under the wing of the Morgan/Rothschild financial network, although American bankers were hard at work to establish the future of American banking across the world. To these ends, bankers envisioned their roles in the "New World Order" President Wilson promoted. Paul Warburg, in an address entitled *Capital Issues and Municipal Debts and Their*

Relation to War Financing, stated, "As the President said in his splendid appeal for thrift on May 29, 'This war is one of nations—not of armies.' Modern warfare has become a struggle of resources and industries as much as a struggle of men."[22] In a speech that followed on the topic of financial reconstruction, Warburg revealed, "As destruction once begun on the battlefield spread its waves until its effects had reached all parts of the world, so the work of reconstruction will involve the whole globe far beyond the centers originally affected . . . the normal of the past is not likely to be the normal of the future, which raises the further question of what that normal ultimately will be."[23] Warburg's outlook held a promising future for American banking. "I much misread the future if it does not have in store for New York the position of a world exchange center."[24] Warburg continued, "In order to carry out this program several things are necessary. First, our banks and bankers must be able and willing freely to extend their acceptances for the financing of the world's trade. . . . And as our banking power and machinery develop, there unfolds new opportunities for foreign branches of American banks."[25] Warburg's conclusion disclosed just how aggressive American bankers would pursue those ends: "The war being over, it is now the privilege of our bankers and financiers to make themselves generals in the . . . pursuits of commerce and trade in all parts of the world."[26] In an address to the New York State Bankers Association on the role of the Federal Reserve would play in reorganizing the world along American standards, Warburg stated, "The banking system of a world power cannot possibly be construed upon so small a foundation."[27] Accordingly, "The Federal Reserve System will grow stronger with every coming day, and the stronger it grows and the more it perfects its organization, the more apparent will its benefits become for all its members."[28]

At this juncture of our examination, we leave off where American bankers stood poised to assert their "scientific" economic system upon a forged liberal world order with the aspiration of becoming the world's economic hegemon that Warburg, Vanderlip, and the financial elite envisioned. As we have seen through the history we have examined, Western ideas and their corresponding economic practices characteristically emerged in Europe, and then made their way across the Atlantic to take root in the United States. As the United States became the world's economic hegemon, however, a whole new chapter of economic history ensues that seems rooted in the triumph of an economic amnesia that has allowed new monetary practices to allude lay people from understanding economics the way they once had. The madness of the First World War marked a turning point where people were so bewildered and desperate that it allowed for the enactment of monopolized inflationary systems that could no longer be comprehended within the traditional terms of bullion and precious metals. Before we reached the modern conclusion that money and economics were subjects of science beyond the grasp of the lay man, our study revealed historical trends that characterized the motives to establish today's prevailing monetary systems. Without a historical perspective that helps us take into account the motives and actions of the key players that forged the economic world we adopted, today's economists and their encompassing approach to economics will be of little avail to help us understand how we even arrived at these ends in the first place.

Conclusion

Through the course of this examination we have seen that economics, particularly as it pertains to banking and finance, is inseparable from the ongoing struggle to control the reigns of society. We explored the subject through different eras of Western history which illustrated varying arrangements of governments sometimes exploiting the money interests for their benefits, and in more modern times money interests exploiting the power of governments for theirs, but regardless of the particulars how it was being done or by whom, a strong historical trend is evident which should support the claim that it is a vitally important field of study to truly understand what drives policy and economic trends that affect the world at large. Nonetheless, the new scientific economists and their political science counterparts that currently dominate this realm of academia shifted their attention away from the historical tradition of event-based narratives to explain social phenomena and the workings of man in terms that mimic scientific law. In the wake of this movement, the history of economics has become beholden to the application of mathematics and statistical methods to mountains economic data to extract simple relationships. The fusion of modern economics and economic history in the 1970's brought about the demise of traditional economic historians. In the absence of scholars that will ask pertinent questions about how we arrived at the economic ends we inherited, an immense ignorance will persist of how our governing systems and economies actually function. As Nobel laureate F.A. Hayek stated, "nobody can be a great economist who is only an economist - and I am even tempted to add that the economist who is only an economist is likely to become a nuisance if not a positive danger."[1]

While historians are more prone to examine governments in conjunction with political science, the same cannot be said about economics. We have become increasingly conditioned to reject anything outside of overtly positivist philosophies of science—the outlook that the exclusive source of all authentic knowledge that applies to social and natural "sciences" must be data derived and subjective to mathematical verification. The Federal Reserve and other "experts" throughout the historical rise of modern economics draw upon this very way of thinking to cite that central banks as we have come to know them came into being because their need was all but obvious, and a tendency persists to ridicule anyone who thinks differently. If someone does not accept the empirical conclusions of math and science we can logically conclude that they are irrational, but modern society has also adopted similar notions about prevailing economic schools of thought. Newton's thesis that the universe tends toward greater entropy seems to have been applied to world-wide Anglo-American prosperity to conclude that its prevailing political economic system somehow evolved to a state of inert uniformity. We have shown, however, that the central banking systems vital to these outcomes were not enacted upon the common perception that they evolved on a leveled and open playing field that permitted fair and equal access to politics and market competition. Quite the contrary, we demonstrated that today's banking systems attained power through winning government protection and exclusive privileges. As we examined the records and reports of key politicians involved in establishing our modern system we discovered that they used their offices as platforms to advocate the same policies sought by the bankers they had intricate ties to.

A key part of our examination also revealed that once common economic debates amongst the American populous and its political parties fell increasingly silent after the election of 1896. Thereafter, politicians from both parties fell in line with bankers who forged the systems in place, and the layman ceased to focus on issues he could no longer understand. There is sound reason behind why the complexity expert-driven economics transcends the common sense of the lay man; it's founded upon lies, evasions, half-truths, and even well-intentioned fictions that paradoxically *lack* sense. Once the players we examined established the economic systems we inherited, the general consensus in the political and economic arenas has been to criticize "heterodox" analyses of the economic system that fall outside of today's econometrics and aggregate macroeconomic conclusions. It is common argument that the Federal Reserve dominates the field of monetary economics through its extensive network of consultants, visiting scholars, alumni, and staff economists, to the extent that Milton Friedman referenced it as a sort of oligopoly on monetary opinion that would discourage anyone with aspirations of advancing in the field from criticizing it. Dissenting opinions can be career liabilities when the editorial boards of key journals work directly for, or are affiliated with the Federal Reserve.[2] It seems to uphold Voltaire's observation, "To determine the true rulers of any society, all you must do is ask yourself this question: Who is it that I am not permitted to criticize?" If there is any truth to this as it pertains to the political and economic interests we examined, it only reinforces our claim that the fields of history and economics must be open to reengaging the subject in ways that will bring balance to the intellectual climate that makes value free analyses and theories that only describe how things 'are', not how they 'should' be. Our consciences must be engaged to reconstruct the actions and motives of others and judge them as moral, or not. Of course, we are far removed from the era when economists were philosophers, and morality was their foremost consideration.

Our initial investigation of economics in Western thought revealed it was conducted on the basis of ethics; what is natural and unnatural. Central to the prevailing theses was that usury was immoral. Usury did not fit our modern banker approved definition that tells us it is charging an *excessive* rate of interest. Rather, the ancient definition of usury is what we would call interest today: using money— or selling it— as a means of acquiring more money. Aristotle's application of metaphysics to the subject led to the conclusion this form of exchange ultimately distorts the appearance of wealth over time and leads to the displacement of natural exchange through a warped sense of reality associated with money. The classical account of wealth acquired through these means is set apart from natural wealth because it cannot be rationed in terms of having enough. Using money in this way means that it is not subordinate to a natural end, and is without limits which makes it irrational. A society, moreover, that has displaced natural exchange by the formation of a perceived social reality associated with money has itself become dangerously irrational. Initially, governments and the Church tried to control the growth of usury, although the lesson to be had from our investigation is that when it comes to money, in the face of moral or religious objections, right or wrong, governments have established a historical trend of acting more in line with worldly gain than heavenly virtue. As is often the case, unfortunately, when governments stand poised to be the beneficiary of illegitimate banking practices, they justify and grant bankers privileges to practice fractional-reserve ratios outside of the frame work of general legal principles that would favor the security of depositors. These trends came about in sync with calls to counter the tenants of Aristotelian thought that held out against banking schemes until such time that new philosophies displaced economics from being within the sphere ethics. This is because what people *believed* about their world and the new ways they saw it was central to revolutions in thought that coincided with changes in economics, finance, and new forms of government manipulation.

Another key aspect of our investigation revealed how Protestants revolutionized the organization of the world's economy after coming out from under the shadow of the Church. They confronted the Aristotelian line of thought championed by Scholasticism as the application of overbearing and corrupt religion that hampered the progress of modern economics. Ironically, the hypocrisy they identified with the corruption in the Church was matched by the irresistible lure that governments followed to pervert money supplies to their advantage. It was in this environment that Northern Europe distanced itself from Southern Europe to promote a sense of individualism truer to the spirit of self-interest, economic freedom, and private-property rights.

The philosophies that emerged provide us with clear insight to the increasing subjectivism that challenged traditional views of objective reality that are were clearly identified by the religious doctrines that upheld classic philosophy. While through the course of our examination we identified numerous philosophers that were influential examples of this, we cannot look at the works of any one philosopher and say that their ideals were responsible for the course of society, especially in the face of contrasting works that were also popular during the approximate time. Nonetheless, these works collectively testify to ideas and notions that became increasingly popular, and evidence the course of human decisions that resulted in policies based upon the conventional wisdom of a time. As Locke himself stated, "As people are walking all the time, in the same spot, a path appears."

A fatal concession to traditional economics came with the abandonment of the Aristotelian and Thomistic idea that economics should focus on the behavior of individual economic agents and households, in addition to the demise of scholastic metaphysics and gnosiology. For Aquinas, universals were the essential properties of all things; they exist from God, His attributes residing in all things at the roots of their empirical reality. Once set into motion, however, the direction Aquinas embarked on with logical explanations of issues that had formally been within the sphere of Gnosticism led to philosophers like Rene Descartes to rely solely upon logic until such time that Gnosticism was totally displaced from mainstream Western thought. The initial abandonment of economics from Thomism, in turn, occurred in sync with science undergoing a secular process in the wake of the Reformation.

Nietzsche observed that the Reformation made each individual their own priest. In this environment, the new universities gave rise to modern philosophy, and with it science. The admiration of science followed, especially from the works of Newton, and gave rise to natural-law philosophy. When human action was no longer motivated by spiritual ends, a context was reached where it became studied without aspiration of reaching universal propositions. As Ernesto Screpanti stated, "And it is precisely when public choices are no longer limited by God, but only by the ends of men and the nation, that it is possible to study them scientifically."[3] This further complicated referencing any common basis of judging economic systems or polices as ethical or not. The want of man uniquely made economics completely muddled because without the standard that had traditionally held Western society from straying too far away from what was deemed objectively ethical, those who stood to gain from polices would no doubt use the power at their disposal to insist their subjective views were correct, and served the greater good.

The ideal that what was "normal" could be overhauled and replaced by a progression towards something "better" led to behaviors we now have the hindsight of seeing as naïve, but nonetheless prove useful for the purpose of examining how modern man arrived at his current disarray of altruistic secularism that radically changed a whole array of social norms, including economics. These developments would not reach their full implementation without the full backing of governments, and an accompanying zeal for government as the agent of improvement. Years later, Friedrich Nietzsche argued that even if those in the Enlightenment that called themselves atheists or materialists continued to be believers. Not that they prayed to God, but in the sense that they revered new illusions which continued to place belief in certain values above life itself that required transforming reality to conform to new idols like the rights of man, science, reason, democracy, socialism, equality and so on. According to Nietzsche, these new perspectives that downplayed traditional faith nonetheless remained prisoner of the underlying structure of religious thought. While the quality of man and his ideas did not improve by swapping one set of ideals for another, the illusion of progress was sustained by the awe of science and technology. As we discovered, the advocates of economic innovations rallied behind implementing new systems deemed "scientific." While the worth of science is defined by dealing with objective facts, the use of science advocated by the bankers we examined seems to have been more in line with using subjective rhetoric to manufacture support for their desired ends in line with G.K. Chesterton's observation, "The rich men want a scientist to write them a *letter de cachet* as a doctor writes a prescription."[4]

Although we now live in an atmosphere where the concepts and habits of thoughts in everyday life are highly influenced by thinking in terms of science and progress, we must not forget that in order for these innovations in thought to dominate, they first had to fight their way into a world where most concepts had been formed on the basis of human relations; men basing their conclusions on interpreting the actions of other men. The ascent of science soon came to exercise an extraordinary fascination in other fields that rapidly began to imitate their teachings and vocabulary, and economics became dislodged from the crux of philosophical inquiry that would have regularly examined the motives of men to discern the reality of their social circumstances. Sir Karl Popper, prominent 20th century philosopher of science and professor from the London School of Economics, declared in 1960 that "Economics is the first of the social sciences to have had its Newtonian Revolution."[5] Improvement was envisioned in understanding "laws"— laws of nature, biology, history, and economics— instead of using the faculty of reason to understand man's own nature.

In the wake of all governmental endeavors since taken in the scientific inspired name of "progress," historians will be hard pressed to produce evidence of men so diligent and successful in attaining a better state in the interests of the poorest and most numerous classes, as vested interests have been successful in manipulating economic policies to their favor. History seems to testify that man has not been nearly as driven to control society for the sake of improving the conditions of the populace, as he has been to engineer self-serving economic systems and policies to forge favorable out comes on behalf its "architects," or more aptly, "manipulators." Friedrich Hayek's observation that, "The ideal of conscious control of social phenomena has made its greatest influence felt in the economic field,"[6] stems not only from the enormous gain to be won by vested interests through government intervention, but also because there is so much that governments can manipulate in their favor. This has held especially true as it pertains to war. Adam Smith wrote:

> when war comes they [governments] . . . are unwilling, for fear of offending the people, who, by so great and so sudden an increase of taxes, would soon be disgusted with the war; . . . The facility of borrowing delivers them from the embarrassment which this fear and inability would otherwise occasion.[7]

Ludwig von Mises astute conclusion succinctly summarized that, "one can say without exaggeration that inflation is an indispensable means of militarism. Without it, the repercussions of war on welfare become obvious much more quickly and penetratingly; war weariness would set in much earlier."[8] It is fascinating that this very point was argued before the Supreme Court in favor of inflation based on the conclusion that if the government was threatened by the war that inflating legal tender provided a means to wage war, thereby legitimizing the incidental power to create fiat money by Congress's power to carry on war.

While such conclusions scream of obvious moral imperatives, we cannot escape the conclusion that the progression of subjective modern thought has clouded our judgment about the "correctness" of actions people enact, or if what they are doing is in alignment what is "good"— especially if we accept Comte's conclusion that, "There is nothing good and nothing bad absolutely speaking; everything is relative, this is the only absolute statement." The basis of "good" has accordingly been reduced to judging if new innovations have produced "more," down playing what should otherwise be the paramount questions of *how*, and *for who*. This pro[re]gression of thought up through the last century prompted Hayek's remark, "it is probably no exaggeration to say that every important advance in economic theory during the last hundred years was a further step in the consistent application of subjectivism."[9]

Economics requires an inquiry of human beliefs because it cannot be solely defined in the objective terms of the physical sciences. Science, devoid of passing judgment on individuals outside of the application of psychology, has clouded the traditional basis of the "moral sciences" that once applied to economics in a historical context, and provided insight to the motives of players in question. We can recognize these elements of human relationships only because they are known to us from the workings of our own minds. Our understanding of others is made possible by the fact that we have a mind like theirs, and from our similarities we can reconstruct their actions and judge them as moral, or not. Such conclusions, while not definitive, are nonetheless common for historians who are left to deduce the motives and actions of key figures whose propensities to protect their endeavors lead them to cloak their true ambitions behind lofty ideals, to be secretive, or flatly dishonest.

The flaw that emerged as a result of these trends of thought was that the growing tide of subjectivism failed to develop a theory of human nature. Our examination, by way of contrast, reveals the propensity of men to contrive complex monetary policies that essentially warp the sense of reality associated with wealth. The many examples we cited to establish that such struggles in the United States were merely an extension of a European norm the American experience was born from testify to the validity of calling the motives of key innovators into question. It is much more reasonable to conclude that the world's dominant economic institutions are an extension of man's corruptive norm than it would be to assume the proposition that we have finally worked our way to the end of history through discovering the best economic system that continues to spread on the merit of its attributes. This would warrant George Santayana's observation that, "Those who cannot remember the past are condemned to repeat it." It would be an oversimplification, however, to say that the economic trends we have examined show that history is repeating itself. Rather, we can conclude that man has forged more efficient means of pursuing the same historical norms.

These norms manifested themselves in the United States where money-making emerged as the dominant ethic; where economic innovation inescapably culminates with American fashioned banks and corporations becoming the world's dominant economic institutions. Scholars of intellectual history have pointed out that the progression of American ideals did not so much take shape in philosophical works as they commonly did in Europe, but were more evident in the establishment of American institutions. Alexis de Tocqueville observed that this drove Americans with the most education and intelligence to join limited intellectual circles characteristically within the academic or contemplative realms, or use their superior talents to take advantage of America's growing obsession with money-making to amass vast fortunes in the private sector. The course of Western thought that raised the state as the embodiment of the law, coupled with democracy that permitted competition amongst the fittest to retain politicians in service of their interests, meant that America held the potential to multiply the prospects of corruption and injustice. When the members of an industry, like the ones we examined, have very strong interests in the actions of a regulatory body, the rest of the citizenry that compete in the democratic process cannot possibly be as informed or keep pace with the resources they employee to gain government favor. Given how all of these elements converged in the unique circumstances that shaped the American experience, from early on we can trace the potential America possessed to lead the course of economics in a race to the bottom.

As we now know, the most powerful system that emerged after a century of struggle did not come from the government domineering endeavors of the Germans, Russians, or Chinese, but came from private interests that steered government. The formation of American fashioned banks and corporations as the world's dominant economic institutions grew in this era in scale with the government that helped establish cartels on the free market, and the evolving banking system that provided the enormous inflationary created capital for this new scale of operation. Although banks came to be favored by the government that provided them the protection of being viewed as "individuals" under the 14^{th} Amendment, the cruel reality is that their nature lends them not to feel genuine human concern for others or society at large in the context of their singularly self-interested enterprises.[10] This inhumane element of power that came to rule the halls of government set the stage for a destructive path of industry and finance that would wield the muscle of the nation-state to devour its own citizens, and scour the earth in pursuit of profit. These interconnected interests, while often in competition against one another, cooperated amongst themselves in the interests of securing the favor of governments to implement and expand their global ambitions. Prominent financial powers of the time used their influence to establish a cartelized economy of grants and exclusive privileges from the government that won them far greater fortunes then they could have possibly achieved on the free market.

Like other businesses, banks could have been held to honor their contractual obligations with reserves under the threat of government enforced liquidation and immediate insolvency, but instead the government adopted the tradition of allowing general suspensions of payments and picking up the liquidation tab of failures that have occurred under privately owned central banks. The disastrous direction the bankers and financers of Wall Street steered the nation towards was manifest in the levels of speculation and reckless behaviors they engaged in, and we even cited government reports that testified as much. Instead of calling into question the fundamentals of their practices and the dangers that persisted through their practice of fractional reserve banking , however, the economy followed their lead and a noticeable trend emerged that was deemed "the business cycle." It was regarded as natural, although we have demonstrated that it is only as natural as we regard fractional-reserve banking and speculation to be natural. Initially, bankers struggled to bail themselves out of trouble through the cooperation of clearing-houses. Instead of risking and straining their own funds, however, they conceptualized a new system that would hold the government responsible for providing reserves through an expansion of the artificial wealth we accept as money whenever the underlying factors that cause the business cycle put the economy in peril. To finally convince the populous that that the entrenched banking system was sound, its solvency— that could not be trusted by its own merit— had to be guaranteed by the government.

The allure of allowing banks to create more money from the practices of fractional reserve banking is altogether too sweet for a deficit inclined government to refuse. This, of course, was also due to the frailty of democracy to withstand the blitz of special interests that were all too eager to align the American economy with the ambitions of international bankers. President Wilson believed he could sell a new liberal world order that advocated a type of American exceptionalism and moral superiority. If such an organization could be implemented, it could no doubt lend itself to using governmental authority to mandate financial laws and systems to bolster the schemes already perpetrated by connected international bankers. The shakeup of uncertainties that arose from the manipulations that governments would embark on to create the illusion of new wealth with complex monetary policies did not come about independent of changes in the way people saw the world. The "Age of Uncertainty" that is used to explain the unsettling way man looked upon his world after World War I could just as easily double as the title of the new era of economics the world stumbled into under the guise that what was not understood about the new money could be safely deferred to governments that must know what coordinated banks were doing. The radical overhaul of the way Western society viewed the world was also conducive to overhauling the basic tenants of economics and money that, like our ideas about objective reality outlined through the course of this work, had been with us for a long time. The madness of the First World War marked a turning point where people were so bewildered and desperate that it allowed governments to enact and monopolize inflationary systems of wealth people could no longer comprehended in terms of bullion and precious metals. When the Fed spurred a nationally-coordinated inflation, it also marked a change in the habit of how average Americans used and thought of gold in their daily lives and they have since resorted to the sole use of paper and checking accounts. With this fundamental change in way people conceptualized wealth, the foundation was set for unprecedented levels of inflation.

In forging this new world for banking, Benjamin Strong's monetary policy with the Federal Reserve became geared towards the objective reorganizing the world along Anglo-American standards by helping the British impose a phony gold-exchange standard upon Europe. Through this gold-exchange standard that would inflate currencies atop of British pounds, England— which meant the Morgan/Rothschild financial network—would be restored to its previous position of financial dominance. Strong collaborated closely with Montagu Norman, Governor of the Bank of England, to inflate American money and credit to support the return of Britain as the monetary leader of Europe. The return of a "gold-standard" after the fiat blitz of the war, sought to hopelessly fix the pound-sterling at pre-war par after being monstrously inflated through the course of the war. Returning to gold at an overvalued par while continuing to indulge in cheap money and inflation, instead of contracting money to levels comparable to pre-war conditions, only guaranteed the outflow of gold from Britain once doubt in the worth of its currency prevailed. The United States did what it could to uphold faith in the post-1925 European gold bullion-pound standard by inflating its money and credit to prevent the hemorrhaging of gold from Britain. The result, however, was the eventual collapse of money and credit in the United States that would lead towards a worldwide depression.

After Britain abandoned its gold standard, American gold reserves came under severe pressure when foreigners began converting their dollars into gold out of concern that the United States would follow Britain. At the same time, domestic depositors concerned with the solvency of banks began withdrawing currency from their accounts which added an internal drain to the banking system that further reduced the money supply and increased deflation. In 1933, during the Roosevelt administration, the government seized gold from American citizens, it became illegal for citizens to own more than $100 in gold coins or bullion, and the dollar became irredeemable for gold in the United States. To boost the economy the Fed expanded bank reserves in the 1930s, while doubling the minimum reserve requirements to 20 percent which effectively triggered a frenzy of credit liquidation and plunged the economy into an even deeper depression. As a result, the Fed has since been very cautious about drastic changes to reserve requirements, and although changes frequently occur, they are usually only by fractions of one percent.

The aspiration of American bankers to assert their "scientific" economic system upon a forged liberal world order to become the world's economic hegemon was largely accomplished in the wake of World War II. The Americans and British promoted the Bretton Woods system which essentially was a new "pseudo-gold standard" that did not use domestic gold or bullion in circulation, but implemented gold as a means to settle international balances between nations. This pseudo-gold standard, while fronting the prestige of gold, was actually based more on faith in the United States and the dollar became the world's principal currency. The Federal Reserve enacted an inflationary policy that printed paper money not backed by gold, but nonetheless promised that it was redeemable as such; essentially the same gambit run by ancient goldsmiths that printed pseudo receipts of gold for interest-bearing loans under the presumption that not all depositors would withdraw their gold at once. The American government guaranteed that dollars could be exchanged by other governments for gold at an official fixed rate. This established dollars as the foundation for international exchange, while other currencies became pegged on the dollar. By the early 1970s, however, the United States was no longer the world's unrivaled economic power. Germany and Japan challenged America's position of preeminence and began to accumulate dollars at an alarming rate. As the Bretton Woods system of fixed exchange rates began to falter, governments and central banks worked to find solutions. To reduce the world's dependency on the Fed, the International Monetary Fund (IMF) and the World Bank were created to extend credit. The IMF would supply short-term loans, and the World Bank would supply long-term credit to member states in trouble. By 1971, the value of American imports outran the value of its exports for the first time in post-world war history. Inflation had become so prevalent that dollars held outside the US began to exceed American gold reserves. The United States accordingly severed the relationship between gold and dollars when President Richard Nixon officially took the U.S. off the gold standard on August 15, 1971. The IMF and World Bank, however, survived the collapse of Bretton Woods. Thereafter, the American dollar has been backed by the "full faith and credit of the United States Government" and the world has come to be dominated by coordinated world inflation instead of gold. None of this would have been possible, however, were it not for the revolutions in thought and the determination of the vested interests we examined. The day had finally dawned when the monetary basis of the world's money matched the "scientific" system Charles Conant promoted:

> The richer commercial countries have found gold to be the most efficient standard of value and basis of credit and as other countries advance successively to the same rank and the supply of gold in the world becomes adequate to their needs they also will take their place from time to time in the circle of the gold standard nations until gold becomes the universal money of commerce or is superseded by some more perfect instrument for doing the world's money work.[11]

In order to keep this engineered system of money going, however, it requires perpetual inflation. Since the Federal Reserve came into existence in 1913, over 95% of the dollar has been inflated away. Goods and services that could be bought for $1.00 in 1913, would now cost $21.80. This essentially means that savings are endangered by monetary policy, which forces investment in order to preserve savings — a bonus for Wall Street at the expense of Main Street. Studies also indicate that inflation inflicts the harshest effects upon the poor.[12] Paul Volcker, Chariman of the Federal Reserve from 1979–87, conceded the Fed's responsibility in reference to the period following the demise of Bretton Woods:

> It hits the people on a fixed income hardest. And there's quite a lot of evidence, contrary to some earlier thinking, that it hits poorer people more than richer people . . . the Federal Reserve had been attempting to deal with the inflation for some time, but I think in the 1970s, in past hindsight, anyway, [it] got behind the curve. It's always hard to raise interest rates.[13]

If we heed the warning of the early economic philosophers, or at the very least consider their conclusion that displacing natural exchange by the formation of a perceived social reality associated with money can lead a people to become dangerously irrational, then certainly an examination of economics from a different perspective is warranted in modern society where few even understand what money is anymore. The

Federal Reserve makes sense in the context that we do not question the paramount establishment of Wall Street speculation and fractional reserve banking. The economic distortions that occur as results of these no doubt put the economy in danger, but more importantly as it plays out in history, they jeopardized the immense profits modern banking is based upon. The Federal Reserve System was accordingly designed to create and control inflation, and was founded by the Federal Reserve Act to "provide the nation with a safer, more flexible, and more stable monetary and financial system." The Department of the Treasury equivocates a similar narrative that, "Such cycles of expansion and panic continued for the next thirty years, and were the basis for the creation of the Federal Reserve in 1913."[14] What is not given proper attention, however, is the danger of fractional reserve banking practices and its ties to speculation. The causes of banking ailments in the United States were more readably identifiable before bankers could come to a unified consensus about what had to be done about it, or who to blame. It was only in this environment, before the influence of bankers eclipsed bringing the fundamentals of their industry into question, that John Jay Knox, Comptroller of Currency, wrote what seems to be a timeless criticism:

> law-making power having been led to believe that the corporations authorized would contribute as much to the public good as to their own profit. But it has been found that overgrown corporations are conducted . . . chiefly for the benefit of the few officers and directors . . . and it is the great economical problem of the day how to correct a monstrous evil.[15]

We only caught a brief glimpse of bringing the fundamentals of banking and Wall Street into question when the Comptroller of Currency Henry Canon stated in 1884:

> It is apparent, however, that a repetition of some of the same circumstances which brought about the monetary crisis of 1873 has been largely influential in causing the present crisis. . . . There is little doubt that one of the causes which led to the local disturbances among the banks . . . was their intimate relation in many instances to the New York Stock Exchange. . . . Lines should be closely drawn between legitimate business and speculation. . . . The proper relation of the New York Stock Exchange to the business of the United States is yet to be determined.[16]

The lure of easy money through manipulation has historically proven difficult to put down, which makes a fair marketplace like the one Saravia da la Calle envisioned, a national banking systems outside of the control of vested interests like the one Andrew Jackson advocated, or even controlling inflation from ravaging poor, all the more difficult to achieve. While regulation and vigilance previously held back manipulators for a time, they persistently crept back with the blessings of governments that granted bankers special privileges that helped make their task of financing the state through inflation much easier than direct taxes. The success of these manipulators was eased with the advance of subjectivism that made their arguments every bit as legitimate as opposing "relative" arguments that called into question their judgment and morality. Because manipulators of wealth have been inclined to deliberately obscure their true intentions behind a mask of lofty abstract goals and ideological principals— be it the Medici, Carlos V, governments threatened by war, or the advocates that promoted the Federal Reserve— historians must counter their generalities by judging the motives behind the innovations they advocated.

End Notes

Introduction

[1] Alan Blinder, Professor of Economics at Princeton and Clinton appointee to Vice Chairman of the Federal Reserve stated, "You can get your information about the economy from admittedly fallible statistical relationships, or you can ask your uncle. I, for one, have never hesitated over this choice. But I fear there may be altogether too much uncle-asking in government circles in general, and in central banking circles in particular."

Passell, Petter. "Economic Scene; Some meaty stuff on monetary policy, from a former Fed hand." *New York Times,* January 29, 1998. http://www.nytimes.com/1998/01/29/business/economic-scene-some-meaty-stuff-on-monetary-policy-from-a-former-fed-hand.html.

[2] The Federal Reserve Bank of St. Louis, "In Plain English: Making Sense of the Federal Reserve." Accessed June 19, 2012. https://www.stlouisfed.org/inplainenglish/history2.cfm.

The Federal Reserve Bank of New York, "The Founding of the Fed." Accessed June 19, 2012. http://www.newyorkfed.org/aboutthefed/history_article.html.

[3] Hayek, Friedrich A. "Award Ceremony Speech, The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel, 1974." Accessed June 20, 2013. http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1974/presentation-speech.html.

[4] This is not to say that the field of science as we know it has triumphed over all fields of academia, but it inescapable that the implementation of scientific thought has become pervasive throughout society and academia as a whole. The German Historical School of thought, for example, was an influential movement that sought to discredit *Vernunftsrecht* (Natural Law), and based their academic conclusions on laws that ascertain the will of people. In this way, the ontological characterization of the fundamental nature of reality and man were displaced by an evolving characterization of what fits man at a moment in time.

[5] Dahl, Robert A. "The Behavioral Approach in Political Science: Epitaph for a Monument to a Successful Protest." *American Political Science Review* 55 (December 1961): 770–71.

[6] Popper, Karl R. *Conjectures and Refutations: The Growth of Scientific Knowledge* (New York: Basic Books, 1962), 55.

[7] Goldin, Claudia. "Cliometrics and the Nobel." *The Journal of Economic Perspectives,* Vol. 9, No. 2 (Spring, 1995): 206.

[8] Board of Governors of the Federal Reserve System. "Who Owns the Federal Reserve?" Accessed July 1, 2012. http://www.federalreserve.gov/faqs/about_14986.htm.

[9] Levy-Bruhl quoted in Rice, Stuart A., Horace Secrist, Robert M. MacIver, and Harold Dwight Lasswell. *Methods in social science, a case book* (Chicago: The University of Chicago Press, 1931), 70.

[10] Madison, James. *The Writings of James Madison, Comprising his Public Papers and his Private Correspondence,* Vol. 3, ed. Gaillard Hunt (New York: G.P. Putnam's Sons, 1900). Accessed June 15, 2012. http://oll.libertyfund.org/titles/1935.

[11] The phrase was first attributed to Milton Friedman in the December 31, 1965, edition of *Time* magazine. In 1971, after taking the United States off the gold standard, Nixon was quoted as saying "I am now a Keynesian in economics", which became popularly associated with Friedman's phrase.

[12] Hayek, Friedrich A. *The Counter-Revolution of Science: Studies on the Abuse of Reason*, 2d ed. (Indianapolis: Liberty Press, 1979), 52.

Chapter I: The Cradle of Western Economic Thought

[1]Bawerk, Eugenvon. *Capital and Interest* (South Holland: Libertarian Press, 1959), 10, 167.

[2]Plato, *Laws*, Book V, accessed August 8, 2012. http://classics.mit.edu/Plato/laws.5.v.html.

[3] Aristotle, *Politics*, Book I, Part IX, accessed August 8, 2012. http://classics.mit.edu/Aristotle/politics.1.one.html.

[4]Roll, Erich. *A History of Economic Thought*, 4th ed. (London: Faber & Faber, 1973), 34-35.

[5]Aristotle quoted from Meikle, Scott. *Aristotle's Economic Thought* (Oxford: Clarendon Press, 1995), 46.

[6]*Ibid.*,47.

[7]*Ibid.*,48.

[8]Aristotle, *Rhetoric,* Book I, Part V, accessed August 13, 2012. http://classics.mit.edu/Aristotle/rhetoric.1.i.html.

[9] Aristotle, *Politics*, Book I, Part IX, accessed August 13, 2012. http://classics.mit.edu/Aristotle/politics.1.one.html.

[10] Joseph Schumpeter, from *History of Economic Analysis*, quoted from Meikle, Scott. *Aristotle's Economic Thought* (Oxford: Clarendon Press, 1995), 87.

[11] Aristotle, *Politics*, Book I, Part X, accessed August 13, 2012. http://classics.mit.edu/Aristotle/politics.1.one.html.

[12]Luckert, Karl W. *Egyptian Light and Hebrew Fire: Theological and Philosophical Roots of Christendom in Evolutionary Perspective* (Albany: State University of New York Press, 1991), 330.

"Neoplatonismentry." *Internet Encyclopedia of Philosophy*, accessed August 13, 2012. http://www.iep.utm.edu/neoplato

[13]Aristotle, *Politics*, Book II, Part V, accessed August 13, 2012. http://classics.mit.edu/Aristotle/politics.1.one.html.

[14]Moehlman, Conrad H. "The Christianization of Interest." *Church History*. Issue 3 (1934): 3-15.

[15]Noonan, John T., Jr.. "Development of Moral Doctrine." *Theological Study* 54, (1993): 662.

[16]Schumpeter, Joseph A. and Elizabeth Boody Schumpeter. *History of Economic Analysis*. (New York: Oxford University Press, 1994), 90.

[17] Aquinas, Saint Thomas. *On Law, Morality, and Politics.* "Question 78: Of the Sin of Interest-Taking; First Article: Is It a Sin to Take Interest for Money Lent?" ed. William P. Baumgarth and Richard J. Regan, S.J. (Indianapolis: Hackett Publishing Company, 1988), 198-209.

[18] Aquinas, Saint Thomas. *Commentary on the Nicomachean Ethics, vol. 1,* ed. Litzinger, C. I. (Chicago: Regnery, 1964), 426.

[19]Boland, Vincent. "Modern dilemma for world's oldest bank."*Financial Times,* June 12, 2009. http://www.ft.com/cms/s/0/a034542e-5771-11de-8c47-00144feabdc0.html?nclick_check=1.

[20]Higgs, Robert. "The Rise of the West." March 23, 2011, *Mises Daily,* https://mises.org/daily/5078/The-Rise-of-the-West.

[21]Hicks, John. *A Theory of Economic History* (London: Oxford University Press, 1969), 38.

[22]Rosenberg, Nathan and L. E. Birdzell, Jr. *How the West Grew Rich: The Economic Transformation of the Industrial World* (New York: Basic Books, 1986), 114–15, 121–23, 136–39.

[23]Kahn, David. *The Codebreakers: The Story of Secret Writing* (New York: Scribner, 1996), 823.

[24]Marzuni, Marcy. *Decoding the Past: The Templar Code.* The History Channel. November 7, 2005. Video Documentary.

[25]*Ibid.*

[26] The *Jewish Encyclopedia* states: "In modern language this term [usury] denotes a rate of interest greater than that which the law or public opinion permits; but the Biblical law, in all dealings among Israelites, forbids all "increase" of the debt by reason of lapse of time or forbearance, be the rate of interest high or low, while it does not impose any limit in dealings between Israelites and Gentiles. Hence in discussing Jewish law the words "interest" and "usury" may be used indiscriminately."

"Usury." *The Jewish Encyclopedia.* Accessed August 30, 2012. http://www.jewishencyclopedia.com/articles/14615-usury.

[27]Ferguson, Niall. *The House of Rothschild: Money's prophets: 1798-1848* (London : Penguin Books, 1999), 481-85.

[28]Machiavelli, Niccolo. *The History of Florence,* The Literature Network. Accessed September 1, 2012. http://www.online-literature.com/machiavelli/florence_italy/.

[29] Our use of the word 'interest' originates from late Middle English (originally as *interess*): from Anglo-Norman French *interesse*, from Latin *interesse*. The *-t* was added partly by association with Old French *interest* 'damage, loss', apparently from Latin *interesse* 'it is important'. The original sense was 'the possession of a share in or a right to something'; hence interest 'compensation for a debtor's defaulting', arose from the Latin *interesse.*

"Interest." *The Oxford Dictionary.* Accessed August 27, 2012. http://www.oxforddictionaries.com/definition/english/interest.

[30]Hibbert, Christopher. *The House of Medici: It's Rise and Fall* (New York: Morrow Quill, 1980), 217.

[31]*Ibid.*

[32]*Ibid., 227.*

Chapter II: The Protestant Ethic and the Spirit of Capitalism

[1]Manchester, William. *A World Lit only by Fire: The Medieval Mind and the Renaissance: Portrait of an Age* (Boston: Little, Brown, 1992), 193.

[2]*Ibid.*, 195.

[3]*Ibid.*, 63.

[4]Soto, Jesús de Huerta. "New Light on the Prehistory of the Theory of Banking and the School of Salamanca." *The Review of Austrian Economics,* Vol. 9, no. 2 (1996): 60.

[5]*Ibid.*, 81.

[6]Seddon, Fred. "The Jesuits and the Spirt of Capitalism." *Wheeling Jesuit College's Annual* (1991): Accessed September 27, 2012. http://www.wju.edu/academics/bus/iscm/Seddon1.pdf.

[7]Ruston, Roger. "Does It Matter What We Do With Our Money?" *Priests & People* (May 1993): 174.

[8]*Ibid.*, 173.

[9]Descartes, Rene. *Meditations on First Philosophy,* "Of the Nature of the Human Mind; and That it is More Easily Known Than The Body." Accessed August 22, 2012. http://oregonstate.edu/instruct/phl302/texts/descartes/meditations/Meditation2.html.

[10] Veatch, Henry Babcock. *Swimming Against the Current in Contemporary Philosophy: Occasional Essays and Papers* (Washington, D.C.: Catholic University of America Press, 1990), 38.

[11]Ferry, Luc. *A Brief History of Thought: A Philosophical Guide to Living* (New York: Harper Perennial, 2011), 130.

[12]Vries, Jan, and A. M. van der Woude. *The First Modern Economy: Success, Failure, and Perseverance of the Dutch Economy, 1500-1815* (Cambridge: Cambridge University Press, 1997).

[13]Coase, R. H. *The Nature of the Firm* (New York: Oxford University Press, 1993).

[14]Van Boven, M. W. "Towards A New Age of Partnership: An Ambitious World Heritage Project." *UNESCO Memory of the World,* VOC Archives, Appendix 2 (2002): Accessed November 27, 2014. http://portal.unesco.org/ci/en/files/22635/11546101681netherlands_voc_archives.doc/netherlands%2Bvoc%2Barchives.doc.

[15] The "dollar" originated as the name generally applied to a one-ounce silver coin minted in the city of Joachimsthal (Joachim's Valley) in Bohemia where they were first minted in 1518. The coins enjoyed a great reputation for uniformity and fineness and were used throughout Europe for almost four hundred years. These coins were called 'Joachim's thalers' and finally, just 'thalers' (*Tal* is German for *valley.* A *thaler* is a person or a thing "from the valley." The word *dollar* emerged from the pronunciation of *thaler.*

[16] Smith, Adam. *An Inquiry Into the Nature and Causes of the Wealth of Nations, Vol. I ed. R. H. Campbell and A. S. Skinner, vol. II of the Glasgow Edition of the Works and Correspondence of Adam Smith,* Book IV,

Chapter III, PDF e-book (Indianapolis: Liberty Fund, 1981), accessed January 14, 2013. http://oll.libertyfund.org/title/220.

[17]*Ibid.*

[18]Quinn, Stephen; Roberds, William. "An Economic Explanation of the Early Bank of Amsterdam, Debasement, Bills of Exchange, and the Emergence of the First Central Bank." *Federal Reserve Bank of Atlanta* Working Paper No. 2006-13 (October 5, 2006): http://papers.ssrn.com/sol3/papers.cfm?abstract_id=934871.

[19]Soto, Jesús, and Melinda A. Stroup. *Money, Bank Credit, and Economic Cycles* (Auburn: Ludwig von Mises Institute, 2006), 98-106.

[20]Federico, P. J. "Origin and Early History of Patents." *Journal of the Patent Office Society*, vol. 11, (July, 1929): 292.

[21]Mokyr, Joel. *The Enlightened Economy: An Economic History of Britain, 1700-1850* (New Haven: Yale University Press, 2009), 65.

[22]Screpanti, Ernesto, and Stefano Zamagni. *An Outline of the History of Economic Thought* (Oxford: Clarendon Press, 1993), 31.

[23]Letwin quoted in Rothbard, Murray. "Sir William Petty and the Mathematics of Power." *Mises Daily*, October 07, 2010. http://mises.org/daily/4694.

[24]Sir William Petty, *The Economic Writings of Sir William Petty,* "VERBUM SAPIENTI." ed. Charles Henry Hull, (Cambridge University Press, 1899), accessed October 9, 2012. http://oll.libertyfund.org/title/1677/30589.

[25]*Ibid.*

[26] Bacon, Francis. *The Essayes or Councels, Civill and Morall,* "Of Usurie." ed. Michael Kiernan (Cambridge: Harvard University Press, 1985), 124–29.

[27]Petty, William. *A Treatise of Taxes, and Contributions* (1667), accessed December 13, 2012. http://www.marxists.org/archive/marx/works/1863/theories-surplus-value/add1.htm.

[28]Sorokin, Pitirim. *Fads and Foibles in Modern Sociology and Related Sciences* (Chicago: H. Regnery Co., 1956), 103, 110.

Chapter III: A Forged Symbiosis Between the Financial Elite and Government

[1] William Potter quoted in Viner, Jacob. *Studies in the Theory of International Trade* (New York: Harper and Bros., 1937), 38.

[2] William Petty quoted in Heckscher, Eli F. *Mercantilism,* 2nd ed. (New York: Macmillan, 1955), 208–9.

Furniss, Edgar S. *The Position of the Laborer in a System of Nationalism* (New York: Kelley and Millman, 1957), 41.

[3] Locke, John. *Some Considerations of the Consequences of the Lowering of Interest and the Raising the Value of Money* (1691), accessed December 4, 2012. https://webspace.utexas.edu/hcleaver/www/368/368LockeSomeConsiderationsAlltable.pdf.

[4] Locke, John. *The Works of John Locke in Nine Volumes,* Vol. 4, "Further Considerations Concerning Raising the Value of Money." Accessed December 6, 2012. http://oll.libertyfund.org/title/763/65190.

[5] *Ibid.*

[6] Barbon, Nicholas. *A Discourse Concerning Coining the New Money Lighter, In Answer to Mr. Lock's Considerations* (1696), accessed December 7, 2012. http://www.econlib.org/library/YPDBooks/Barbon/brbnDT0.html.

Letwin, William. *The Origins of Scientific Economics: English Economic Thought 1660-1776* (London : Methuen, 1963), 78–9.

[7] Westfall, Richard S. *Never at Rest: A Biography of Isaac Newton* (Cambridge: Cambridge University Press, 1983), 571–5.

White, Michael. *Isaac Newton: the Last Sorcerer* (Reading, Mass.: Addison-Wesley, 1997), 259, 267.

[8] Keynes, John Maynard quoted in Newman, James R. *The World of Mathematics: A Small Library of the Literature of Mathematics from A'h-mosé the Scribe to Albert Einstein* (New York: Simon and Schuster, 1956), 277.

[9] Philosopher and historian Alexandre Koyré coined the term *scientific revolution* in 1939 to describe the paradigm shift that took place between the end of the Renaissance and continued through the beginning of the Enlightenment in late 18th century.

[10] Newton. Preface, *PhilosophiaeNaturalis Principia Mathematica* (1687), accessed January 3, 2013. http://www.bartleby.com/39/24.html.

[11] As quoted from Jean, Roger V. *Symmetry in Plants* (Singapore: World Scientific, 1998), xxxvii.

[12] "David Hume." *Stanford Encyclopedia of Philosophy.* Accessed December 25, 2012. http://plato.stanford.edu/entries/hume/.

[13] Hume, David. *A Treatise of Human Nature* (1740). Accessed December 25, 2012. http://www.davidhume.org/texts/ehu.html.

[14] Keynes, John Maynard. *A Treatise on Probability* (London: Macmillan and Co., 1921), 272.

Keynes wrote, "Hume's skeptical criticisms are usually associated with causality; but argument by induction—inference from past particulars to future generalizations—was the real object of his attack."

[15]Popper, Karl R. *Conjectures and Refutations: The Growth of Scientific Knowledge* (New York: Basic Books, 1962), 55.

[16]Einstein, Albert. *The Collected Papers of Albert Einstein*, "A letter to Moritz Schlick, December 14, 1915." ed. Beck, Anna and Havas, Peter. (Princeton, N.J.: Princeton University Press, 1987), Vol. 8A, Doc.165.

[17]Krugman, Paul. "The Conscience of a Liberal: How We Know The Earth Is Old." *The New York Times*, November 20, 2012. http://krugman.blogs.nytimes.com/2012/11/20/how-we-know-the-earth-is-old/.

[18]Hume quoted from Rothbard, Murray. "David Hume and the Theory of Money." *Mises Daily*, April 27, 2011. http://www.mises.org/daily/5077/.

[19]Smith, Adam. *The Death of David Hume*. "Letter *from* Adam Smith *to* William Strachan, Esq." (Nov. 9, 1776). Accessed January 1, 2013. http://www.ourcivilisation.com/smartboard/shop/smitha/humedead.htm.

[20]Heilbroner, Robert L. *The Worldly Philosophers: The Lives, Times, and Ideas of the Great Economic Thinkers*. 4th ed. (New York: Simon and Schuster, 1972), 44-45.

[21] Smith, Adam. *An Inquiry Into the Nature and Causes of the Wealth of Nations, Vol. I ed. R. H. Campbell and A. S. Skinner, vol. II of the Glasgow Edition of the Works and Correspondence of Adam Smith*, Book I, Chapter II, "Of the Principle which Gives Occasion to the Division of Labour." PDF e-book (Indianapolis: Liberty Fund, 1981), accessed January 2, 2013. http://oll.libertyfund.org/title/220.

[22] Smith, Adam. *An Inquiry Into the Nature and Causes of the Wealth of Nations, Vol. I ed. R. H. Campbell and A. S. Skinner, vol. II of the Glasgow Edition of the Works and Correspondence of Adam Smith*, Book I, Chapter IX, "Of the Profits of Stock." PDF e-book (Indianapolis: Liberty Fund, 1981), accessed January 2, 2013. http://oll.libertyfund.org/title/220.

[23]Smith, Adam. *An Inquiry Into the Nature and Causes of the Wealth of Nations, Vol. I ed. R. H. Campbell and A. S. Skinner, vol. II of the Glasgow Edition of the Works and Correspondence of Adam Smith*, Book I, Chapter IV, "Of Lent Stock and Interest." PDF e-book (Indianapolis: Liberty Fund, 1981), accessed January 2, 2013. http://oll.libertyfund.org/title/220.

[24]Bentham, Jeremy. *Defence of Usury*, 4th ed. (London: Payne and Foss, 1787). Accessed January 1, 2013. http://oll.libertyfund.org/ToC/0167.php.

[25] Hume, David. *Of Interest*, Part II, Essay IV (1742). Accessed February 14, 2013. http://www.econlib.org/library/LFBooks/Hume/hmMPL27.html.

[26]James, Harold. *The End of Globalization* (Cambridge: Harvard University Press, 2001), 12.

[27]Walter, Andrew. *World Power and World Money: The Role of Hegemony and International Monetary Order* (New York: St. Martin's Press, 1991), 88.

[28]Ravenhill, John. *Global Political Economy* (Oxford: Oxford University Press, 2005), 7, 328. Occasionally also called the *golden age of capitalism* in older sources, and also the *first golden age of capitalism* in later sources that recognize golden age that spanned approximately 1951 – 73.

[29] Paterson is attributed to boasting the famous statement, *"The Bank hath benefit of interest on all monies which it creates out of nothing."* This quotation is said to be from the prospectus for the Bank of England, but it does not appear in *A Brief Account of the Intended Bank of England* or elsewhere in *The Writings of William Paterson.* Its earliest known appearance in print dates only from 1935 in Christopher Hollis' *The Two Nations: A Financial Study of English History.*

[30] The Chancellor of the Exchequer, commonly referred to as *the* Chancellor, is the title held by the British Cabinet minister responsible for all economic and financial matters. The position is considered the most powerful office in British politics after the Prime Minister, and is the only top office never occupied by a woman. The Chancellor is the third-oldest major state office in British history that dates from time of Henry I. The medieval English office of Exchequer was responsible for the collection of royal revenues, and controlled monetary and fiscal policies until such time that the Bank of England displaced the totality of his powers, and was granted independent control of interest rates.

[31] *British Parliamentary Reports on International Finance: the Cunliffe Committee and the Macmillan Committee Reports* (New York: Arno Press, 1979), 25.

[32] The National Archives, "Bank Charter Act," (1844). Accessed January 7, 2013. http://www.legislation.gov.uk/ukpga/Vict/78/32/contents.

[33] These Mithraeum ruins are perhaps the most famous of all twentieth-century Roman discoveries in the City of London. The whole site was moved to nearby Temple Court, Queen Victoria Street, London EC4, where the remains of the temple foundations have been reassembled for display to the public. The practices were referred to by the Romans as the "Mystery of the Persians" that included a complex system of initiations and ritual meals. Given some of the cult's beliefs like Mithras' birth on the 25th of December, or practices like the use of bread and cup in worship, scholars like Marvin Meyer have concluded, "early Christianity ... in general, resembles Mithraism in a number of respects – enough to make Christian apologists scramble to invent creative theological explanations to account for the similarities." Meyer, Marvin quoted in Levine, Amy, Dale C. Allison, and John Dominic Crossan. *The Historical Jesus in Context* (Princeton, N.J.: Princeton University Press, 2006), 179.

[34] By 1797 war with France had drained the gold reserves. The Government prohibited the Bank from paying its notes in gold. This Restriction Period lasted until 1821.

The Bank of England, "History," *About the Bank,* accessed February 4, 2013. http://www.bankofengland.co.uk/about/Pages/history/default.aspx#2.

[35] Hülsmann, JörgGuido. *The Ethics of Money Production* (Auburn, Ala.: Ludwig von Mises Institute, 2008), 199-203.

[36] BBC, "Empire of the Seas," accessed February 22, 2013. http://www.bbc.co.uk.news-channel.org/pressoffice/proginfo/tv/2010/wk2/feature_sea.shtml.

[37] Chesterton, G. K. *Heretics/Orthodoxy* (Nashville: T. Nelson Publishers, 2000), 13.

Chapter IV: Private Interests and American Debt

[1] Smith, Adam. *An Inquiry Into the Nature and Causes of the Wealth of Nations, Vol. I ed. R. H. Campbell and A. S. Skinner, vol. II of the Glasgow Edition of the Works and Correspondence of Adam Smith,* Book IV, Chapter VII, "Of Colonies." PDF e-book (Indianapolis: Liberty Fund, 1981), accessed January 2, 2013. http://oll.libertyfund.org/title/220.

[2]*Ibid.*

[3]Schneider, Herbert Wallace. *A History of American Philosophy.* 2d ed. (New York: Columbia University Press, 1963), 35.

[4]Hegel, G.W.F. *The Philosophy of Law* (1821), quoted in Armesto, Felipe. *Ideas that Changed the World* (New York: Dorling Kindersley, 2003), 307.

[5] The only exception was a form of money issued five years earlier in Quebec known as "card money." Monsieur Mueles, the governing intendant of Quebec, divided some playing cards into quarters and marked them in denominations and issued them to pay for wages and government supplies until they were later redeemed in specie sent from France.

[6] A study conducted by the IMF and World Bank concluded that the poor are left to suffer the harshest results of inflation and that inflation ultimately increases poverty. *See* Easterly, William, and Stanley Fischer. "Inflation and the Poor." *Journal of Money, Credit and Banking,* vol. 33, issue 2 (2001): 160.

[7]Rothbard, Murray. *A History of Money and Banking in the United States: The Colonial Era to World War II* (Auburn: Ludwig von Mises Institute, 2002), 51-55.

[8] The argument was presented for the creation of the US Federal Reserve under the pretense that central planning would eliminate the pains of the "business-cycle" and "provide the nation with a safer, more flexible, and more stable monetary and financial system." Quite the contrary, the Federal Reserve has since taken responsibility for the Great Depression and history has demonstrated that creating "easy" fiat money, as was the case in colonial America and the 1920's, has been the basis, not the solution, of the business cycle. *See* Kemmerer, Donald. "Paper Money in New Jersey, 1668-177." *New Jersey Historical Society, Proceedings 74* (April, 1956).

[9]Rothbard, Murray. *A History of Money and Banking in the United States: The Colonial Era to World War II* (Auburn: Ludwig von Mises Institute, 2002), 56.

[10] Smith, Adam. *An Inquiry Into the Nature and Causes of the Wealth of Nations, Vol. I ed. R. H. Campbell and A. S. Skinner, vol. II of the Glasgow Edition of the Works and Correspondence of Adam Smith,* Book V, Chapter II, PDF e-book (Indianapolis: Liberty Fund, 1981), accessed January 2, 2013. http://oll.libertyfund.org/title/220.

[11]Hülsmann, JörgGuido. *The Ethics of Money Production.* (Auburn: Ludwig von Mises Institute, 2008), 199-203.

[12] Robert McCann Rice's 1941 book *Money and Men* quotes Franklin without prior sources as stating, "In the Colonies we issue our own money. It is called Colonial Scrip. We issue it in proper proportion to the demands of trade and industry to make the products pass easily from the producers to the consumers. In this manner, creating for

ourselves our own paper money, we control its purchasing power, and we have no interest to pay no one." Various small publications in 1940s popularized variations of another statement attributed to Franklin that reads, "The refusal of King George to allow the Colonies to operate on an honest Colonial system, which freed the ordinary man from the clutches of the money manipulators, was probably the prime cause of the revolution." This quote is sometimes cited as being from Franklin's autobiography, but this statement has never appeared in any edition. As we have already demonstrated, the colonial issuing of fiat money was anything but "controlled" or completely "honest". These statements may have been derived from Franklin's examination by the British Parliament in February 1766, published in "The Examination of Benjamin Franklin" in *The Parliamentary History of England from the Earliest Period to the Year 1803* (1813). When questioned why Parliament had lost respect among the people of the Colonies, Franklin answered: "To a concurrence of causes: the restraints lately laid on their trade, by which the bringing of foreign gold and silver into the Colonies was prevented; *the prohibition of making paper money among themselves,* and then demanding a new and heavy tax by stamps; taking away, at the same time, trials by juries, and refusing to receive and hear their humble petitions."

[13] Franklin, Benjamin. *A Modest Enquiry into the Nature and Necessity of a Paper-Currency by Benjamin Franklin* (1729), accessed March 3, 2013. http://etext.virginia.edu/users/brock/webdoc6.html

[14] Franklin, Benjamin. *The Autobiography of Benjamin Franklin*, accessed March 3, 2013. www.ushistory.org/franklin/autobiography/page32.htm.

[15] *Ibid.*, 48.

[16]Burnett, Edmund Cody. *The Continental Congress* (New York: W.W. Norton, 1964), 83.

[17]Rothbard, Murray. *A History of Money and Banking in the United States: The Colonial era to World War II* (Auburn: Ludwig von Mises Institute, 2002), 59-61.

[18]Jefferson, Thomas. *The Complete Anas of Thomas Jefferson*, "February 4 Entry." Accessed March 6, 2013. http://archive.org/details/anasofthomasj00jeffrich.

[19]Ferguson, E. James. *The Power of the Purse: A History of American Public Finance* (Chapell Hill: University of North Carolina, 1961), 124.

[20] Morris, Robert. *The Revolutionary Diplomatic Correspondence of the United States. 6 vols.* "Letter from Robert Morris to Congress, May 17, 1781." ed. Wharton, Francis, (Washington, D.C.: Government Printing Office, 1889) 6:309-11.

[21] Library of Congress. *Journals of the Continental Congress, 1774-1789.* "In Congress, December 31, 1781. Volume XXI." Accessed March 1, 2013. http://memory.loc.gov/ammem/amlaw/lwjclink.html.

[22] *Ibid.*

[23]Rothbard, Murray. *Conceived in Liberty,* Volume IV (New Rochelle: Arlington House Publishers, 1975), 392.

[24]Goddard, Thomas H., Alexander Hamilton, and George McDuffie. *A General History of the Most Prominent Banks in Europe Particularly the Banks of England and France : The Rise and Progress of the Bank of North America : A Full History of the Late and Present Bank of the United States* (New York: H.C. Sleight, 1831), 48-50.

[25] Jefferson, Thomas. *The Works of Thomas Jefferson,* Federal Edition, Vol. 5, "Chapter: To William Stephens Smith."(New York and London, G.P. Putnam's Sons, 1904-5), accessed March 12, 2013. http://oll.libertyfund.org/title/802/86685.

[26]Szatmary, David P. *Shays's Rebellion: The Making of an Agrarian Insurrection* (Boston: University of Massachusetts Press, 1980), 123.

[27]Beard, Charles A. *An Economic Interpretation of the Constitution of the United States* (New York: The Macmillan Company, 1935).

[28]Alexander Hamilton quoted in Govan, Thomas P. "The Rich, the Well-born, and Alexander Hamilton." *The Mississippi Valley Historical Review,* Vol. 36, No. 4 (Mar., 1950): 675-680. Accessed March 7, 2013. http://www.jstor.org/stable/1895524.

[29] Jefferson, Thomas. *Memoirs, Correspondence, and Private Papers of Thomas Jefferson: Late President of the United States,* Vol. III, ed. by T.J. Randolph (London: H. Colburn and R. Bentley, 1829) 519.

Also referenced by the House Committee of Ways and Means. U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Report of House Committee of Ways and Means, on Renewal of Charter of the Bank of the United States, February 9, 1832. House Report 283, Twenty-second Congress, 1st Session." (Washington: U.S. Government Printing Office, 1963), 193.

[30] Madison, James. *The Writings of James Madison, Comprising his Public Papers and his Private Correspondence,* Vol. 3, ed. Gaillard Hunt (New York: G.P. Putnam's Sons, 1900). Accessed March 15, 2013. http://oll.libertyfund.org/titles/1935.

[31] Hamilton, Alexander. "Federalist Paper 84." *The Federalist Papers,* accessed March 13, 2013. http://www.thefederalistpapers.org/federalist-papers/alexander-hamilton-federalist-paper-84-a-bill-of-rights-would-be-dangerous.

[32]Hamilton, Alexander. *The Federalist: With Letters of Brutus.* "New York Journal, November 1, 1787." (Cambridge: Cambridge University Press, 2003), 447-453.

[33] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Report of Secretary of Treasury on a National Bank. Communicated to the House of Representatives, December 14, 1790. First Congress, 3rd Session." (Washington: U.S. Government Printing Office, 1963), 7.

Chapter V: The First & Second Banks of the United States

[1] It is noteworthy that Jefferson's arguments over the bill referencing government repayment appear to fall short of fully grasping such transactions as loans at interest. The government actually invests in the stock of the bank a sum equal to that which it receives on loan, and as a proprietor of the stock will share in the profit of the institution with dividends that get appropriated back to the bank as interest on the sum borrowed. Hence, such an agreement is manifestly, and in the strictest sense, a loan at interest.

[2] Randolph, Edmund. *The Papers of George Washington*, "Opinion on Constitutionality of a National Bank." Library of Congress, accessed April 5, 2013. http://memory.loc.gov/cgi-bin/query/P?mgw:3:./temp/~ammem_t6M3.

[3] Jefferson, Thomas. *The Writings of Thomas Jefferson*, Vol. 5, "Opinion on Constitutionality of a National Bank." ed. Paul Leicester Ford (New York: G.P. Putnam's Sons, 1892), 284-289.

[4] Hamilton, Alexander. *The Works of Alexander Hamilton: Published from the Original Manuscripts Deposited in the Department of State,* Vol. 4, "Secretary of the Treasury to President Washington." ed. John C. Hamilton (New York J.F. Trow, 1850), 104-138.

[5] Jefferson said, "The unit of the dollar is a known coin, and the most familiar of all to the mind of the public. It is already adopted from South to North, has identified our currency, and therefore happily offers itself a unit already introduced." Cited from Laughlin, J. Laurence. *The History of Bimetallism in the United States*, 4th ed. (New York: Greenwood Press, 1968), 11.

[6]Westley, Christopher. "The Debate Over Money Manipulations: A Short History" *Intercollegiate Review* 45, (Fall 2010): Accessed March 29, 2013. http://www.mmisi.org/ir/45_1-2/westley.pdf.

[7]Jefferson, Thomas. *The Complete Anas of Thomas Jefferson*, "February 4 Entry." Accessed March 6, 2013. http://archive.org/details/anasofthomasj00jeffrich.

[8]Madison, James. *The Federalist, No. 10*. "The Utility of the Union as a Safeguard Against Domestic Faction and Insurrection. Daily Advertiser, Thursday, November 22, 1787." *The Constitution Society*, accessed April 1, 2013. http://www.constitution.org/fed/federa10.htm.

[9]Jefferson, Thomas. *The Thomas Jefferson Papers,* "Letter to John Taylor, 26 November 1798." The Library of Congress, accessed April 5, 2013. http://memory.loc.gov/cgi-bin/query/P?mtj:16:./temp/~ammem_TjOQ.

[10] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* " Report of Secretary of Treasury on Renewal of Charter of the Bank of the United States. Communicated to the Senate, Tenth Congress, 2nd Session." (Washington: U.S. Government Printing Office, 1963), 80.

[11]U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* " Report of Secretary of Treasury on Renewal of Charter of the Bank of the United States. Communicated to the Senate, Eleventh Congress, 3rd Session." (Washington: U.S. Government Printing Office, 1963), 86.

[12] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Report of the Senate Committee, on the Renewal

of Charter of the Bank of the United States. Communicated to the Senate, March 2, 1811. Eleventh Congress, 3rd Session." (Washington: U.S. Government Printing Office, 1963), 89.

[13]U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Report of the House Committee, on the Renewal of Charter of the Bank of the United States. Communicated to the Senate, March 2, 1811. Eleventh Congress, 3rd Session. (Washington: U.S. Government Printing Office, 1963), 90.

[14] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Report of the Senate Committee, on the Renewal of Charter of the Bank of the United States. Communicated to the Senate, March 2, 1811. Eleventh Congress, 3rd Session." (Washington: U.S. Government Printing Office, 1963), 89.

[15]U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Report of the House Committee, on the Renewal of Charter of the Bank of the United States. Communicated to the Senate, March 2, 1811. Eleventh Congress, 3rd Session. (Washington: U.S. Government Printing Office, 1963), 90.

[16] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Report of the Senate Committee, on the Renewal of Charter of the Bank of the United States. Communicated to the Senate, March 2, 1811. Eleventh Congress, 3rd Session." (Washington: U.S. Government Printing Office, 1963), 89.

[17] The *Authorization for Use of Military Force Against Iraq Resolution* of 1991 was actually a closer vote, although not a "formal" declaration of war.

[18] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Report of the Secretary of Treasury on Treasury Notes. Communicated to the House of Representatives, November 28, 1814. Thirteenth Congress, 3rd Session." (Washington: U.S. Government Printing Office, 1963), 96.

[19]Jefferson, Thomas. *The Thomas Jefferson Papers,* "Letter to John Wayles Eppes, June 24, 1813." The Library of Congress, accessed April 5, 2013. http://memory.loc.gov/cgi-bin/query/P?mtj:1:./temp/~ammem_UGb1.

[20]Rothbard, Murray. *The Panic of 1819: Reactions and Policies.* (Auburn: Ludwig von Mises Institute, 2007), 4.

[21] Merchants, money brokers, bankers, and the general public used monthly journals known as "bank note detectors" to aide the evaluation of varying state bank notes in relation to specie. *See* Timberlake, Richard H.. *Money, Banking, and Central Banking* (New York: Harper & Row, 1965).

[22] Jefferson. Thomas. *The Writings of Thomas Jefferson* (New York: Heritage Press, 1967), 106-107.

[23] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Report of the Secretary of Treasury on Public Credit. Communicated to the House of Representatives, October 18, 1814. Thirteenth Congress, 3rd Session." (Washington: U.S. Government Printing Office, 1963), 96.

[24] *Ibid.*

[25] *Ibid.*

Chapter VI: War Over the National Bank

[1]U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "First Annual Message. Twenty-First Congress, 1st Session. December 8, 1829." (Washington: U.S. Government Printing Office, 1963), 144.

[2] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Report of the Senate Committee on Finance, on National Currency. Senate Doc. 104, Twenty-First Congress, 1st Session." (Washington: U.S. Government Printing Office, 1963), 149.

[3] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Report of House Committee of Ways and Means, on Renewal of Charter Bank of United States. House Report 283, Twenty-Second Congress, 1st Session." (Washington: U.S. Government Printing Office, 1963), 193.

[4] *Ibid.*

[5] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Veto Message of President Andrew Jackson on the Bill to Renew the Charter of the Bank of the United States. Twenty-Second Congress, 1st Session. July 10, 1832." (Washington: U.S. Government Printing Office, 1963), 214.

[6] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Message Read to the Cabinet on Removal of the Public Deposits. September 18, 1833." (Washington: U.S. Government Printing Office, 1963), 230-242.

[7] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Report of the Secretary of the Treasury on Removal of Public Deposits. Twenty-Third Congress, 1st Session. December, 4, 1833." (Washington: U.S. Government Printing Office, 1963), 243.

[8]U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Message to the Twenty-Third Congress, 2nd Session. December 1, 1834." (Washington: U.S. Government Printing Office, 1963), 266.

[9] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Message to the Twenty-Third Congress, 1st Session. December 5, 1833." (Washington: U.S. Government Printing Office, 1963), 264.

[10]U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Message to the Twenty-Third Congress, 2nd Session. December 1, 1834." (Washington: U.S. Government Printing Office, 1963), 269.

[11]U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Message to the Twenty-Third Congress, 1st Session. December 5, 1833." (Washington: U.S. Government Printing Office, 1963), 265.

[12]U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Message to the Twenty-Fourth Congress, 1st Session. December 7, 1835." (Washington: U.S. Government Printing Office, 1963), 274-278.

[13] *Ibid.*

[14] *Ibid.*

[15]Quigley, Carroll. *Tragedy and Hope: A History of the World in Our Time* (New York: Macmillan, 1966), 111.

[16] Ferguson, Niall. *The Ascent of Money: A Financial History of the World* (New York: Penguin Press, 2008), 78.

[17] Ferguson, Niall. "House of Rothschild: Money's Prophets 1798-1848," *The Harvard Business School Working Knowledge*, accessed May 3, 2013. http://hbswk.hbs.edu/archive/1321.html.

[18]Quigley, Carroll. *Tragedy and Hope: A History of the World in Our Time* (New York: Macmillan, 1966), 112.

[19] Michael McLeay, Amar Radia and Ryland Thomas. "Money Creation in the Modern Economy." *The Bank of England,* accessed September 28, 2014. http://www.bankofengland.co.uk/publications/documents/quarterlybulletin/2014/qb14q1prereleasemoneycreation.pdf.

[20]Twain, Mark. *Autobiography of Mark Twain*, ed. Harriet Elinor Smith, Benjamin Griffin, Victor Fischer, Michael B. Frank, Sharon K. Goetz, and Leslie Diane Myrick (Berkeley: University of California Press, 2010), 460.

[21] Twain, Mark. *Collected Tales, Sketches, Speeches & Essays.* "The Revised Catechism, September 27, 1871." (New York: Library of America, 1992).

[22]Hammond, Bray. *Banks and Politics in America, from the Revolution to the Civil War* (Princeton: Princeton University Press, 1957), 627.

Chapter VII: The Chaos of War as a Pretext for Inflation

[1] Hammond, Bray. *Banks and Politics in America, from the Revolution to the Civil War* (Princeton: Princeton University Press, 1957), 182–183, 309, 393–399.

[2]Larson, Henrietta. *Jay Cooke, Private Banker* (Cambridge: Harvard University Press, 1936), 103.

[3]Lawson, Melinda. *Patriot Fires: Forging a New American Nationalism in the Civil War North* (Lawrence: University Press of Kansas , 2002), 40-64.

[4] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Secretary of the Treasury. Thirty-Seventh Congress, 2nd Session, December 9, 1861." (Washington: U.S. Government Printing Office, 1963), 289.

[5]Henry Cooke quoted in Sharkey, Robert P. *Money, Class, and Party: An Economic Study of Civil War and Reconstruction* (Baltimore: Johns Hopkins Press, 1967), 245.

[6]Hammond, Bray. *Sovereignty and an Empty Purse: Banks and Politics in the Civil War* (Princeton: Princeton University Press, 1970), 289-290.

[7] Greenbacks had portraits of Lincoln on the $5 note, and Secretary Chase on the $1, but when Spencer Clark, chief clerk of the Treasury's National Currency Division, put his own portrait on 5 cent fractional notes, Republican Representative Martin R. Thayer of Pennsylvania pushed legislation through Congress, still in force till today, making it illegal to put the picture of any living American on any coin or paper money.

[8] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Special Message to Congress on Financing the War. Senate Journal, 37th Congress, 3rd Session." (Washington: U.S. Government Printing Office, 1963), 305.

[9]Rothbard, Murray. *A History of Money and Banking in the United States: The Colonial Era to World War II* (Auburn: Ludwig von Mises Institute, 2002), 130.

[10]U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "National Currency Act, 12 Statutes at Large 665, Thirty-Seventh Congress, Chapter 58, 3rd Session, Approved February 25, 1863, by Abraham Lincoln." (Washington: U.S. Government Printing Office, 1963), 307-332.

[11]U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Comptroller of Currency, November 28, 1863." (Washington: U.S. Government Printing Office, 1963), 332-345.

[12]U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Third Annual Message to Congress. Senate Journal, 38th Congress, 1st Session, December 8, 1863." (Washington: U.S. Government Printing Office, 1963), 345.

[13] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Secretary of Treasury. 38th Congress, 1st Session, December 10, 1863." (Washington: U.S. Government Printing Office, 1963), 345-347.

[14] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "National Bank Act. 13 Statutes at Large 99, 38th Congress, Chapter 106, 1st Session, Approved June 3, 1863, by Abraham Lincoln." (Washington: U.S. Government Printing Office, 1963), 348-374.

[15]U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Comptroller of Currency. November 25, 1864." (Washington: U.S. Government Printing Office, 1963), 375-386.

[16]Rothbard, Murray. *A History of Money and Banking in the United States: The Colonial Era to World War II* (Auburn: Ludwig von Mises Institute, 2002), 137.

[17]U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Fourth Annual Message to Congress, Senate Journal, 38th Congress, 2nd Session, December 6, 1864." (Washington: U.S. Government Printing Office, 1963), 387.

[18] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Comptroller of Currency, November 25, 1864." (Washington: U.S. Government Printing Office, 1963), 375.

[19] McCulloch, Hugh. "Advice to Bankers of 1863," *The Federal Reserve Bank of St. Louis,* accessed June 4, 2013. http://fraser.stlouisfed.org/docs/publications/books/1938_comp_nbs.pdf.

[20] The triumph of the Office of Comptroller of Currency's (OCC) independence is often cited in the 2007 United States Supreme Court case *Watters v. Wachovia Bank, N.A.* The court ruled that the Comptroller, not the states, has the authority to subject national banks to "general supervision" and "oversight." State regulators, thereafter, could not interfere with the business of banking by subjecting national banks or their OCC-licensed operating subsidiaries to audits or surveillance as it would rival the oversight invested in the OCC.

[21]U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Act of March 3, 1865. 13 Statutes at Large 469, 38th Congress, Chapter 78, 2nd Session, Approved by Abraham Lincoln, March 3, 1865." (Washington: U.S. Government Printing Office, 1963), 388.

[22]Carson, Thomas. *Gale Encyclopedia of U. S. Economic History* (Farmington Hills: Cengage Gale, 2000).

[23]Grossman, Richard S. "U.S. Banking History, Civil War to WWII," *EH.net. Economic History Services*, accessed June 6, 2013.
http://eh.net/encyclopedia/article/grossman.banking.history.us.civil.war.wwii.

Chapter VIII: Blame it on the Business Cycle

[1] Jay Cooke quoted in Rothbard, Murray. *A History of Money and Banking in the United States: The Colonial Era to World War II* (Auburn: Ludwig von Mises Institute, 2002), 156.

[2] Charles P. Kindleberger, *Manias, Panics and Crashes: A History of Financial Crises*, 5th ed. (New York: John Wiley & Sons, 2005), 137; and Peter Mixon, "The Crisis of 1873: Perspectives from Multiple Asset Classes," *Journal of Economic History* 68, no. 3 (2008): 722–757.

[3]U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Comptroller of Currency. Forty-Third Congress, 1st Session, November 28, 1873." (Washington: U.S. Government Printing Office, 1963), 390.

[4] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Secretary of Treasury. Forty-Third Congress, 1st Session, December 1, 1873." (Washington: U.S. Government Printing Office, 1963), 405-410.

[5] U.S. Department of the Treasury. "William A. Richardson (1873 - 1874)." Accessed June 12, 2013. http://www.treasury.gov/about/history/pages/warichardson.aspx.

[6] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Comptroller of Currency. Forty-Eighth Congress, 2nd Session, December 1, 1884." (Washington: U.S. Government Printing Office, 1963), 422.

[7] Kolko, Gabriel. *The Triumph of Conservatism: A Reinterpretation of American History, 1900-1916* (New York: Free Press of Glencoe, 1963), 140.

[8] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Comptroller of Currency. Fifty-Second Congress, 1st Session, December 7, 1891." (Washington: U.S. Government Printing Office, 1963), 442.

[9] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Comptroller of Currency. Fifty-Third Congress, 2nd Session, December 4, 1893." (Washington: U.S. Government Printing Office, 1963), 447.

Chapter IX: Establishing a Pseudo-Gold Standard

[1]Garfield, James A. "President James Garfield's Inaugural Address (1881)," *The American Presidency Project,* accessed June 15, 2013. http://www.presidency.ucsb.edu/ws/index.php?pid=25823.

[2]Field, Gray J. "Dissenting opinion of Justice Field in *Juilliard v. Greenman*, Legal Tender Cases - 110 U.S. 421," *JUSTIA US Supreme Court,* accessed June 29, 2013. http://supreme.justia.com/cases/federal/us/110/421/case.html.

[3]Kolko, Gabriel. *The Triumph of Conservatism: A Reinterpretation of American History, 1900-1916* (New York: Free Press of Glencoe, 1963), 147-48.

[4]Chesterton, G. K.. *Utopia of Usurers* (Norfolk, VA: IHS Press, 2002), 103.

[5] This phrase was popularized by Mark Twain, who attributed it to the British Prime Minister Benjamin Disraeli, although the phrase is not found in any of Disraeli's works and the earliest known uses of it appeared years after his death. In light of this, the phrase has since been attributed to Twain himself.

[6] Screpanti, Ernesto, and Stefano Zamagni. *An Outline of the History of Economic Thought* (Oxford: Clarendon Press, 1993), 90.

[7] Tobin, James . "Neoclassical Theory in America: J. B. Clark and Fisher." *American Economic Review* Vol. 75, No. 6 (1985): 28–38.

[8] Friedman, Milton. *Money Mischief: Episodes in Monetary History* (San Diego: Harcourt Brace & Co., 1994), 37.

[9] Schumpeter, Joseph Alois. *History of Economic Analysis.* (New York: Oxford University Press, 1954), 754.

[10] While this school of thought did not rise in the United States to sufficiently challenge the establishment of the vastly influential ideas and trends under examination, it has since emerged from its humble origins as the key opponent of contemporary economic science and inflationary policies through the works of Ludwig von Mises and Nobel Laureate Friedrich von Hayek. Their contributions have since influenced Americans, such as Murray Rothbard and Ron Paul, who have tried to bring economics back into the American political debate.

Chapter X: World Ambitions and Agitation for a Government Clearing-House

[1] Kolko, Gabriel. *The Triumph of Conservatism: A Reinterpretation of American History, 1900-1916* (New York: Free Press of Glencoe, 1963), 147-48.

[2] Rothbard, Murray. *A History of Money and Banking in the United States* (Auburn: Ludwig von Mises Institute, 2002), 195-201.

[3] Conant, Charles A. *A History of Modern Banks of Issue with an Account of the Economic Crises of the Present Century* (New York: G.P. Putnam's Sons, 1896), v.

[4] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Comptroller of Currency. Sixteenth Congress, 1st Session, December 2, 1907." (Washington: U.S. Government Printing Office, 1963), 453.

[5] Vanderlip, Frank. *Pending Banking Legislation: Letters by Officers of the National City Bank of New York to the Banking and Currency Committees of the Congress of the United States* (New York: National City Bank of New York, 1913), 5.

[6] Livingston, James. *Origins of the Federal Reserve System: Money, Class and Corporate Capitalism, 1890–1913* (Ithaca: Cornell University Press, 1986), 150-154.

[7] Bankers' Magazine quoted in Rothbard, Murray. *Wall Street, Banks, and American Foreign Policy* (Burlingame, Calif.: Center for Libertarian Studies, Inc., 1996), 5.

[8] *Ibid.*

[9] Buzzanco, Robert. "Anti-Imperialism." *The Encyclopedia of American Foreign Policy*, 2002, accessed July 10, 2013. http://vi.uh.edu/pages/buzzmat/antiimp.html.

[10] Butler, Smedley Darlington. *War Is a Racket the Antiwar Classic by America's Most Decorated Soldier* (New York: Skyhorse Publishing, Inc., 2013).

[11] Loomis, Francis B. "Letter to President Roosevelt submitted by Assistant Secretary of the State Francis B. Loomis." *Gold Standard in International Trade*, accessed July 10, 2013. http://bikibook.com/gold-standard-in-international-trade-1477.html.

[12] Baker headed Morgan's First National Bank of New York, and served as a director of virtually every important Morgan-run enterprise, including: Chase National Bank, Guaranty Trust Company, Morton Trust Company, Mutual Life Insurance Company, AT&T, Consolidated Gas Company of New York, Erie Railroad, New York Central Railroad, Pullman Company, and United States Steel. See Burch, Philip H. Jr. *Elites in American History. Vol. 2: The Civil War to the New Deal* (New York: Holmes and Meier, 1981), 190, 229.

[13] Burch, Philip H. Jr. *Elites in American History. Vol. 2: The Civil War to the New Deal* (New York: Holmes and Meier, 1981), 134–35.

[14] Bruner, Robert F. and Carr, Sean D. *The Panic of 1907: Lessons Learned from the Market's Perfect Storm.* (Hoboken, New Jersey: John Wiley & Sons, 2007), 31.

[15] Herrick, Myron T. "The Panic of 1907 and Some of Its Lessons." *Annals of the American Academy of Political and Social Science, Vol. 31*, (March 1, 1908): 8–25. Accessed August 2, 2013. https://archive.org/details/jstor-1010701.

[16] Bruner, Robert F. and Carr, Sean D. *The Panic of 1907: Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 79.

[17] *Ibid.*, 101.

[18] Groseclose, Elgin Earl. *America's Money Machine: The Story of the Federal Reserve* (Westport, Conn.: Arlington House, 1980), 26-27.

[19] George Perkins in the *New York Times*, October 23, 1907, quoted from Groseclose, Elgin Earl. *America's Money Machine: The Story of the Federal Reserve*. Westport, Conn.: Arlington House, 1980. PDF e-book accessed July 27, 2013. https://archive.org/stream/pdfy-LfgMbTowiyaIc4at/America%27s%20Money%20Machine%20-%20The%20Story%20of%20the%20Federal%20Reserve_djvu.txt.

[20] Moen, Jon; Tallman, Ellis "The Bank Panic of 1907: The Role of the Trust Companies." *The Journal of Economic History,* 52 (1992): 611–30.

[21] Tallman, Ellis W. and Moen, Jon. "Lessons from the Panic of 1907." *Federal Reserve Bank of Atlanta Economic Review, 75* (1990): 2–13. Accessed August 8, 2013. http://www.frbatlanta.org/filelegacydocs/ern390_tallman.pdf.

Stillman was related to even greater wealth by marriage: his daughters, Sarah Elizabeth Stillman and Isabel Goodrich Stillman, married William Goodsell Rockefeller and Percy Avery Rockefeller, respectively. His grandson, James Stillman Rockefeller, served as president of National City from 1952 to 1959 and chairman from 1959 to 1967.

[22] Bruner, Robert F. and Carr, Sean D. *The Panic of 1907: Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 99-103.

[23] Chernow, Ron. *Titan: the Life of John D. Rockefeller, Sr, New York* (Random House, 1998), 542-544.

[24] Bruner, Robert F. and Carr, Sean D. *The Panic of 1907: Lessons Learned from the Market's Perfect Storm* (Hoboken, New Jersey: John Wiley & Sons, 2007), 100-101.

[25] Rothschild, Nathaniel. "*The New York Times,* Oct. 26, 1907." *The Modern History Project*, accessed July 17, 2013. http://modernhistoryproject.org/mhp?Article=WorldOrder&C=1.1.

Chapter XI: A New Central Bank

[1] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Secretary of Treasury. Sixtieth Congress, 1st Session, December 2, 1907." (Washington: U.S. Government Printing Office, 1963), 464.

[2] Talbert, Joseph T. *Pending Banking Legislation: Letters by Officers of the National City Bank of New York to the Banking and Currency Committees of the Congress of the United States* (New York: National City Bank of New York, 1913), 25.

[3] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Comptroller of Currency. Sixtieth Congress, 1st Session, December 2, 1907." (Washington: U.S. Government Printing Office, 1963), 453-454.

[4] *Ibid.*

[5] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Secretary of Treasury. Sixty-First Congress, 2nd Session, December 6, 1909." (Washington: U.S. Government Printing Office, 1963), 476.

[6] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Secretary of Treasury. Sixty-First Congress, 3rd Session, December 5, 1910." (Washington: U.S. Government Printing Office, 1963), 477.

[7] Schiff and Warburg were related by marriage. Schiff was a son-in-law of Solomon Loeb, cofounder of Kuhn, Loeb, and Warburg, married to Nina Loeb, was another son-in-law of Solomon Loeb by a second wife. The tie was fortified even more once Schiff's daughter Frieda married Paul Warburg's brother Felix, another partner of Schiff's and Paul Warburg's.

[8] Whitehouse, Michael A. "Paul Warburg's Crusade to Establish a Central Bank in the United States." *The Region - Publications & Papers | The Federal Reserve Bank of Minneapolis,* accessed August 27, 2013. http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=3815.

[9] Warburg, Paul M. *The Federal Reserve System*, Vol. 2 "A Plan for a Modified Central Bank." (New York: The MacMillan Co., 1930), 29.

[10] Rothbard, Murray. *A History of Money and Banking in the United States.* (Auburn: Ludwig von Mises Institute, 2002), 243.

[11] The relatively insignificant focus of the bill that introduced an emergency currency provision was used only once after the bill was passed, in 1914, after the establishment of the Federal Reserve.

[12] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Report of the national Monetary Commission. Senate Doc. 243, Sixty-Second Congress, 2nd Session, January 9, 1912." (Washington: U.S. Government Printing Office, 1963), 482-502.

[13] Rothbard, Murray. *A History of Money and Banking in the United States* (Auburn: Ludwig von Mises Institute, 2002), 245.

[14] Whitehouse, Michael A. "Paul Warburg's Crusade to Establish a Central Bank in the United States." *The Region - Publications & Papers | The Federal Reserve Bank of Minneapolis,* accessed August 27, 2013. http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=3815.

[15] *Ibid.*

[16] Conant, Charles A. "A Central Bank of Issue." *The New York Times*, September 22, 1909.

[17] Conant, Charles A. "A Central Bank of Issue." *The New York Times*, September 25, 1909.

[18]Chesterton, G. K. *Utopia of Usurers* (Norfolk, VA: IHS Press, 2002), 103.

[19] Livingston, James. *Origins of the Federal Reserve System: Money, Class, and Corporate Capitalism, 1890-1913* (Ithaca, N.Y.: Cornell University Press, 1986), 203.

[20] Whitehouse, Michael A. "Paul Warburg's Crusade to Establish a Central Bank in the United States." *The Region - Publications & Papers | The Federal Reserve Bank of Minneapolis,* accessed August 27, 2013. http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=3815.

[21]U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Secretary of Treasury. Sixty-Second Congress, 2nd Session, December 4, 1911." (Washington: U.S. Government Printing Office, 1963), 478-481.

[22] Vanderlip, Frank. *Pending Banking Legislation: Letters by Officers of the National City Bank of New York to the Banking and Currency Committees of the Congress of the United States* (New York: National City Bank of New York, 1913), 8.

[23] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Secretary of the Treasury. Sixty-Second Congress, 3rd Session, December 2, 1912." (Washington: U.S. Government Printing Office, 1963), 520.

[24] Whitehouse, Michael A. "Paul Warburg's Crusade to Establish a Central Bank in the United States." *The Region - Publications & Papers | The Federal Reserve Bank of Minneapolis,* accessed August 27, 2013. http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=3815.

[25] Charles A. Lindbergh, Sr. *Banking, Currency and the Money Trust* (Little Falls, MN: C.A. Lindbergh, 1913), 43. PDF book accessed August 4, 2013. http://state-citizen.org/Banking-and-Currency-and-the-Money-Trust-by-Minesota-Congressman-Charles-a-Lindbergh-Sr.pdf.

[26] Kolko, Gabriel. *The Triumph of Conservatism; A Reinterpretation of American History, 1900-1916* (New York: Free Press of Glencoe, 1963), 186.

[27] Untermyer, Samuel. "Say Money Trust is Now Disclosed." *New York Times,* Jan 12, 1913. Accessed September 1, 2013. http://query.nytimes.com/mem/archive-free/pdf?_r=1&res=9F00E2DB163FE633A25751C1A9679C946296D6CF.

[28] Bruner, Robert F., and Sean D. Carr. *The Panic of 1907: Lessons Learned from the Market's Perfect Storm.* (Hoboken, N.J.: John Wiley & Sons, 2007), 148.

[29] U.S. Congress, House of Representatives. *Pujo Committee Report,* "Report of the Committee Appointed Pursuant to House Resolutions 429 and 504 to Investigate the Concentration of Control of Money and Credit." (Washington: U.S. Government Printing Office, February 28, 1913). Accessed July 28, 2013. http://www.scribd.com/doc/34121180/Pujo-Committee-Report-Report-of-the-Committee-Appointed-Pursuant-to-House-Resolutions-429-and-504-1912-1913-Pujo-Committee-Report.

[30] Morgan, J. Pierpont, and Samuel Untermyer. *Testimony of J.P. Morgan before the Bank and Currency Committee of the House of Representatives, at Washington, D.C., appointed for the purpose of investigating an alleged money trust in "Wall street."* (New York: Printed by Mail and Express Print. Co., 1912) 4-5.

[31] Lindbergh, Charles A. "Referring to the act which established the Federal Reserve." *Congressional Record, Vol. 51,* (December 22, 1913): 1446.

[32]The Congressional record from December 22 and 23, 1913, reveals that nearly all of those abstaining from voting for had previously declared their opposition to the bill.

[33]Kolko, Gabriel. *The Triumph of Conservatism; A Reinterpretation of American History, 1900-1916* (New York: Free Press of Glencoe, 1963), 235.

Chapter XII: Ushering in an Age of Uncertainty

[1] Since the 1930's, the crucial open market policies of the Fed have been decided by the Federal Open Market Committee, that meets in Washington, including all seven members of the Board of Governors, in addition to five members that rotate from the pool of twelve banker-selected Presidents of the regional Feds.

[2] The Fed can also control the money supply to a lesser extent by changing the reserve requirements, although it generally does this in only fractions of one percent to avoid throwing the economy into a tailspin of liquidations as it did in 1938 by doubling the reserve requirement to 20. Not surprisingly, the overall trend of the Fed has been to increase inflation by lower this amount.

[3]Federal Reserve Bank of Boston. *Putting It Simply- The Federal Reserve* (Boston: Public Services Department of the Federal Reserve Bank of Boston, 1984).

[4] Silver was still coined, although when the price of silver surpassed the face value of coins, the government removed silver from coinage. LBJ claimed he would saturate the market with so many Kennedy half-dollars that it would force the coins to remain in circulation. Despite the record number of coins minted, they were quickly removed from circulation in 1965. Since silver never dropped below $1.21 an ounce, there was incentive to melt silver coins as soon as they came into circulation. What LBJ didn't understand was Gresham's law; that money overvalued by the government will drive out money that is undervalued by the government. One-dollar "Silver Certificates" were bills printed from 1878 to 1964 in response to silver agitation by citizens who were angered by the United States going on the gold standard. For years, the bills were redeemable in silver dollar coins, and later in raw silver bullion. Since August 16, 1968, however, they are redeemable only in Federal Reserve Notes, while still being recognized as legal tender.

[5] All hard and easily liquidated currency is known as the M0 money supply, and according to the Federal Reserve there is about $908.6 billion in the M0 supply stream (the Federal Reserve says that at any given time, between one-half and two-thirds of the M0 money stock of U.S. dollars is held overseas); M1 represents all of the currency in the M0 money supply, plus all of the money held in checking accounts, as well as all of the money in travelers' checks, totaling $2256.1 billion; M2 is the M1 supply, plus all of the money held in money market funds, savings accounts and small CDs that amounts to $9944.5 billion; and M3 is M2 plus all of the large CDs. As of March 2006, the Fed no longer tracks the M3 money stock as an economic indicator, but that month M3 totaled around $10.3 trillion. [source: Federal Reserve: http://www.federalreserve.gov/econresdata/statisticsdata.htm].

[6] Paul, Ron. *End the Fed* (New York: Grand Central Pub., 2009), 50.

Matthews, Steve and Torres, Craig. "Bernanke Says Federal Reserve Won't Reveal Details on Loans," *Bloomberg,* November 18, 2008. http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aS1eWoJj0sKc.

[7] Mises, Ludwig, *Nation, State, and Economy* (New York: New York University Press, 1983), 163.

[8] Rothbard, Murray. *The Case Against the Fed* (Auburn: Ludwig Von Mises Institute, 1994), 69-70.

[9] Rothbard, Murray. *Wall Street, Banks, and American Foreign Policy* (Burlingame, CA: Center for Libertarian Studies, Inc., 1996), 19.

[10] *Ibid.*, 21.

[11] First Lady Frances Cleveland controversially assumed the NSL positions of Director of the Speaker's Bureau and The Committee on Patriotism through Education. She resigned from the organization on December 8, 1919, however, from a conviction that the psychological indoctrination and use of fear in classrooms to inculcate children was wrong.

[12] Rothbard, Murray. *A History of Money and Banking in the United States* (Auburn: Ludwig von Mises Institute, 2002), 245.

[13]Tooley, Hunt. *The Western Front: Battleground and Home Front in the First World War* (Basingstoke, Hampshire: Palgrave Macmillan, 2003).

[14] Rothbard, Murray. *The Case Against the Fed* (Auburn: Ludwig Von Mises Institute, 1994), 70.

[15] Eventually, a concerted effort of Rockefeller interests and what Murray Rothbard called "brasher Wall Street Jewish investment banks such as Lehman Brothers and Goldman Sachs," displaced Morgan dominance during the New Deal. The climax of this financial revolution came about with Rockefeller's takeover of Morgan's Chase National Bank of New York. Winthrop Aldrich, son of Senator Aldrich and brother-in-law to John D. Rockefeller, Jr., engineered the merger with the Rockefeller Equitable Trust Company in what became Chase Bank. *See* Rothbard, Murray. *The Case Against the Fed* (Auburn: Ludwig Von Mises Institute, 1994), 71-72.

[16] United States Senate. "Merchants of Death." *United States Senate History,* September 4, 1934. http://www.senate.gov/artandhistory/history/minute/merchants_of_death.htm.

[17] Rothbard, Murray. *The Case Against the Fed* (Auburn: Ludwig Von Mises Institute, 1994), 70.

[18] Friedman, Milton and Schwartz, Anna J. *A Monetary History of the United States, 1857-1960* (Princeton, NJ: Princeton University Press, 1963), 198.

[19] Freud, Sigmund. *The Basic Writings of Sigmund Freud,* "Totem and taboo; some points of agreement between the mental lives of savages and neurotics." (New York: Modern Library, 1938).

[20] Schweitzer, Albert. *Albert Schweitzer: Essential Writings* (Maryknoll, N.Y.: Orbis Books, 2005).

[21] Vanderlip, Frank A.. *How to Win the War* (New York: National City Bank of New York, 1917), 16.

[22]Warburg, Paul M. *Capital Issues and Municipal Debts and Their Relation to War Financing* (New York: The Academy of Political Science, Columbia University, 1918), 3.

[23]Warburg, Paul. "Some Phases of Financial Reconstruction." *St. Louis Federal Reserve*, accessed July 10, 2013. https://fraser.stlouisfed.org/historicaldocs/mpmw1918/download/96043/Warburg_19181206.pdf, 3.

[24] *Ibid.*, 5.

[25] *Ibid.,* 5-6.

[26] *Ibid.,* 7.

[27]Warburg, Paul M. *The Federal Reserve System and the Banks* (New York: Press of the Financial Age, 1916), 4.

[28] *Ibid.*, 30.

Conclusion

[1] Hayek, Friedrich A. "Award Ceremony Speech, The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel, 1974." Accessed June 20, 2013. http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1974/presentation-speech.html.

[2] White, Lawrence H. 2005. "The Federal Reserve System's Influence on Research in Monetary Economics." *Econ Journal Watch,* Volume 2, Number 2, (August 2005): 325-354.

[3] Screpanti, Ernesto, and Stefano Zamagni. *An Outline of the History of Economic Thought* (Oxford: Clarendon Press, 1993), 31.

[4]Chesterton, G. K..*Utopia of Usurers* (Norfolk, VA: IHS Press, 2002), 103.

[5] Popper, Karl R. *Conjectures and Refutation: The Growth of Scientific Knowledge* (New York: Basic Books, 1962), 55.

[6] Hayek, Friedrich A. *The Counter-Revolution of Science: Studies on the Abuse of Reason.*2d ed. (Indianapolis: Liberty Press, 1979), 165.

[7] Smith, Adam. *An Inquiry into the Nature and Causes of the Wealth of Nations.* Book V, Chapter III, "Of Public Debts." Accessed August 25, 2013. http://www.econlib.org/library/Smith/smWN22.htm.

[8] Mises, Ludwig, *Nation, State, and Economy* (New York: New York University Press, 1983), 163.

[9] Hayek, Friedrich A. *The Counter-Revolution of Science: Studies on the Abuse of Reason.*2d ed. (Indianapolis: Liberty Press, 1979), 52.

[10] It is notable that the1886 Supreme Court decision that protected corporations as individuals under the 14th Amendment is not in keeping with the nature of the amendment's 1868 Reconstruction context that was enacted to overrule the 1857 *Dred Scott v. Sandford* Supreme Court ruling that bared black Americans as citizens of the United States.

[11]Conant, Charles A. *A History of Modern Banks of Issue With an Account of the Economic Crises of the Present Century* (New York: G.P. Putnam's Sons, 1896), 337.

[12] A study conducted by the IMF and World Bank concluded that the poor are left to suffer the harshest results of inflation and that inflation ultimately increases poverty. *See* Easterly, William, and Stanley Fischer. "Inflation and the Poor." *Journal of Money, Credit and Banking,* vol. 33, issue 2 (2001): 160.

[13]Volcker, Paul. "Paul Volcker Interview." *PBS,* accessed August 1, 2013. http://www.pbs.org/fmc/interviews/volcker.htm

[14] U.S. Department of the Treasury. "William A. Richardson (1873 - 1874)." Accessed June 12, 2013. http://www.treasury.gov/about/history/pages/warichardson.aspx.

[15] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Comptroller of Currency. Forty-Third Congress, 1st Session, November 28, 1873." (Washington: U.S. Government Printing Office, 1963), 390.

[16] U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912,* "Annual Report of the Comptroller of Currency. Forty-Eighth Congress, 2nd Session, December 1, 1884." (Washington: U.S. Government Printing Office, 1963), 422.

Bibliography

Aquinas, Saint Thomas. *Commentary on the Nicomachean Ethics, vol. 1,* ed. Litzinger, C. I. (Chicago: Regnery, 1964).

Aquinas, Saint Thomas. *On Law, Morality, and Politics.* "Question 78: Of the Sin of Interest-Taking; First Article: Is It a Sin to Take Interest for Money Lent?" ed. William P. Baumgarth and Richard J. Regan, S.J. (Indianapolis: Hackett Publishing Company, 1988).

Aristotle, *Politics*, accessed August 13, 2012. http://classics.mit.edu/Aristotle/politics.1.one.html.

Aristotle, *Rhetoric*, accessed August 13, 2012. http://classics.mit.edu/Aristotle/rhetoric.1.i.html.

Armesto, Felipe. *Ideas that Changed the World* (New York: Dorling Kindersley, 2003).

Bacon, Francis. *The Essayes or Councels, Civill and Morall,* "Of Usurie." ed. Michael Kiernan (Cambridge: Harvard University Press, 1985).

Bank of England, "History," *About the Bank,* accessed February 4, 2013. http://www.bankofengland.co.uk/about/Pages/history/default.aspx#2.

Barbon, Nicholas. *A Discourse Concerning Coining the New Money Lighter, In Answer to Mr. Lock's Considerations (1696),* accessed December 7, 2012. http://www.econlib.org/library/YPDBooks/Barbon/brbnDT0.html.

Bawerk, Eugenvon. *Capital and Interest* (South Holland: Libertarian Press, 1959).

BBC, "Empire of the Seas," accessed February 22, 2013. http://www.bbc.co.uk.news-channel.org/pressoffice/proginfo/tv/2010/wk2/feature_sea.shtml.

Beard, Charles A. *An Economic Interpretation of the Constitution of the United States* (New York: The Macmillan Company, 1935).

Bentham, Jeremy. *Defence of Usury*, 4th ed. (London: Payne and Foss, 1787). Accessed January 1, 2013. http://oll.libertyfund.org/ToC/0167.php

Board of Governors of the Federal Reserve System. "Who Owns the Federal Reserve?" Accessed July 1, 2012. http://www.federalreserve.gov/faqs/about_14986.htm.

Bogen, David S.*The Scandal of Smith and Buchanan: The Skeletons in the McCulloch vs. Maryland Closet* (Baltimore: University of Maryland School of Law, 1985).

Boland, Vincent. "Modern dilemma for world's oldest bank."*Financial Times,* June 12, 2009. http://www.ft.com/cms/s/0/a034542e-5771-11de-8c47-00144feabdc0.html?nclick_check=1.

British National Archives, "Bank Charter Act," (1844). Accessed January 7, 2013. http://www.legislation.gov.uk/ukpga/Vict/78/32/contents

British Parliamentary Reports on International Finance, *The Cunliffe Committee and the Macmillan Committee Reports* (New York: Arno Press, 1979).

Bruner, Robert F. and Carr, Sean D. *The Panic of 1907: Lessons Learned from the Market's Perfect Storm.* (Hoboken, New Jersey: John Wiley & Sons, 2007).

Burch, Philip H. *Elites in American History* (New York: Holmes & Meier, 1981).

Burnett, Edmund Cody. *The Continental Congress* (New York: W.W. Norton, 1964).

Butler, Smedley Darlington. *War Is a Racket the Antiwar Classic by America's Most Decorated Soldier* (New York: Skyhorse Publishing, Inc., 2013).

Buzzanco, Robert. "Anti-Imperialism." *The Encyclopedia of American Foreign Policy*, 2002, accessed July 10, 2013. http://vi.uh.edu/pages/buzzmat/antiimp.html.

Carson, Thomas. *Gale Encyclopedia of U. S. Economic History* (Farmington Hills: Cengage Gale, 2000).

Chernow, Ron. *Titan: the Life of John D. Rockefeller, Sr., New York* (Random House, 1998).

Chesterton, G. K. *Heretics/Orthodoxy* (Nashville: T. Nelson Publishers, 2000).

Chesterton, G. K. *Utopia of Usurers* (Norfolk, VA: IHS Press, 2002).

Coase, R. H. *The Nature of the Firm* (New York: Oxford University Press, 1993).

Conant, Charles A. "A Central Bank of Issue." *The New York Times*, September 22, 1909.

Conant, Charles A. "A Central Bank of Issue." *The New York Times*, September 25, 1909.

Conant, Charles A. *A History of Modern Banks of Issue with an Account of the Economic Crises of the Present Century* (New York: G.P. Putnam's Sons, 1896).

Dahl, Robert A. ''The Behavioral Approach in Political Science: Epitaph for a Monument to a Successful Protest." *American Political Science Review* 55 (December 1961).

Descartes, Rene. Meditations on First Philosophy, "Of the Nature of the Human Mind; and That it is More Easily Known Than The Body." Accessed August 22, 2012. http://oregonstate.edu/instruct/phl302/texts/descartes/meditations/Meditation2.html.

Easterly, William, and Stanley Fischer. "Inflation and the Poor." *Journal of Money, Credit and Banking,* vol. 33, issue 2 (2001).

Einstein, Albert. *The Collected Papers of Albert Einstein*, ed. Beck, Anna and Havas, Peter. (Princeton, N.J.: Princeton University Press, 1987).

Federal Reserve Bank of Boston. *Putting It Simply- The Federal Reserve* (Boston: Public Services Department of the Federal Reserve Bank of Boston, 1984).

Federal Reserve Bank of New York, "The Founding of the Fed." Accessed June 19, 2012. http://www.newyorkfed.org/aboutthefed/history_article.html.

Federal Reserve Bank of St. Louis, "In Plain English: Making Sense of the Federal Reserve." Accessed June 19, 2012. https://www.stlouisfed.org/inplainenglish/history2.cfm.

Federico, P. J. "Origin and Early History of Patents." *Journal of the Patent Office Society*, vol. 11, (July, 1929).

Ferguson, E. James. *The Power of the Purse: A History of American Public Finance* (Chapell Hill: University of North Carolina, 1961).

Ferguson, Niall. *The Ascent of Money: A Financial History of the World* (New York: Penguin Press, 2008).

Ferguson, Niall. *The House of Rothschild: Money's prophets: 1798-1848* (London : Penguin Books, 1999).

Ferry, Luc. *A Brief History of Thought: A Philosophical Guide to Living* (New York: Harper Perennial, 2011).

Field, Gray J. "Dissenting opinion of Justice Field in *Juilliard v. Greenman*, Legal Tender Cases - 110 U.S. 421," *JUSTIA US Supreme Court,* accessed June 29, 2013. http://supreme.justia.com/cases/federal/us/110/421/case.html.

Fortune Magazine. "The Richest Americans." *CNN Money,* accessed May 1, 2013. http://money.cnn.com/galleries/2007/fortune/0702/gallery.richestamericans.fortune/4.html.

Franklin, Benjamin. "A Modest Enquiry into the Nature and Necessity of a Paper-Currency (1729)." Accessed March 3, 2013. http://etext.virginia.edu/users/brock/webdoc6.html.

Franklin, Benjamin. *The Autobiography of Benjamin Franklin,* accessed March 3, 2013. www.ushistory.org/franklin/autobiography/page32.htm

Freud, Sigmund. *The Basic Writings of Sigmund Freud,* "Totem and taboo; some points of agreement between the mental lives of savages and neurotics." (New York: Modern Library, 1938).

Friedman, Milton and Schwartz, Anna J. *A Monetary History of the United States, 1857-1960* (Princeton, NJ: Princeton University Press, 1963).

Friedman, Milton. *Money Mischief: Episodes in Monetary History* (San Diego: Harcourt Brace & Co., 1994).

Furniss, Edgar S. *The Position of the Laborer in a System of Nationalism* (New York: Kelley and Millman, 1957).

Garfield, James A. "President James Garfield's Inaugural Address (1881)," *The American Presidency Project,* accessed June 15, 2013. http://www.presidency.ucsb.edu/ws/index.php?pid=25823.

Goddard, Thomas H., Alexander Hamilton, and George McDuffie. *A General History of the Most Prominent Banks in Europe Particularly the Banks of England and France : The Rise and Progress of the Bank of North America : A Full History of the Late and Present Bank of the United States* (New York: H.C. Sleight, 1831).

Goldin, Claudia. "Cliometrics and the Nobel." *The Journal of Economic Perspectives,* Vol. 9, No. 2 (Spring, 1995).

Govan, Thomas P. "The Rich, the Well-born, and Alexander Hamilton." *The Mississippi Valley Historical Review,* Vol. 36, No. 4 (Mar., 1950). Accessed March 7, 2013. http://www.jstor.org/stable/1895524.

Groseclose, Elgin Earl. *America's Money Machine: The Story of the Federal Reserve* (Westport, Conn.: Arlington House, 1980).

Grossman, Richard S. "U.S. Banking History, Civil War to WWII," *EH.net. Economic History Services*, accessed June 6, 2013. http://eh.net/encyclopedia/article/grossman.banking.history.us.civil.war.wwii.

Hamilton, Alexander. *The Federalist: With Letters of Brutus*. "New York Journal, November 1, 1787." (Cambridge: Cambridge University Press, 2003).

Hamilton, Alexander. "Federalist Paper 84." *The Federalist Papers,* accessed March 13, 2013. http://www.thefederalistpapers.org/federalist-papers/alexander-hamilton-federalist-paper-84-a-bill-of-rights-would-be-dangerous.

Hamilton, Alexander. *The Works of Alexander Hamilton: Publishedfrom the Original Manuscripts Deposited in the Department of State* ed. John C. Hamilton (New York J.F. Trow, 1850).

Hammond, Bray. *Banks and Politics in America, from the Revolution to the Civil War.* (Princeton: Princeton University Press, 1957).

Hayek, Friedrich A. "Award Ceremony Speech, The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel, 1974." Accessed June 20, 2013. http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1974/presentation-speech.html.

Hayek, Friedrich A. *The Counter-Revolution of Science: Studies on the Abuse of Reason*, 2d ed. (Indianapolis: Liberty Press, 1979).

Heckscher, Eli F. *Mercantilism,* 2nd ed. (New York: Macmillan, 1955).

Herrick, Myron T. "The Panic of 1907 and Some of Its Lessons." *Annals of the American Academy of Political and Social Science, Vol. 31*, (March 1, 1908): 8–25. Accessed August 2, 2013. https://archive.org/details/jstor-1010701.

Hibbert, Christopher. *The House of Medici: Its Rise and Fall* (New York: Morrow Quill, 1980).

Hicks, John. *A Theory of Economic History* (London: Oxford University Press, 1969).

Heilbroner, Robert L. *The Worldly Philosophers: The Lives, Times, and Ideas of the Great Economic Thinkers.* 4th ed. (New York: Simon and Schuster, 1972).

Higgs, Robert. "The Rise of the West." March 23, 2011, *Mises Daily,* https://mises.org/daily/5078/The-Rise-of-the-West.

Hülsmann, JörgGuido. *The Ethics of Money Production* (Auburn: Ludwig von Mises Institute, 2008).

Hume, David. *Of Interest,* Part II, Essay IV (1742). Accessed February 14, 2013. http://www.econlib.org/library/LFBooks/Hume/hmMPL27.html.

Hume, David. *A Treatise of Human Nature* (1740). Accessed December 25, 2012. http://www.davidhume.org/texts/ehu.html.

Internet Encyclopedia of Philosophy, "Neoplatonismentry." Accessed August 13, 2012. http://www.iep.utm.edu/neoplato.

James, Harold. *The End of Globalization* (Cambridge: Harvard University Press, 2001).

Jean, Roger V. *Symmetry in Plants* (Singapore: World Scientific, 1998).

Jefferson, Thomas. *The Complete Anas of Thomas Jefferson*, accessed March 6, 2013. http://archive.org/details/anasofthomasj00jeffrich.

Jefferson, Thomas. *Memoirs, Correspondence, and Private Papers of Thomas Jefferson: Late President of the United States,* Vol. III, ed. by T.J. Randolph (London: H. Colburn and R. Bentley, 1829).

Jefferson, Thomas. *The Thomas Jefferson Papers.* The Library of Congress, accessed April 5, 2013. http://memory.loc.gov/cgi-bin/query/P?mtj:16:./temp/~ammem_TjOQ.

Jefferson, Thomas. *The Works of Thomas Jefferson* (New York and London, G.P. Putnam's Sons, 1904-5), accessed March 12, 2013. http://oll.libertyfund.org/title/802/86685.

Jefferson, Thomas. *The Writings of Thomas Jefferson* ed. Paul Leicester Ford (New York: G.P. Putnam's Sons, 1892).

Jewish Encyclopedia, "Usury." Accessed August 30, 2012. http://www.jewishencyclopedia.com/articles/14615-usury.

Kahn, David. *The Codebreakers: The Story of Secret Writing* (New York: Scribner, 1996).

Kemmerer, Donald. "Paper Money in New Jersey, 1668-177." *New Jersey Historical Society, Proceedings 74* (April, 1956).

Keynes, John Maynard. *A Treatise on Probability* (London: Macmillan and Co., 1921).

Kindleberger, Charles P. *Manias, Panics and Crashes: A History of Financial Crises*, 5th ed. (New York: John Wiley & Sons, 2005).

Kolko, Gabriel. *The Triumph of Conservatism: A Reinterpretation of American History, 1900-1916* (New York: Free Press of Glencoe, 1963).

Krugman, Paul. "The Conscience of a Liberal: How We Know The Earth Is Old." *The New York Times,* November 20, 2012. http://krugman.blogs.nytimes.com/2012/11/20/how-we-know-the-earth-is-old/.

Larson, Henrietta. *Jay Cooke, Private Banker* (Cambridge: Harvard University Press, 1936).

Laughlin, J. Laurence. *The History of Bimetallism in the United States*, 4th ed. (New York: Greenwood Press, 1968).

Lawson, Melinda. *Patriot Fires: Forging a New American Nationalism in the Civil War North* (Lawrence: University Press of Kansas , 2002).

Letwin, William. *The Origins of Scientific Economics: English Economic Thought 1660-1776* (London : Methuen, 1963).

Levine, Amy, Dale C. Allison, and John Dominic Crossan. *The Historical Jesus in Context* (Princeton, N.J.: Princeton University Press, 2006).

Library of Congress. Journals of the Continental Congress, 1774-1789. "In Congress, December 31, 1781. Volume XXI." Accessed March 1, 2013. http://memory.loc.gov/ammem/amlaw/lwjclink.html.

Lindbergh, Charles A. Sr. *Banking, Currency and the Money Trust* (Little Falls, MN: C.A. Lindbergh, 1913), 43. PDF book accessed August 4, 2013. http://state-citizen.org/Banking-and-Currency-and-the-Money-Trust-by-Minesota-Congressman-Charles-a-Lindbergh-Sr.pdf.

Lindbergh, Charles A. "Referring to the act which established the Federal Reserve." *Congressional Record, Vol. 51,* (December 22, 1913).

Livingston, James. *Origins of the Federal Reserve System: Money, Class and Corporate Capitalism, 1890–1913* (Ithaca: Cornell University Press, 1986).

Locke, John. *Some Considerations of the Consequences of the Lowering of Interest and the Raising the Value of Money* (1691), accessed December 4, 2012. https://webspace.utexas.edu/hcleaver/www/368/368LockeSomeConsiderationsAlltable.pdf.

Locke, John. *The Works of John Locke in Nine Volumes,* Vol. 4, "Further Considerations Concerning Raising the Value of Money." Accessed December 6, 2012. http://oll.libertyfund.org/title/763/65190.

Loomis, Francis B. "Letter to President Roosevelt submitted by Assistant Secretary of the State Francis B. Loomis." *Gold Standard in International Trade*, accessed July 10, 2013. http://bikibook.com/gold-standard-in-international-trade-1477.html.

Luckert, Karl W. *Egyptian Light and Hebrew Fire: Theological and Philosophical Roots of Christendom in Evolutionary Perspective* (Albany: State University of New York Press, 1991).

Machiavelli, Niccolo. *The History of Florence,* The Literature Network. Accessed September 1, 2012. http://www.online-literature.com/machiavelli/florence_italy/.

Madison, James. *The Federalist, No. 10.* "The Utility of the Union as a Safeguard Against Domestic Faction and Insurrection. Daily Advertiser, Thursday, November 22, 1787." *The Constitution Society*, accessed April 1, 2013. http://www.constitution.org/fed/federa10.htm.

Madison, James. *The Writings of James Madison, Comprising his Public Papers and his Private Correspondence,* Vol. 3, ed. Gaillard Hunt (New York: G.P. Putnam's Sons, 1900). Accessed June 15, 2012. http://oll.libertyfund.org/titles/1935.

Manchester, William. *A World Lit only by Fire: The Medieval Mind and the Renaissance: Portrait of an Age* (Boston: Little, Brown, 1992).

Marzuni, Marcy. *Decoding the Past: The Templar Code.* The History Channel. November 7, 2005. Video Documentary.

Matthews, Steve and Torres, Craig. "Bernanke Says Federal Reserve Won't Reveal Details on Loans," *Bloomberg,* November 18, 2008. http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aS1eWoJj0sKc.

McCulloch, Hugh. "Advice to Bankers of 1863," *The Federal Reserve Bank of St. Louis*, accessed June 4, 2013. http://fraser.stlouisfed.org/docs/publications/books/1938_comp_nbs.pdf.

McLeay, Michael. Amar Radia and Ryland Thomas. "Money Creation in the Modern Economy." *The Bank of England,* accessed September 28, 2014. http://www.bankofengland.co.uk/publications/documents/quarterlybulletin/2014/qb14q1prereleasemoneycreation.pdf.

Meikle, Scott. *Aristotle's Economic Thought* (Oxford: Clarendon Press, 1995).

Minicucci, Stephen. "Internal Improvements and The Union, 1790–1860." *Studies in American Political Development,* Vol. 18, Issue no. 2 (2004).

Mises, Ludwig, *Nation, State, and Economy* (New York: New York University Press, 1983).

Mixon, Peter. "The Crisis of 1873: Perspectives from Multiple Asset Classes," *Journal of Economic History* 68, no. 3 (2008).

Moehlman, Conrad H. "The Christianization of Interest." *Church History.* Issue 3 (1934).

Moen, Jon; Tallman, Ellis "The Bank Panic of 1907: The Role of the Trust Companies." *The Journal of Economic History,* 52 (1992).

Mokyr, Joel. *The Enlightened Economy: An Economic History of Britain, 1700-1850* (New Haven: Yale University Press, 2009).

Morgan, J. Pierpont, and Samuel Untermyer. *Testimony of J.P. Morgan before the Bank and Currency Committee of the House of Representatives, at Washington, D.C., appointed for the purpose of investigating an alleged money trust in "Wall street."* (New York: Printed by Mail and Express Print. Co., 1912).

Morris, Robert. *The Revolutionary Diplomatic Correspondence of the United States. 6 vols.* "Letter from Robert Morris to Congress, May 17, 1781." ed. Wharton, Francis, (Washington, D.C.: Government Printing Office, 1889).

National City Bank of New York. *Pending Banking Legislation: Letters by Officers of the National City Bank of New York to the Banking and Currency Committees of the Congress of the United States* (New York: National City Bank of New York, 1913).

Newman, James R. *The World of Mathematics: A Small Library of the Literature of Mathematics from A'h-mosé the Scribe to Albert Einstein* (New York: Simon and Schuster, 1956).

Newton, Issac. Preface, *PhilosophiaeNaturalis Principia Mathematica* (1687), accessed January 3, 2013. http://www.bartleby.com/39/24.html.

Noonan, John T., Jr.. "Development of Moral Doctrine." *Theological Study* 54, (1993).

Oxford Dictionary, "Interest." Accessed August 27, 2012. http://www.oxforddictionaries.com/definition/english/interest.

Passell, Petter. "Economic Scene; Some meaty stuff on monetary policy, from a former Fed hand." *New York Times,* January 29, 1998. http://www.nytimes.com/1998/01/29/business/economic-scene-some-meaty-stuff-on-monetary-policy-from-a-former-fed-hand.html.

Paul, Ron. *End the Fed* (New York: Grand Central Pub., 2009).

Petty, William. *A Treatise of Taxes, and Contributions* (1667), accessed December 13, 2012. http://www.marxists.org/archive/marx/works/1863/theories-surplus-value/add1.htm.

Petty, William. *The Economic Writings of Sir William Petty,* .ed. Charles Henry Hull, (Cambridge University Press, 1899).

Popper, Karl R. *Conjectures and Refutations: The Growth of Scientific Knowledge* (New York: Basic Books, 1962).

Quigley, Carroll. *Tragedy and Hope: A History of the World in Our Time* (New York: Macmillan, 1966).

Quinn, Stephen; Roberds, William. "An Economic Explanation of the Early Bank of Amsterdam, Debasement, Bills of Exchange, and the Emergence of the First Central Bank." *Federal Reserve Bank of Atlanta* Working Paper No. 2006-13 (October 5, 2006): http://papers.ssrn.com/sol3/papers.cfm?abstract_id=934871.

Randolph, Edmund. *The Papers of George Washington*, "Opinion on Constitutionality of a National Bank." Library of Congress, accessed April 5, 2013. http://memory.loc.gov/cgi-bin/query/P?mgw:3:./temp/~ammem_t6M3.

Ravenhill, John. *Global Political Economy* (Oxford: Oxford University Press, 2005).

Rice, Stuart A., Horace Secrist, Robert M. MacIver, and Harold Dwight Lasswell. *Methods in social science, a case book* (Chicago: The University of Chicago Press, 1931).

Roll, Erich. *A History of Economic Thought*, 4th ed. (London: Faber & Faber, 1973).

Rosenberg, Nathan and L. E. Birdzell, Jr. *How the West Grew Rich: The Economic Transformation of the Industrial World* (New York: Basic Books, 1986).

Rothbard, Murray. *The Case Against the Fed* (Auburn: Ludwig Von Mises Institute, 1994).

Rothbard, Murray. *Conceived in Liberty,* Volume IV (New Rochelle: Arlington House Publishers, 1975).

Rothbard, Murray. "David Hume and the Theory of Money." *Mises Daily*, April 27, 2011. http://www.mises.org/daily/5077/.

Rothbard, Murray. *A History of Money and Banking in the United States: The Colonial Era to World War II* (Auburn: Ludwig von Mises Institute, 2002).

Rothbard, Murray. *The Panic of 1819: Reactions and Policies.* (Auburn: Ludwig von Mises Institute, 2007).

Rothbard, Murray. "Sir William Petty and the Mathematics of Power." *Mises Daily*, October 07, 2010. http://mises.org/daily/4694.

Rothbard, Murray. *Wall Street, Banks, and American Foreign Policy* (Burlingame, Calif.: Center for Libertarian Studies, Inc., 1996).

Rothschild, Nathaniel. "*The New York Times,* Oct. 26, 1907." *The Modern History Project*, accessed July 17, 2013. http://modernhistoryproject.org/mhp?Article=WorldOrder&C=1.1.

Ruston, Roger. "Does It Matter What We Do With Our Money?" *Priests & People* (May 1993): 174.

Schneider, Herbert Wallace. *A History of American Philosophy*. 2d ed. (New York: Columbia University Press, 1963).

Schumpeter, Joseph A. *History of Economic Analysis*. (New York: Oxford University Press, 1994).

Schweitzer, Albert. *Albert Schweitzer: Essential Writings* (Maryknoll, N.Y.: Orbis Books, 2005).

Screpanti, Ernesto, and Stefano Zamagni. *An Outline of the History of Economic Thought* (Oxford: Clarendon Press, 1993).

Seddon, Fred. "The Jesuits and the Spirt of Capitalism." *Wheeling Jesuit College's Annual* (1991): Accessed September 27, 2012. http://www.wju.edu/academics/bus/iscm/Seddon1.pdf.

Sharkey, Robert P. *Money, Class, and Party: An Economic Study of Civil War and Reconstruction* (Baltimore: Johns Hopkins Press, 1967).

Smith, Adam. *The Death of David Hume*. "Letter *from* Adam Smith *to* William Strachan, Esq." (Nov. 9, 1776). Accessed January 1, 2013. http://www.ourcivilisation.com/smartboard/shop/smitha/humedead.htm.

Smith, Adam. *An Inquiry Into the Nature and Causes of the Wealth of Nations, Vol. I ed. R. H. Campbell and A. S. Skinner, vol. II of the Glasgow Edition of the Works and Correspondence of Adam Smith,* PDF e-book (Indianapolis: Liberty Fund, 1981), accessed January 14, 2013. http://oll.libertyfund.org/title/220.

Sorokin, Pitirim. *Fads and Foibles in Modern Sociology and Related Sciences* (Chicago: H. Regnery Co., 1956).

Soto, Jesús de Huerta, and Melinda A. Stroup. *Money, Bank Credit, and Economic Cycles* (Auburn: Ludwig von Mises Institute, 2006).

Soto, Jesús de Huerta. "New Light on the Prehistory of the Theory of Banking and the School of Salamanca." *The Review of Austrian Economics,* Vol. 9, no. 2 (1996).

Stanford Encyclopedia of Philosophy, "David Hume." Accessed December 25, 2012. http://plato.stanford.edu/entries/hume/.

Szatmary, David P. *Shays's Rebellion: The Making of an Agrarian Insurrection* (Boston: University of Massachusetts Press, 1980).

Tallman, Ellis W. and Moen, Jon. "Lessons from the Panic of 1907." *Federal Reserve Bank of Atlanta Economic Review, 75* (1990): 2–13. Accessed August 8, 2013. http://www.frbatlanta.org/filelegacydocs/ern390_tallman.pdf.

Timberlake, Richard H. *Money, Banking, and Central Banking* (New York: Harper & Row, 1965).

Tobin, James . "Neoclassical Theory in America: J. B. Clark and Fisher." *American Economic Review* Vol. 75, No. 6 (1985).

Tooley, Hunt. *The Western Front: Battleground and Home Front in the First World War* (Basingstoke, Hampshire: Palgrave Macmillan, 2003).

Twain, Mark. *Autobiography of Mark Twain,* ed. Harriet Elinor Smith, Benjamin Griffin, Victor Fischer, Michael B. Frank, Sharon K. Goetz, and Leslie Diane Myrick (Berkeley: University of California Press, 2010).

Twain, Mark. *Collected Tales, Sketches, Speeches & Essays.* "The Revised Catechism, September 27, 1871." (New York: Library of America, 1992).

U.S. Congress, Committee on Banking and Currency. *Federal Banking Laws and Reports: A Compilation of Major Federal Banking Documents, 1780-1912* (Washington: U.S. Government Printing Office, 1963).

U.S. Congress, House of Representatives. *Pujo Committee Report,* "Report of the Committee Appointed Pursuant to House Resolutions 429 and 504 to Investigate the Concentration of Control of Money and Credit." (Washington: U.S. Government Printing Office, February 28, 1913). Accessed July 28, 2013. http://www.scribd.com/doc/34121180/Pujo-Committee-Report-Report-of-the-Committee-Appointed-Pursuant-to-House-Resolutions-429-and-504-1912-1913-Pujo-Committee-Report.

U.S. Senate. "Merchants of Death." *United States Senate History,* September 4, 1934. http://www.senate.gov/artandhistory/history/minute/merchants_of_death.htm.

Untermyer, Samuel. "Say Money Trust is Now Disclosed." *New York Times,* Jan 12, 1913. Accessed September 1, 2013. http://query.nytimes.com/mem/archive-free/pdf?_r=1&res=9F00E2DB163FE633A25751C1A9679C946296D6CF.

Van Boven, M. W. "Towards A New Age of Partnership: An Ambitious World Heritage Project." *UNESCO Memory of the World*, VOC Archives, Appendix 2 (2002): Accessed November 27, 2014. http://portal.unesco.org/ci/en/files/22635/11546101681netherlands_voc_archives.doc/netherlands%2Bvoc%2Barchives.doc.

Vanderlip, Frank A.. *How to Win the War* (New York: National City Bank of New York, 1917).

Veatch, Henry Babcock. *Swimming Against the Current in Contemporary Philosophy: Occasional Essays and Papers* (Washington, D.C.: Catholic University of America Press, 1990).

Viner, Jacob. *Studies in the Theory of International Trade* (New York: Harper and Bros., 1937).

Volcker, Paul. "Paul Volcker Interview." *PBS*, accessed August 1, 2013. http://www.pbs.org/fmc/interviews/volcker.htm.

Vries, Jan, and A. M. van der Woude. *The First Modern Economy: Success, Failure, and Perseverance of the Dutch Economy, 1500-1815* (Cambridge: Cambridge University Press, 1997).

Walter, Andrew. *World Power and World Money: The Role of Hegemony and International Monetary Order* (New York: St. Martin's Press, 1991).

Warburg, Paul M. *Capital Issues and Municipal Debts and Their Relation to War Financing* (New York: The Academy of Political Science, Columbia University, 1918).

Warburg, Paul M. *The Federal Reserve System*, Vol. 2 "A Plan for a Modified Central Bank." (New York: The MacMillan Co., 1930).

Warburg, Paul M. *The Federal Reserve System and the Banks* (New York: Press of the Financial Age, 1916).

Warburg, Paul M. "Some Phases of Financial Reconstruction." *St. Louis Federal Reserve*, accessed July 10, 2013. https://fraser.stlouisfed.org/historicaldocs/mpmw1918/download/96043/Warburg_19181206.pdf.

Westfall, Richard S. *Never at Rest: A Biography of Isaac Newton* (Cambridge: Cambridge University Press, 1983).

Westley, Christopher. "The Debate Over Money Manipulations: A Short History" *Intercollegiate Review* 45, (Fall 2010): Accessed March 29, 2013. http://www.mmisi.org/ir/45_1-2/westley.pdf.

White, Lawrence H. "The Federal Reserve System's Influence on Research in Monetary Economics." *Econ Journal Watch,* Volume 2, Number 2, (August 2005).

White, Michael. *Isaac Newton: the Last Sorcerer* (Reading, Mass.: Addison-Wesley, 1997).

Whitehouse, Michael A. "Paul Warburg's Crusade to Establish a Central Bank in the United States." *The Region - Publications & Papers | The Federal Reserve Bank of Minneapolis,* accessed August 27, 2013. http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=3815.