The 'Alternative' History of Money

From Barter to Bit Coin

Tom Schneeweis
(Nom De Plume: Tam Schpuppis)

Focus of Book

"There Is More Truth In Fiction Than In Fact"

History: Here is the point of this book; money matters, it changes everything. However, if one only concentrates on getting it rather than understanding its past, present, and future, you will remain on the fringes of money. You will always be reaching for it rather than being a part of it. At the end, think of all the people who really have money, the bankers, the lawyers, the business entrepreneurs. They really understand money, they are part of it. If you read this book, you might too.

Abstract

Other works on the History of Money simply failed to provide (in my view) a proper understanding of the real History of Money and its importance in the development of human civilization. Even more important, previous books on the History of Money offered little if any instruction on understanding how the History of Money might help others actually make some. If they had, why are so many monetary historians and those who have read their books (primarily college history majors) so poor? The Truth is "They Were Never There" where money was. I mean they were never where or when money was actually made, found, discovered or whatever. In short, they wrote or taught about something they never saw or did. Or has been said many times, the proof is in the pudding or in this case, one's bank account. Hopefully, this effort will not only enrich its readers but the author as well.

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The Alternative History of Money

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Preface

For any book, the purpose of the preface is to thank all those individuals who have inspired or helped you on your past voyages of discovery and that have resulted in you (that is the current author) believing that this current literary voyage has a chance of success. Why thank everyone at the very start of a voyage? Because that is where a trip always begins and it is at that time you want to express your appreciation to all your shipmates for joining up for this new voyage. It is also important to thank them before they discover how mad they should be at you for taking them along with you or for distorting their ideas or for presenting their ideas in such a way that their own reputations have been for ever sullied or forbid, destroyed. For that reason, I am not signaling out any individual shipmate for their particular efforts. This is not a sign of selfishness or arrogance on my part or even a sign of my basic kindness for the feelings or future of those who have helped me in this effort, but for the simple fact that I may need their help in the future and do not wish to cast them overboard at this time.

Author's Biography

Tam Schpuppis is the "Nom De Plume" of the actual author. The name was created by the Atlantic Monthly which switched an a for the o, p for the e, and turned an n upside down to create a new name on the author's home address. The actual author, Tom Schneeweis, is a noted author with well over 100 articles including the popular but yet to be published (or even written) **Myth and Mayhem in Capital Markets** as well as seven books including the internationally recognized titles (the titles not the actual books) **History of Algae (Green Publications, TBD)** and **The Hunting of the Economic Snark in Historical Studies (Where's Waldo Publications, TGD).** He is currently finishing a series of Non-Fiction Fictional novelettes with Will O. Wisp Publishing for the "On Just About Anything Goes" series for children under twelve. He is also the CEO of Bah Humbug publishing (a series of on-line Holiday cards). He is a noted twitter @whocares and Blogger: www.wishyouwerehere.com.

BAH HUMBUG!

Tom supposedly lives with his wife and three dogs (like, really mean dogs) up on a long dirt road in a small town in Southern Vermont. He has informed his ex-friends that he spends most of his time growing apples for his global 'Calvados and Hard Cider' operation (Thales LLC) and coming up with financial software for his international financial modeling firm, Platypus International, whose motto is "If It Looks Strange That Is Because It Is.

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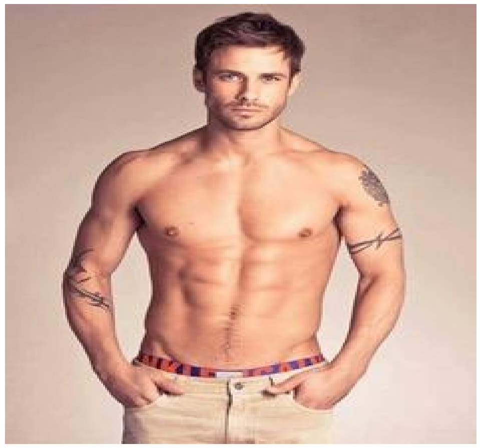

The "Alternative" Tom Schneeweis

If you are going to lie may sure it is worth the effort

The Alternative History of Money: Summary Abstract

If you don't know about Money, you don't know NOTHING

"Money Changes Everything"*

Reprise

Money changes everything
Money changes everything
We think we know what we're doin'
We don't pull the strings
It's all in the past now
Money changes everything

Money changes everything
Money changes everything
We think we know what we're doing
We don't know a thing
It's all in the past now

Money changes everything
Money changes everything
Money changes everything

Here is the point of this book; money matters, it changes everything. However, if one only concentrates on getting it rather than understanding its past, present, and future, you will remain on the fringes of money. You will always be reaching for it rather than being a part of it. At the end, think of all the people who really have money, the bankers, the lawyers, the business entrepreneurs. They really understand money. If you read this book, you might too.

*Last three stanzas from Money Changes Everything, Cindy Lauper, 1982. Most people regard Ms. Lauper's version as the Principal Version. But as this book points out, when one is talking about money, there is always an alternative story or history. In this instance, there is a real truth behind the story is that Ms. Lauper did not even write the lyrics. The original single was released in 1978 by the Brains as a 45 RPM single on Gray Matter Records. Cyndi Lauper's recording of "Money Changes Everything" was released as the fifth single from her album *She's So Unusual*. It has been released in over 27 variations across the world, the most common being a two track 7" vinyl single (with varying covers).. Source Wikipedia. I only point this out here that Ms. Lauper's version is the one we think of today. It just shows that money has little to do with the truth of its origins or the story it tells, instead it is the constant around which all things circle, MONEY CHANGES EVERYTHING.

Forward

Each individual has his or her own reasons for taking time out of their life to read someone else's view on something. There are even stranger reasons for each individual taking time out of their life to present their view on something. The purpose of a forward is not to replace a reader's own purpose for reading a book but to detail the author's reasons for taking time out of a hundred or so more valuable things he or she should be doing with his life for writing one . Another reason for a forward is just to make sure that years later some idiot does not try to lay some type of modern new age drivel about the inner meanings hidden in some dead author's effort.

The reason my writing this book is simply that I like money (not the making of it of course but the idea of it). Most people do not realize that the very word money is relatively modern. In early 3000 BC (Before Coins) it was called #&%&&~^*$, however, today only the '$' remains. The other reason is that every day as I lose more and more of it (that is money), it seems important to at least remember where it originally came from and how it developed over time. Moreover, other works on the History of Money simply failed to provide (in my view) a proper understanding of the real History of Money and its importance in the development of human civilization. Even more important, previous books on the History of Money offered little if any instruction on understanding how the History of Money might help others actually make some. If they had, why are so many monetary historians and those who have read their books (primarily college history majors) so poor? As has been said many times, the proof is in the pudding or in this case, one's bank account. Hopefully, this effort will not only enrich its readers but the author as well.

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So, we start our voyage. It is not a long voyage or a short one. It is a voyage of thirteen chapters. Why thirteen chapters? Well in fact originally there were only seven. The reason for seven chapters was that I was told that humans cannot hold more than seven ideas in their head at one time (Sidebar: note the Greek concept of the seven headed Hydra in which case she could only hold one idea but at least had seven heads to hold it). I was also told, however, that individuals will not pay $9.99 for only seven chapters so we broke all but one into smaller subchapters to provide the accepted reader's "return to pay" ratio. As for its length, the book is about 300 pages with each chapter about 15-20 pages. Why? The answer is simple. Most books are sold at airports and most airplane flights (from the time you get to the airport and land) take about four to five hours (NY to Chicago, or NY to Atlanta, Atlanta to Chicago) to complete. As a result, the publishers demanded that the book be about 250 pages (most flyers want to read a book before they get off the plane and a 250 page book (300 with pictures) can normally be read in four to five hours or about one minute a page (5 hours @ 60 minutes per hour and one page per minute = 300 pages). If you want a bigger book fly to Europe.

Lastly, the content of this book is based on my personal musings and any relationship between characters in this book and any individuals in real life is merely the ramblings of an old man or in the imagination of the reader. I should note that this book was written without the direct assistance of other monetary historians or at least self-proclaimed monetary historians. It is not that I did not try. Each individual I asked did not want their name in or on the book. So, in response to their lack of interest and my concern over being sued if their names were mentioned, I have not included the names of all of those whose ideas I have borrowed (I will not say stolen since if anyone wants their idea back they are welcome to it).

Now that does not mean that this book does not contain some essential truths. I am or was an academic. Now I would normally never admit to it, since many of my academic friends would stop at this point and throw the book back on the $1 table from whence it came but here it comes.

We academics have very little evidence of any absolute truth, and we absolutely have no absolute truth on the "History of Money".

It is said that academics count only what they can measure and never measure what really counts. That is incorrect. We only measure what we can be easily published. Remember it is better to have published and perished than never to have published at all. As important go with the flow. One book rarely disagrees with a previous book. If one does, one runs the risk of being criticized or at least not invited to the adult's table at the next 'History of Money Conference" (e.g., The Annual History of Money Conference is held in Venice, Italy every year. For a full agenda of next year's conference see Appendix C).

As a result, there is a consistency of reported facts within most academic books or at least the proclivity not to fly in the face of the Gods of past research or past authors (remember the concept of hubris and the simple fact that Greek Gods or Gods of any form or religion do not like humans thumbing through or criticizing the Gods' own past efforts). One cannot or should not therefore ask academics to break the bounds that bind them. That having been said, readers are reminded of the value here of the famous Emerson quote where he warned us that:

"Foolish Consistency Is The Hobgoblin of Small Minds"

I am not saying that most academics have small minds, but they do stress small ideas. Here is why. As discussed earlier, the secret to publishing is not to fly in the face of the Gods. Take what is given, rewrite what is given, put a nice cover[1] on it and move on. Now every one of us, but especially academics, never want to be caught looking stupid (badly dressed perhaps, but stupid never) so we want to insure that the chance that we would reject a commonly held belief is very, very, very, very small. [2] If we were to make this mistake; that is rejecting a commonly held idea (regardless of its failings) which is also held as true by most academic without absolute evidence (which as mentioned we never have) would relegate one to the annual Thomas Kuhn 'Award for Academic Irrelevance" which is awarded each year to the academic who is right but right at the wrong time.[3]

[1] To paraphrase a famous actor, "It is better to look good than to feel good". There are a lot of nice looking 'History of Money' books suitable for the entry table as well as for the general reader. It (the generic it) has also been shown that the placement of a glossy 'History of Money' book in a suitable spot increases the value of the home significantly. Buyers have reported that such a book creates the image that the house is well grounded in money; a kind of a Feng Shui thing. See The Origins of Value: The Financial Innovations that Created Modern Capital Markets by William N. Goetzmann and K. Geert Rouwenhorst, 2012 and Money: A History by Catherine Eagleton, Jonathan Williams, and Joe Cribb, 2007.

[2] One part of the game is to test a hypothesis that we know is probably false and that is easy to reject, In the academic world of analysis (e.g., statistics), it is important to note that many academics try to make their job really easy by making a hypothesis with the intent of rejecting it; that is, intending to run an experiment which produces results which show that the hypothesis is rejected. We do this because one can always come up with a hypothesis that is so stupid that the chance of proving it wrong is easy. That is why if one gets it wrong and ends up rejecting a true hypothesis one can really look really, really, really stupid. So academics either say something that is so banal, so true that it can never be rejected or they make a proposition that is so crazy that it is easy to reject it. That is why academics also never test anything that is interesting or which is debatable. In short, academics hate to make what is called Type I errors. A **type I error** is the incorrect rejection of a true null hypothesis (of course my methodology could be so screwed up that the whole study is flawed but we academics don't worry about that here). I call this fictional nonfiction since one is reporting as false (fiction) but what was commonly held to be true (nonfiction). As a sidebar here we spend very little time on a **type II error** is the incorrect acceptance of a hypothesis as fact when it is false. Most academics would take this risk because no one ever hears about it anyway. In this book, readers don't have to worry about either because we concentrate on what I call **type III error**; that is, hiding the truth by supposedly writing the truth. We attempt to reduce this type of error by writing fiction but for which the fiction represents the 'true truth' better that those who write what they regard as truth about the past but in so doing miss the facts underlying that truth completely. In this book we promote what is called **non-fiction fiction** where the true truth is carried in the heart of that fiction more than it ever was or could be seen when addressed into so called "Non Factual Factual History").

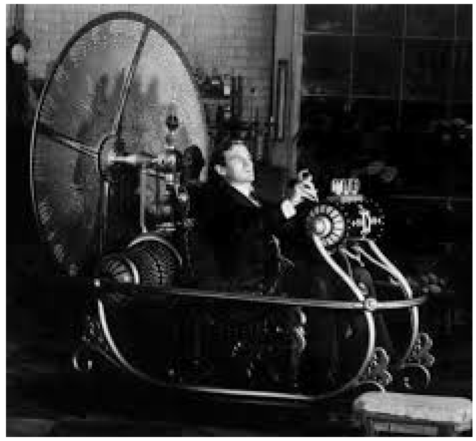
[3] OK, on the off chance that someone reading this book may not have any idea of what I am speaking of, Thomas Kuhn is (note ain't dead yet) American physicist, historian, and philosopher of science whose controversial 1962 book The Structure of Scientific Revolutions reminded readers that any new idea has to replace an accepted "old

Therefore, if a mistake is to be made, it is better to accept something as true even if that something is really false as long as everyone else believes it to be true. Moreover, as an academic, one must learn never to write something in which one has little or no chance of going against commonly held beliefs. Why? If we incorrectly reject a hypothesis that supports a commonly held truth (commonly called Type 1 error) we still have to find an alternative and that is tough (there is even something called Type II error (see previous footnote) but the fact that we are using Roman numerals, I and II, rather than simple 1 and 2 is a message that we are simply trying too hard to act smart so that we will just move on.

One should not be so quick, however, to criticize academic writers for promoting lies rather than reject commonly held beliefs? Every successful academic writer soon realizes the significance behind Mark Twain's dictum (slightly revised here) that "truth dies an early death, but a lie well told lasts forever." Most academics are good writers, but they are even better liars. Most academic writers, at least those who concentrate on historical narratives, concentrate on something I call "Factual fiction" where one presents as factual what must be known to be non-fact; that is, they continue to lie about what is regarded as truth but is in reality fiction. It is just easier. How many academics do you know that write about something that they read about but have never left their office.[4] This is similar to most historians who write about the past but have never been there either unless they had access to H. G. Wells' Time Machine.

Idea" and that takes a whole lot time and a whole lot of evidence so do not hold your breath for truth to win out in the short run.

[4] I had to leave this out of the text for fear that many readers would stop here if they knew the truth about successful writers; that is, most noted writers never take the time to really read about their subject. First, as pointed out to me by one of my mentors "Those that read never have the time to write". You simply do not have the time to do both. As long as I have you here I might as well report on two other 'absolute truths' that I learned from him (and recall there are very few of these truths so pay attention). First, never confuse motion with movement (a lot of us run around looking busy but never moving the idea forward) and secondly and most important, "Never read before you



Monetary Historian in Time Machine

In truth, truth probably doesn't matter. C. Santayana is said to have supposedly said, "Those who cannot remember the *past* are condemned to *repeat it*". Unfortunately, he got it wrong. Given how often we have misinterpreted the past, it is best said that those who 'only' remember the past are plagued to repeat it. Writers and readers should give themselves a little more leeway as to what the truth is and how it is reported and to reject the past when suggesting new untested ideas.

Readers have often heard the phrase, "the truth is often funnier than fiction.' **Again No, No A Thousand Times No**. Someone got the words switched. The phrase should really be read as "fiction is often truer than fact.' This book concentrates on just that. We do not expose the truth around the false fact; we provide truth about "what is" by concentrating on what many commonly believed to be fiction. In short, we explore the truth by focusing on **"Non-fiction**

write". If you do you will be either recounting past authors' bad ideas or simply parroting their good ones. Write and then read. Most academics, incorrectly, have it the other way around.

Fiction." I believe this is done best by presenting a good story. One often hears that there is more truth in a supposedly good fictional story than what is often presented as fact in popular "fact based" documentaries. Unfortunately, there is very little of what I call, "non-fiction fiction" where the writer illustrates that there is more truth in fiction than in the fact. As discussed in an earlier footnote, it is really Type III error, and it exists only in the fourth dimension, so no one normally hears about it (and certainly never sees it). Hopefully, the reader will come to accept the following.

> At its core, people are people, and the true history of money is based on how people came to view the creation of money and its place in society. At various times, the history of money has been determined by people's acceptance of a defined government order (e.g., central banks), a certain moral order (e.g., gold to monitor money creation), or an accepted market order (e.g., whatever works). Each has had its successes and its failures. It is for the reader and not some writer attempting to get another line on his resume to determine the relative value of each monetary system and how, over time, its form and its place in society have changed. Moreover, it is for the reader to determine which driver of monetary change is best to lead us into the future (author unknown or at least unwilling to admit to it but initials 'ts' have been found on the bottom of several yellowed pages)

If this seems a little too daunting then just take the next two ideas, go outside, and get some sunshine.[5] And Here They Are!!!!!

1. The importance of the "Aha" moment in the History of Anything.
2. The importance of trust and in its absence, a big army.

[5] The forward is where you warn people of what is coming; that is, forward is really to 'fore warn' the reader. This book is more of a tutorial. There are more complete and certainly more boring books on the history of money. Why read this book. Well my mother used to start dinner with dessert. When ask why, she answered that first of all she had to get the kids to the table before she served the really boring but more nutritious part of the meal. This book is kind of the frothy dessert before the brussel sprouts and veal served in most history of money books.

It is also important to point out that the title for this book 'History of Money' was borrowed in part from others, but plagiarism is the sincerest form of flattery. For those readers who do not have an undergraduate degree in economics or an MA in monetary history, do not worry. I have both of them and I don't remember any of it. As important, by the time one writes a book it is five to ten years out of date in terms of current knowledge. A book published in 2014 was generally begun in 2012 and is based on research published in 2011 which was started in 2009 and was based on data or results from periods earlier than that (often five to ten years earlier). Often in reading a book entitled the 'History of Money,' articles and books are cited that are over ten to twenty years old, as if nothing has been learned since. In short most books on the History of Money, or in fact the History of Anything, are historical artifacts by the time we read them. Of even greater concern is that there are few actual historical artifacts on the History of Money, and none of the past or current authors were in fact ever there so how do they know. However, in the writing of this book I have become increasingly aware of the perhaps non-factual common threads that run through most monetary history well as economics. Instead, we need to 'tie' these new 'alternative' threads together. That is what has been accomplished (or so says I) in the "Alternative History of Money" and for those who need another reason to read the book that is presented here you can always keep it on your shelf to impress your friends and it comes with a signed and framed Certificate of Completion.

Enjoy.

Theme: Follow The Money

Every chapter in a good book should have a story. A great book (or at least a better than good book) should do even more. It should offer a central theme, a way to look at life, a connection through time. The theme in this book is simple; that the progress of man follows from new ideas and those new ideas often grow out of a new thought. But that growth often requires money so if you want to track the progress of man just **Follow the Money**.[6]

Just Follow the Money

In a different context and for different reasons, this has been said before, but as I have said earlier, plagiarism is the highest form of flattery. If "Follow the Money" is such an important way to look at our own life or our own history, why are there so few books on the origins and history of money? The answer is simple. For many the story of money may be regarded as a little

[6] For those for whom this reference is lost on them, Deep throat was the individual who parsed out information to the newspapermen 'Woodward and Bernstein' in the Nixon Watergate scandal. This central focus or referent helped them get to the story. His constant suggestion was simply to "follow the money'. For those whose level of reading is a little more puerile I am sorry for bringing up the word Deep Throat (see the movie).

intimidating. To reduce that fear, each chapter has three parts; 1) we summarize what we want to tell you (summary introduction), 2) we tell you what we just told you we would tell you (content), and 3) we remind you of the important parts of what we just told you (things you should remember). So, for those in a hurry, one can just read the 'summary introduction' at the start of each chapter and 'important things to remember' at the end of each chapter and then go immediately to the Certificate of Completion page. Now for the rest of you, the really good stuff and the stuff that will make you the focus of any really interesting party is found in the "content" sections. Lastly, as you read this book, if you ever feel confused as to the "Underlying Theme" which runs through our story simply read the words on the attached bookmark: **Ideas * Money = Progress**. So Deep Throat from Watergate days was right or at least half right. If you want to understand how ideas get done and how humans have progressed over the centuries just **"Follow the Money."**

Chapter 1: The Origin of Money – Part I

And Now for the Real Story.[7]

Introduction: Summary

When telling a story, one is warned never to bury the lead. This story is about Money. So, in the first place most of you would not be reading this chapter, or this book, unless you were interested in money. The truth is that each of us has our own story as to our interest in money. So, to relieve any normal reader's anxiety over recounting their own personal story as to their own source of interest in money, this chapter starts with a self-confession as to source of the author's own interest in the dollar, yen, euro or what have it.

So, I confess, I started this book with the hope that that by looking into the past, one may better understand how money and its evolution over time offers an understanding of the human condition and how that condition will evolve in the future. Unfortunately, as pointed out previously, I soon came to understand that much of what has been written on the history of money is pure speculation since in truth none of the 'ordained' academic experts who wrote about it were ever really there.

[7] For the non-academic, the real 'real' story is in the footnotes. That is where all academics admit that what is in the text is really questionable and that it is in the footnotes that we provide the disclaimer on everything we said in the text. Note that I also put a formal disclaimer at the end of this book. This is consistent with practitioners that want to make it very, very clear that what they are saying in the text could be wrong and not for anyone to take the text so seriously that they would think of suing them if the truth turns out to be different from what is written in the text. Since academics make no money and therefore are not afraid of being sued they used footnotes rather than 'official' disclaimers to protect themselves from anyone taking them seriously or from anyone suing them for their writings.

I wish to repeat – all and I mean all of the authors of any the History of Money book were never really there.

I want to remind our readers that if those who write about money (including myself) offered any real insight that would help individuals make more money going forward, the cost of this book would be significantly higher.

Lastly, we want to warn readers that each of you may have a different concept of what we mean by the term 'money.' In the movie 'Jerry McGuire' the key character is famous for calling on his client's employers to 'Show Me The Money.' Is this the same money we are talking about in this book? The answer is Yes and No. Yes, the money Jerry was looking for was an accepted form or vehicle that his client would use as a store of value, a unit of account and a medium of exchange. In Jerry's world this money would come in the form of a monthly or quarterly payment into a bank account of some form that could then be used as a basis for representing a particular 'Fiat' currency that would be or could be used for specific 'commodity' or financial transactions. In earlier centuries, the client's agent would have said the same thing, 'Show me the Money' but in the case of previous 'Stars' they would have received other forms of monetary expression (Babe Ruth\Gold Backed Dollars; Ulysses S. Grant\Metal Coins; Shakespeare\gold coins; Johann Gutenberg/gold ingots; Moses\seashells or mud bricks).

In short, for many individuals, money is about a particular object that can be used for a current or future transaction. It is money in the specific (smaller sense) and not money in the general (larger sense). This book may address money in the smaller sense also talks about money in the larger sense and I don't mean just bigger like a bigger stone or a bigger wheel but bigger in the sense of Money as a General 'Bigger' Idea and as a Cosmic Mover and Shaker. Money in this case must be understood as both an Idea in the sense that it has a place in the cosmological moving's of man's actions through time and in the sense that its real existence within a society has a direct impact on the progress of that society by providing a means for the advancement of that society. Therefore, for those who read this book, money will be seen in both the small and the large; that having been said this chapter and future chapters will help the reader understand the 'History of 'Follow the Money'' or the 'History of 'Show me the Money''. Hopefully, the book will help in understanding how humans and money interacted to help in the development and progress of each.

Content: Money - A Personal History

Money is used in almost every aspect of human activity, so it is natural that from our very earliest age most of us have been entranced with and by it. My first encounter with money was when I was about five. From what I can recollect, my Grandmother showed me a pickle jar with nickels in it. She told me that every nickel she collected over the next two years would go into this jar and when I was seven it would be mine. As any normal five-year-old boy, those circular Buffalos and Indians took hold of my imagination.

Every Five Year Old Boy's Dream

Soon I was asking several simple questions. What is money? How do I get it? Where does it come from? As to the first question, what is money? My Grandpa, who ran a large bank and therefore in my mind was the fount of wisdom on money, said money was the basis of human progress (or the most base of human progress - I forget which) since it greased the parts of the machine called human activity (I suspected it was that grease that made money so slippery that few individuals could hold on to it for very long). More importantly, it was distinguished by having three characteristics.[8] It was called a 'unit of account' because his wife (my Grandma) could account for every unit of it. He also pointed out that for many it is a 'store of value' which, of course, meant that you could be sure that its value would be kept safe over time (e.g., stored in my nickel jar) . Lastly, he said it was a 'medium of exchange' not only because it was a medium which permits individuals to buy today what they can't afford to pay for tomorrow but that the "medium" he often visited would never exchange any information without it to exchange.

My grandfather was perhaps factually correct, but he failed to answer a more important question, how do I get it? I received various answers but none of them really satisfied me until at a very young age, my parents worked out what they regarded as a reasonable answer to my question of how to get it. Here is the secret; for the most part you have to work for it. In grade school, my parents worked out a simple means by which I received spending money; Simply put, I received 50 cents for every A, 25 cents for every B and I paid them a dollar for every C. While regarded as somewhat sadistic in today's every child is above average culture, the agreement did

[8]This was also the point of my life where he pointed out the importance of the concept of threeness. People like ideas in threes, three of this, three of that. There are probably more than three unique aspects of money but for this story, three will suffice.

incentivize me to 'focus' on the prize.[9] As I grew older, money increasingly became a central part of other aspects of my life, but the work part of getting money seemed increasingly one sided. More important, but regardless of its daily impact, it remains a mystery as to who really started it or where its creation came from. I figured out that the 'who' was long dead but I believed that if I knew 'where' it came from I could get up one morning and take off looking for it. I believed that it couldn't be too far away since others had found it and I had a good walking stick. I figured that all I had to do was ask directions from a few people here and there and I would easily find it. Imagine how disappointed I was that after an entire day of exploration, I was no clearer to finding out where it came from than when I started out that morning.

History of Money: A Personal View

Mind you, by a young age I knew the name of all the great warriors, scientists, mathematicians, religious leaders, as well as my Presidents but the founder of money and thereby the very origin from whence it came from, remained unknown. Even my grandfather (who, as I mentioned earlier, was the fount of all wisdom in matters of money) simply said, "If you follow money wherever it blows, you can tell where it goes, but where it came from, ***'Nobody Knows'*** ". The purpose of this chapter (in fact one of the purposes of this whole book) is to follow that money wherever it blows. We also attempt to detail the path it took to get to where it is today and where it may go in the future. To be fair, I must let the air out of the bag early, we simply do not know

[9] To those who think this attempt to incentivize behavior was limited to my parents, each Christmas my grandparents would rearrange various ornaments. They would then line up my brothers and I after which we were "incentivized' to call out where a particular ornament was. Whoever got it first got a 'financial' reward. I only mention this that each of my brothers has achieved financial success (moral success is left for others to judge). How to promote financial education and behavior is of concern to us all. I only mention that if your kids or family read this book then similar payoffs would and could be appropriate. Again myself and my brothers have each achieved a level of financial success; now one out of three may be by chance, two out of three a probability, three out of three is a proof.

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when or where our ancestors first created something that today we call money. The simple reason is that, as said before, and this again this may shock some readers, **"No One Who Is Alive Today Was There"** and just as important no one left a video or a CD on the origin of money. We did have a third century BC version of old "Beta Max;" basically, a roll of papyrus entitled **'So This Is Money'** but some idiot called Ben Hur ran an old chariot over it.

For the uninitiated, the traditional view of the origin of money, championed in various sources, is that (This is from Wikipedia which as we all know is one of the Eighth of Pillar of Wisdom):[10]

- As early as 9000 BC both grain and cattle were used as money or as *barter* (Davies) (the *first grain remains* found, considered to be evidence of pre-agricultural practice date to 17,000 BC.[20][21][22] The importance of grain with respect to the value of money is inherent in language where the term for a small quantity of gold was "grain of gold".[23]h[24]

- An early type of money were cattle, which were used as such from between 9000 to 6000 BCE onwards (*Davies* 1996 & 1999)[42][43] Both the animal and the manure produced were valuable; animals are recorded as being used as payment as in Roman law where fines were paid in oxen and sheep (*Rollin* 1836)[44][45][46] and within the *Iliad* and *Odyssey*, attesting to a value c.850–800 BCE (*Evans* & *Schmalensee* 2005).[47][48]

- It has long been assumed that metals, where available, were favored for use as proto-money over such commodities as cattle, cowry shells, or salt, because metals are at once durable, portable, and easily divisible.[49] The use of gold as proto-money has been traced back to the fourth millennium BC when the Egyptians used gold bars of a set weight as a

[10] For those interested in the Seven Pillars of Wisdom, you can buy the book (T. H. Lawrence, circa 1920) or rent a version of the movie, Lawrence of Arabia (D. Levine, circa 1960) with the now dead Peter O'Toole (again proof that it is better to look good than to be good). As one who has both read the book and saw the movie all you really need to know is 1) T. H. Lawrence was a British civil-servant who was dumb enough to ride a camel in the desert to attack a city from the desert side, win, make some Arab friends in the process write a book about it that no one really read and die in a motorcycle accident at a young age so everyone thinks he was brilliant , 2) The movie is almost 3 hours long so go back to number 1, and 3) the Seven Pillars of Wisdom refers not to 1 or 2 (but it is a great title) but some utterances in the Psalms; that are: I, wisdom, dwell together with prudence; I possess knowledge and discretion. To fear the LORD is to hate evil; I hate pride and arrogance, evil behavior, and perverse speech. Counsel and sound judgment are mine;…. . If you have read this footnote you have already gained enough knowledge to show off at a bar or wherever your friends and family frequent and the money spent on this book is well worth it. Par example, "Well Bill I was just reading about the 7 Pillars of Wisdom and there it is. As a side bar, having a copy of Seven Pillars of Wisdom is the ultimate coffee table book along with the History of Money by T. Schuppupis. How better to impress your friends other than having a new Tesla car in your driveway and it is a whole lot cheaper.

> medium of exchange,[citation needed] as had been done earlier in Mesopotamia with silver bars.[citation needed]

I have left the notation and the citations in the above to indicate the depth of analysis that has supposedly been done on the History of Money. In this book we will at random provide direct citations from various works of noted monetary historians or sources (such as Wiki).[11] Most of these citations will be in the footnotes. Why, because if one finds out something in footnotes one feels special, like one received a special gift that only a few others have received. Secondly, one hates to get overly detailed in the main text and footnotes let someone reading this book know the sources of some of the traditional beliefs posited by some other author. However, readers should be made aware. When reading various studies on monetary history, I found that it was **"Turtles All the Way Down"[12];** that is, each citation was simply a citation of an earlier book full of citations on an even earlier book which was also full of citations on an even earlier set of writings. None of which were founded on the basis of fact – Not to worry, as discussed earlier written "fact" is often "convincing fiction" and to have someone build on a foundation that foundation has to be believed – in short, Belief is Better Than Truth.

In short, we have history of money by confabulation. A confabulation is a fantasy that has unconsciously emerged as a factual account in memory. A confabulation may be based partly on fact or be a complete construction of the imagination. Again no one was there and we have little

[11] Many readers may question why one might spend a portion of their lives on the 'History of Money'. Well if you are a historian one can certainly make more 'money' on understanding money that let us say, the history of non-profits. As the famous bank robber said in the 1930's as to why he robbed banks: "Because that is where the money is". So to why many writers concentrate on the history of money (e.g., Nigel Ferguson), because that is where the money is.

[12] The turtles all the way down refers to a response of a women (some say to Bertrand Russell after he had described the pattern of the universe) in which she said the world was flat and was carried on the back of a turtle. When asked what the turtle was resting on, she responded, of course it was turtles all the way down.

or no direct documentation of the actual events. Instead, we rely on the written or oral history of others and many of those beliefs are based on confabulation. We are given a hint of the potential problem in that at the start of most of the references section in Wiki one reads:

This article needs additional citations for verification. Please help improve this article by adding citations to reliable sources. Unsourced material may be challenged and removed.

I do not have the interest or the time to challenge each and every incorrect statement in past books or articles on the History of Money. In short, everyone who had written about the origin of money had read it from someone who read it from someone else who remembers reading it from someone else but they forget whom or where (e.g., turtles all the way down). Even worse, each of the authors referenced were proclaimed to be experts by themselves or proclaimed as experts by one of their friends. It was 'Kingship' by self-decree. Now I am not against any individual's right to make up their own history, but one must be careful in making up the history of others. Many of the words used to describe money's journey through time such as **commodity money** (Money based on the agricultural, livestock, or 'commodity' of choice and whose value was based on the value of that commodity), **reference money** (Money which has no value in itself but has value based on its 'references' to some other (often non-commodity) objects such as sea shells, and gold) and finally **fiat money** which has worth simply on the strength of the word (e.g., by fiat) of some monetary authority (or the army backing up that authority) or which has value based on a common perception among users of that currency. In fact, in some ways all of these "money" words were simply made-up words to tell a story. Now this I understood. Making up words to tell a story is part of any writer's toolkit. I had heard of 'old money' (my Uncle Bill was old money) and 'clean money' (money that was not washed in a traditional sense but cleaned in a sense that all the fingerprints or the dirt associated with it has been removed), so I readied myself for a journey to a new world, a world of in which the story was driven in part by the dreams of others and their dreams about money.[13]

Now as I said previously, I am in favor of a good story and I have no issue with the ramblings of academics who through the time tested use of outdated references and verbal sourcing can raise any idea to acceptability if not respectability. But in this case, I remain a little bit skeptical as to the Wiki summary as to the "History of Money." The reason was simple, the author of the Wiki 'History of Money' was not there at the creation and none of the authors cited in the references were there either. **Again I repeat none of them were there.** However, what we do know is that people are people and that faced with a common problem most of us, as well as our ancestors, will try various ways of working around, over or through that problem.

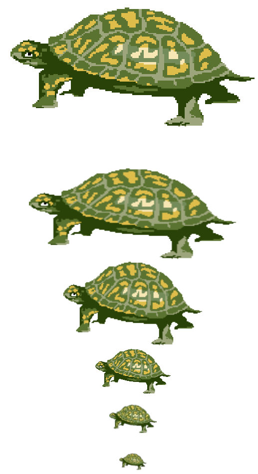
Things You Should Remember

First, as discussed earlier when reading historical anything it is good to remember it is often Turtles all the way down; that is, the basic problem with historical writing based on previous research which cites even earlier research is the 'Turtles All The Way Down Syndrome.'

Stephen Hawking in *A Brief History Of Time* starts with the anecdote. A well-known scientist (some say it was Bertrand Russell) once gave a public lecture on astronomy. He described how the earth orbits around the sun and how the sun, in turn, orbits around the center of a vast collection of stars called our galaxy. At the end of the lecture, a little old lady at the back of the room got up and said: "What you have told us is rubbish. The world is really a flat plate supported on the back of a giant tortoise." The scientist gave a superior smile before replying,

[13] T.E. Lawrence: "All men dream, but not equally. Those who dream by night in the dusty recesses of their minds, wake in the day to find that it was vanity: but the dreamers of the day are dangerous men, for they may act on their dreams with open eyes, to make them possible" Seven Pillars of Wisdom. Introductory Chapter

"What is the tortoise standing on?" "You're very clever, young man, very clever," said the old lady. "But it's turtles all the way down."



Secondly, for many of us money is a personal thing. It is in our back pocket or in our suit pocket; it is in our purse or billfold; it is in our bank account or money account. For others it may even be regarded as a house a car or in some other referent or illiquid form. For most of us, however, it is a unique and particular object that permits us to buy or build something now or in the future. It is a unit of account, a store of value, a medium of exchange. Not my Grandmother's accounting unit, or where she stored it, or even my Grandfather's means of exchanging information with a medium. Of even greater importance, however, is that like my Grandmother and Grandfather, is how we view money in any of the three aforementioned roles depends directly on our personal experiences with it. If it was lost so easily, how could it be a store of anything, if it was rejected as a means of buying something how was it a medium of exchange and if one could not agree if there even existed a concept like zero how could it be a unit of account? Money, in short, as an object of our desire has changed over the centuries, however, whatever its form it has served not only a practical day to day service but as a process by which humans have progressed. It, that is money, has served as both the food we eat on the boat as well

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as the boat itself. It has been with us on every voyage.[14] The rest of this book takes us on that voyage. Good Sailing.

What You Will Be Tested On:

Deep Throat
Show Me the Money
Commodity Money
Reference Money
Fiat Money

Selected References

Robert D., Jr. Leonard, Charles J. Opitz and Kenneth Bressett Curious Currency: The Story of Money from the Stone Age to the Internet Age

Sitta von Reden. Money in Classical Antiquity (Key Themes in Ancient History)

Glyn Davies. A History of Money from Ancient Times to the Present Day by 3rd ed. Cardiff: University of Wales Press, 2002.

Neil Ferguson. The Ascent of Money: A Financial History of the World. Penguin Books, 2009.

[14] This is as good a point as any to illustrate how money is intertwined with all aspects of human life, it is the spice of life. It makes everything just a little bit better. In fact, one of the very first forms of money was itself a spice; that is, pepper. It could be stored easily, one would carry it around as a medium of exchange, and in seed form it was easily counted as a unit of account. However, like many of our earliest attempts at a monetary form, it had a basic flaw. When people carried too much of it around with them, they had a tendency to sneeze and thus exposing themselves to robbery and vandalism. As we shall see all successful forms of money required that if one stored it, or counted it, or exchanged it that one would live long enough to enjoy it. As we shall see, all successful forms of money always end up under the control of someone who insures that those with it get to keep it.

Chapter 2: Origin of Money – Part II

Summary Introduction

There is the story the authors want to tell, the story the readers' want to hear, and there is the true story. Instead of copying the "traditional institutional approach" to the history of money in which authors concentrate on this begot that, and this happened in 1311 BC at 2AM on a Thursday under the reign of XXX the 13th, we focus on what we have titled an "alternative" story as to the history of money. The traditional approach to the history of money has hosts of followers. It sounds more intellectual so you must cite a time, a place, and an action with some sense of authority (e.g., I read it here). As important, why buy a book if it does not have copious (that means a lot) of dates, times, and places. The alternative history of money emphasizes the underlying process by which the idea of money interacted with the development of other new ideas to promote the development of mankind. What we call progress. It is the "true" History of Money (note the use of capitals).

The word 'alternative' may be regarded as somewhat pejorative if the traditional view of the history of money has a lock on truth. In truth, the origins of anything start from the beginning. = Moreover, our ancestors often had to start from scratch. That is, they had no history. This is important for two reasons. First, books on the history of people who had no history are somewhat a contradiction in terms and second the fact that our forefathers had no history could have been a benefit to them in their own development. We are often told that we have to read history in order to learn from it. Au Contraire Mon Ami (throughout the book we will add a little French to make all of us all feel a little more intellectual). If our forefathers and foremothers had a history they might have looked at it, assumed that it had something to say and never come up with different ideas (most of their ideas were new ideas for the simple fact that they did not have a big bag of past ideas to draw from). The fact that it took them so long to come up with ideas (homo sapiens started about 100,000 years ago) says more about humans than it does the idea itself.

So, in this chapter we explore how man first came up with the idea of money. Man and his money have been intertwined from the very start. For much of human history, humans were described in terms of their anthropological grouping; such as, Neanderthal or Homo-sapiens. Fortunately, there came a time when a member of that homo-sapiens group stood up and became what we today regard as an individual, as from - "Well Bill Is Certainly 'An' Individual. Why, was "Bill 'An' Individual" so important in the development of money? First for the development of the idea of money we needed a few men/women who would rather think about themselves rather than worrying solely about the rest of their tribe. We needed an individual who understood that there is an **"I"** in the middle of tr**i**be. Without an **"I"** there would have been no one there to develop new ideas (why do you think **Idea** starts with an **"I"**). As important, money had to be one of the first ideas since money is often required (for funding if anything else) for any thought to move to an idea or for any idea to move forward to an even better idea.

Now this may be a little technical, and we may be pushing points but it is probably the right time to distinguish between a thought and an idea. An idea is 'a thought with a plan;' that is. an idea is a successful means to accomplish a thought. We often have thoughts, like I thought of this or I thought of that. Or someone may say I have a thought. If someone does express the fact that they have a thought, most of us quickly leave the room. Who cares? But if someone says I have an idea, you immediately think he has a plan to accomplish what he is thinking. In short a thought is kind of 'imagined think piece' whereas an idea is a well-planned (or at least semi-well planned) out thought. If anything is learned from this chapter it is that money is often required to move from "**Aha, I have a thought**" to "**AHA, I HAVE AN IDEA.**" Money provides, let's say, the manure that helps make thoughts grow to ideas or for ideas to grow into even better ideas or as my Grandfather maintained "it's the "Grease".

The story of this chapter is therefore the story of how a few of our ancestors came up with the 'Idea of Money' and how that Idea led to Human Progress. Moreover, this chapter reinforces the primary story of this book; that is, the importance of money in the well-known 'Development of Ideas' Equation (IDEA): that is,

Thoughts x A Plan = An Idea (1)

And even more significant, the importance of money and ideas in the 'Progress of Man' equation: (An idea without money soon collapses back into just an old thought).

Ideas x Money = Human Progress (2)

where progress is created by the funding of ideas which leads to individuals taking the Idea (thought with a plan) to the practice level (e.g. progress) since they come to understand that while thoughts by themselves do not have a future, ideas (thoughts with a plan) may if they are properly funded - which leads to even better ideas resulting in even better ideas resulting in even better ideas (Feel free to go ahead and split your own infinitive).

The secondary story is that ideas are not generated from some set of notes from a class in entrepreneurial studies but come from 'Idea Men."[15] From the previous equations one can see that we cannot move forward (progress) without money or ideas. However, progress happens even faster if they (money and ideas) work in tandem in special ways but one additional important variable is the quality of the individual pushing the idea forward; that is,

Sample Equation: $Y = bo + b1\ X$ (see the book: Equations for Dummies…….)

Where Y = Dependent Variable (Progress)

X = Independent Variable (Idea Man Index in which is 0 for an idiot and 100 is for a man who is near to God)

In short Human Progress = (Money x Ideas)) = bo + b1 * Idea Man

Where bo = intercept is a constant and depends on primarily the quality of the idea and not the Man

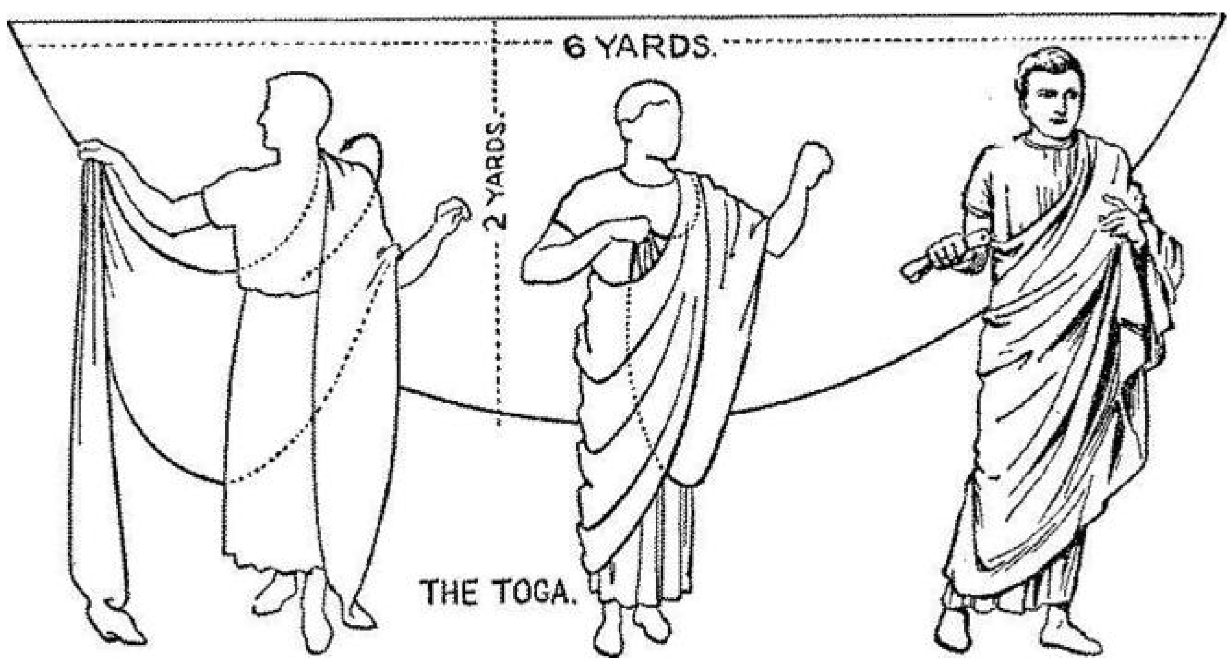
b1 = Rate of Human Progress (it reflects impact of the quality of the Idea Man)

[15] Many academics purport that classes in entrepreneurship can teach ideaship (or idea ship or a ship of ideas or how to ship ideas). To settle this grammatical debate find a grammarian since this who debate has slowed progress more than it has ever sped it up). Since most of men's progress has occurred from men that never took an academic class in anything, one will have to wait and see if these classes produce a better quality of 'idea men' than that produced from men who learned in the real world how to make an idea work in a way similar to the concept of anti-fragility (Anti-Fragility, Nassim Taleb, 2013).

Note the speed of Human Progress is based on the quality of the **"Idea Man."** It is the focus of this book but that quality of the interaction between money and ideas depends in part on the quality of the man (or women) having the ideas; that is, **Idea Men**. For instance, in future chapters, we will show how Money 1) helped Zug turned his idea of mud hut (which was a thought with a plan) into a tanning salon (see Zug Cowman), 2) helped Gus build a gambling casino on the coasts of the Indian Ocean (see Gus Wheeler-Dealer) and 3) helped Morris develop a publishing and advertising firm (see Morris T. Chiseler). In short, this chapter reminds us that people are people and that given a chance they will act, as people will, with all the self-interest, entrepreneurial forces, and intellectual curiosity as we do today. Throughout the centuries the ebb and flow of ideas and money has made human progress rather bumpy, but we don't need a bunch of 'Monetary Historians' who were never there to tell us that. As noted in this chapter, all we need to understand the origins of money is an understanding of ourselves and that there is in all of us the DNA of our ancestors; that is, there is a little Idea Man (a builder (Zug), a gambler (Gus) and a chiseler (Morris)) in all of us.

Origin of Money

Now here is the real story. Until about 10,000 BC (that is Before Coins) most of our ancestors simply did not have the time or the interest to even worry about money or what it should have been called even if it existed in any of its now well-known ancient stated forms (bricks, sea shells….) or for its stated purposes (store of value, unit of account, …). They had to spend all their time running away from polar bears and looking for a wayward seal to eat since it was cold, very cold. So cold that they had to wear clothes, lots of clothes and most important clothes that did not have pockets, side pockets, back pockets, vest pockets or any kind of pockets. Why no pockets? Well first for the simple reason that the animal hides came from seals or polar bears who did not have pockets.[16] Second, most of our ancestors wore togas which were simple wrap around sheets, and which did not have pockets.[17] Nor did our early ancestors have purses. When running from a bear one does not want to have to turn around and pick up a dropped purse. OK, maybe they had purses but survivor bias[18] prevents us from having any knowledge of those idiots that carried ,purses, drop them and then try to retrieve them only to be caught by a Saber tooth tiger and regulated to the dust bind of history (or more likely the stomach of some wandering 10,000 BC saber tooth tiger). Without pockets and purses it is hard to create a concept like money. Money may have a store of value, but you need a place to store it in the first place.



[16] Why no pockets? As discussed later, if one does not have money or use money, one does not need pockets.
[17] Since most of our ancestors did not have sewing machines or sharp scissors, togas with no pockets were the way to go.
[18] Survivor bias comes from the idea that we only learn from those who survived; that is, the dead tell no tales. An even better example is that we think all dolphins are kind creatures because we have heard stories on how dolphins have saved sailors by helping them swim but we never hear from all the sailors the dolphins drowned. This is better known as the “Dolphin Theory” of finance see. T. Schneeweis ‘The Dolphin Theory of Finance” P&I, 1992.

Note: Toga = No Pockets

It was not until centuries after the end of the last Ice Age, or as I said around 10,000 BC, that our ancestors had the chance to actually sit around and enjoy life. The question is then how does one enjoy life. Well in fact they did not; that is, enjoy life. It was still everyman for himself and his family. You caught your own food, cooked your own food, made your own hut, wove your own clothes, and made sure no one stole any of it from you. Basically, you worked like a dog to get from day 1 to day 2. So how did we get started on this whole progression of mankind thing and the origin and role of money in that progress? Well, while there still are a few who may question if we are better off today than in 10,000 BC but for much of our progress we have to thank an individual by the name of Zug. But before we get to Zug, I did notice how often I have included small interjections between parentheses as a means of informing the reader or moving the story alone. These interjections will continue throughout this story as a type of sidebar which is included in the text but not given the status of a footnote; a sidebar is a a type of orphaned child of a footnote or maybe even an adolescent.

Zug the Cowman

Now, back to the story, where did the concept of money come from? Now remember neither I nor any other monetary historian was there but I believe that it probably went something like this. An individual named Zug was walking down the path near Bagdad or whatever it was called back then and saw an empty mud hut. This is a good time to introduce the reader to Zug. During the Ice Age, Zug (as most industrious individuals of the time) was a hunter. Not just any hunter but a hunter of Mammoths (large elephants) and the animal from which future large undertakings were named after, such as, that was a “Mammoth Undertaking.” In short, Zug as an early entrepreneur who was up to a “Mammoth Task.” Now remember, Zug was just coming out of the Ice Age. Upon seeing the mud hut, Zug thought to himself, **“Aha, I Have An Idea.”** Ok maybe at first it was kind of a thought like, “that mud hut could make a great tanning salon (a thought)”, but as we will show how soon Zug turned that thought into an Idea since he continued in his mind “ah this is how I would do it”. In short, Zug’s thought became an ‘Idea;’ that is, “that mud hut ‘would make (a thought)’ turned into that is ‘how I would make’ that mud hut into a tanning salon (an idea).”

Could (a thought) proceeds Would (an Idea)

But before we get there we are going to take a break here to recognize Zug because Zug has never received the recognition he deserves. At the very least, the Smithsonian should have a statue somewhere honoring ‘**Zug, “Aha I Have An Idea” Guy.’**

Zug Cowman: The AHA I Have An Idea Guy

Why is this important? Because, "**Aha, I Have An Idea***"* was for all practical purposes the birth of modern man. Once one person had an idea, it led to other people having ideas, and soon everyone is having an idea and we all know how dangerous an idea is (See T.H. Lawrence quote in footnote 11). I am sure some of Zug's ancestors may have had an idea, but from what we have found, it was often in a dream and on waking up they soon realized how foolish it was.[19] Zug's ancestors were very practical men and running from a bear is not an idea, it is a reaction, it is a necessity. What makes Zug's idea so important is that he had this idea when he was awake. This difference is important. If an idea comes in a dream no one hardly ever shouts out loud 'Aha' and more often than not, no one is there to hear the idea anyway. If one has an idea when they are awake and injects the **"Aha, I Have An idea**" someone may be there to hear it. More importantly, one may even try to make the idea it come true or if they are a good wife hound you until you make it come true.

We know that the "**Aha.**…..." is the origin of all human activity because it is the "true" Proto word. It is the only word found in all cultures around the globe and is spelled and pronounced the same everywhere (see Appendix D). In short, every culture known to man, came into existence with an "Aha…." Without an "Aha" there are no ……… after it. It is the word that all other words follow. In fact, we are really lucky that it was Zug who had this 'Aha moment' instead of one of his Neanderthal third cousins. If a Neanderthal had taken it upon himself or herself to

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19 **Ok here it is again for those who did not read footnote 11 go back and read it.** Even T.H. Lawrence knew how important a first idea was. He pointed out that "all the revision in the world will not save a bad first draft: for the architecture of the thing comes, or fails to come, in the first conception, and revision only affects the detail and ornament, alas!" Letter to Bruce Rogers (20 August 1931) wake up some day in the past and say "Aha, I Have An Idea" we and the world would look a whole lot different today (or at least our kids would). For those who are afraid they may lose their place in this book the following are a few examples:

Aha An exclamation of understanding, realization, invention, or recognition.

- Chinese: Mandarin: 嗯 (zh) (ǹg), 啊 (zh) (à)
- Dutch: Aha (nl)
- Esperanto: Aha
- Finnish: Ahaa (fi)
- French: Ahan (for)
- German: Aha (de)
- Greek: αχά (ache)
- Hungarian: Aha (hu)
-

Etymology[edit]

From Proto-Nuclear Polynesian **afa*, from Proto-Oceanic **apa*, from Proto-Eastern Malayo-Polynesian **apa*, from Proto-Central-Eastern Malayo-Polynesian **apa*, from Proto-Malayo-Polynesian **apa*.

Well now that that is off my chest, what was Zug's, "**Aha, I Have An Idea**" Idea? As I said, Zug's initial idea was that the mud hut would make a great place for a tanning salon. In fact, it was more of a thought in that he had not decided how he would get hold of the hut. Zug only thought, "This would be a great place for a 'tanning salon' if I only had some **'?'**." Again, we did not have a word for **'?'** even if it existed in practice. This is similar to the lack of the number zero for centuries despite the fact that many people had zero money. Now this 'tanning salon' was not a crazy thought. Our ancestors had just come out of an "Ice Age" and no one I mean no one had a tan. The first thing you want after a long very long winter (or ice age) is to go out and strut your stuff but to do that you want a tan. Zug was good at many things, but he was crap at making mud huts. In fact, the one thing Zug was really good at was raising cows but since he had to spend all his time hunting, fishing, cooking, weaving he had little time even to do that; that is, to get really good at raising cows. Zug knew he needed to find the guy who had made the mud hut and find a way to get it. This was Zug's what is called today, 'proto money idea"; that is, trade something he had to someone else who needed something Zug had for something that the someone else had that Zug needed or wanted.

Zug's first real idea (that is a thought in which Zug knew how he would make that thought come true), was the idea of 'Barter." You see, Zug was really from an area of the Caucasus where many of his kinfolk were known as Tartars. Since most of the people in the Bagdad area were also guys who were from the Caucasus, Zug knew that he would have to beg a Tarter (eventually begging a Tarter come to be known as Barter). Zug's idea was to search for the owner of the hut and to beg him to trade it for one of his cows. This idea was the first start on the long path of the history of money. That leads us to the second player in our story, Gus.

But first a sidebar. Zug's idea of Barter or the idea to use goods to trade between two individuals is often referred to today as 'proto money' or the 'prototype.' As will be discussed later, the phrase proto money came from current historians who like the word prototype (i.e., prototype or proto). Now let's be honest our ancestors had no history of the concept prototype. For every one of them this was the first type of anything. This was it. They had no sense of what it was or where this was going.[20] The concept of prototype can only come from a bunch of ivory tower

[20] It is important to understand that one only sees the first idea in the rear view mirror. Again as pointed out before, as T.H. Lawrence said. "All the revision in the world will not save a bad first draft: for the architecture of the thing comes, or fails to come, in the first conception, and revision only affects the detail and ornament, alas!" Letter to Bruce Rogers (20 August 1931).

historians who can sit back today and ask "well where did this come from. Well, that must have been the prototype." In fact, if one comes across the word 'proto money' in earlier records it was really our ancestors trying to get some money 'pronto.' But early stone 'Chiselers' (remember this was the Stone Age) who kept track of early Barter accounts in stone carvings saved time by not putting the 'n' in. As we built up our vocabulary, the word 'Chiseler' has likewise come down through the ages as one who provides less than what they are contracted to do. Now back to our story and Gus.

Gus Wheeler-Dealer (The First Federal Reserve Chairman[21])

Now in truth maybe Zug was not the only individual who had an idea in 10,000 BC since the empty mud hut had to come from someone and in fact had been built by a guy named Gus. But as T. H. Lawrence suggested Gus's idea was not a 'real idea.' Gus's idea of building a hut had come in a dream. He had no idea what to do next and believed it was silly as most dreams are, but he built it anyway. Remember you can have a great thought but if no one ever hears about it all you have is a great thought that no one ever hears of (mud hut as a tanning salon). Now Gus, like Zug, was a man of multiple talents. All the men of this time had to be. There was no specialization. There was no, Zug makes Cows and Gus makes Huts and that is that. And more importantly, what Gus really wanted to do was take his family off to what is now Dubai and build a casino, but he had no idea how to get that dream started (so in fact it was really more of just a thought).

[21] See Chapter 2 for Gus's importance in the creation of the first "Central Bank" which monitor the creation of money (then seashells) which formed the basis for money after someone found that cows made really good eating.

In truth Gus was just a dreamer. In the end this whole thing (that is the History of Money and all that) depended on Zug having an idea of how to get to the mud hut when he was awake. When Zug learned that the hut was built by Gus he headed over to Gus about using his mud hut as a tanning salon. Zug offered Gus one of Zug's cows in payment (As discussed earlier Zug had a herd of cows and was known as Zug Cowman).[22] Now Gus thought that Zug's idea about trading the mud hut for one of Zug's cows was a great idea since it fit well with his other thought (building a casino) and once he had the cow he had a complete idea; that is, he could use the cow to take him and his family to Dubai. Again, as discussed previously once one guy (Zug) has an idea, another guy (Gus) found a way to use that idea and soon the whole idea thing kind of took over.

Drawing of Gus Wheeler Dealer

Now the above is all interesting and all that but how does the above fit into the History of Money? Well, when Zug thought initially of the tanning parlor, he had to come up with the idea

[22] OK this is just one string of history, but it's the only one we know. There is an area of research known as "string theory" which for some it is how the world is held together and for others it is how many different histories exist. For example, if that asteroid had missed earth this whole money thing may have been started by Zug the Dinosaur.

of Barter for his thought to become a real idea. As I said, one Tarter begging another Tarter for this or that (Zug's trading a cow for a hut) was one of the first examples of what we call today Barter. It was a kind of "Pro (n)to" Money (e.g., Pronto money - like get that cow here pronto). Now this barter thing was big. As soon as people heard of the Zug/Gus Barter model, everyone got into the act. Before this Barter idea, we, that is everyone, had to do multiple things; that is, no specialization. After this Barter idea, weavers only weaved, builders only built, and farmers only farmed. We moved from a society where individuals did a lot of things poorly to a society where they did at least one thing well and traded it for goods made by others in the area. This increased dramatically the total production of goods and the comparative value of the paired trades eventually helped in what we will call money, that is, determining the cost of goods relative to a common benchmark (currency).

So, for our readers at this point, a simple point. Zug's first idea, Barter was a good idea. In fact, Zug's idea of Barter was similar to the ideas of a bunch of white guys[23] (Adam Smith, David Ricardo, and others) about 12,000 years later who got a lot of press for ideas like product specialization and absolute and comparative advantage based on trade theory between individuals. Big Deal. Zug, Gus, and his contemporaries had this whole trade thing figured out 12,000 years earlier. So, whenever an academic trade theorist gets on his high horse (which in the Middle East is really get on one's high camel which is higher than even a high horse), tell them to go ZUG IT.

[23] And by the way Zug and Gus were also white guys (Caucasians). We know this because they were from the Caucasus which is where we White Guys came from. Until the politically correct police came into control in the 20th century people were grouped into certain geographical areas based on the skin color) but back to our story.

But prior to the creation of money, everyone who wanted anything had to Barter for it. But imagine if every action between two individuals required them to argue for hours over the terms of that trade. If there were N people and they each wanted to specialize in producing one good they would need to trade that good with the other N people each person, and since you can't trade with yourself, and that no one could agree a cow for a hut is the same as a hut for a cow, one would have to make (N*(N-1))/2 individual barters (my cow for your cow, my cow for your hut, my cow for your grain and since so on and so on). If this continued people would have spent all their time bartering instead of really ever doing any trades. Or if we only had ten people specializing in 10 goods that would be almost (100/2) individual barters. Imagine doing that every day as the population increased. Barter had in it its own seeds of destruction and in an agriculture economy the concept of seeds of destruction was well known.

Barter: Number of Trades

			cow	hut	coat	wheat	corn	fish	wheat	shoes	camel	beer
	Individual	1	1	2	3	4	5	6	7	8	9	10
Individual		1 cow	cow to cow	cow to hut							cow to camel	
2		2 hut	cow to hut	hut to hut								
		3 coat	cow to coat									
		4 wheat										
		5 corn										
		6 fish										
		7 wheat										
		8 shoes										
		9 camel										
		10 beer										
												Bear to Bear

So, as we said what Zug did do was offered one of his cows to Gus in order to buy the hut and so Gus and his wife could ride the cow down to Dubai to check out casino properties. This was the start of Barter, but it was not the Idea of Money. Now this is where it gets a little complicated, but having an idea is easy but, as we said, making it come true is difficult. You see, Zug charged people grain to lie on the bed in the mud hut (in fact it was the mud that made them look brown not the tan, but after a good rain everyone came back). This enabled Zug to raise cows on the grain he got from his tanning customers (note that in the earlier paragraphs from Wiki on the History of Money, the Wiki authors incorrectly thought that the grain was the first currency. **No, No a thousand times No**. Grain was the engine of the growth (e.g., grain was used to feed the cows) but it was too ephemeral (Note that if it is more than two ephemerals, it is a lot of ephemerals). Simply put, it (grain) was too easily blown away in the wind to be a long-term solid foundation for the first form of currency which, as we will see, was cows. This is also a good time to bring in a third member of the story, Morris the Chiseler.

Morris T. Chiseler

It was not known at the time but the cow that Zug initially used to come up with the idea of Barter would soon become the basis for the first form of money (a unit of account, a store of value and a medium of exchange). It is well known among a small minority of historians that Gus was a well-known dreamer and had often thought of setting up a casino. Now this is what happened. Gus had gone to Zug to ask if his Zug's brother (Morris T. (the) Chiseler)[24] could carve a Roulette Wheel out of one of the stone tablets which lay around the city of Bagdad. Note the Roulette Wheel was Gus's idea for the primary game in his gambling casino. Zug offered the services of Morris to help make the Roulette Wheel. Of course, Morris was a chiseler in more

[24] In fact, Zug's brother Morris was the noted Chiseler who had screwed up this whole pronto\proto thing up earlier by leaving out the 'n' and was forced to leave eventually and settled in northern Italy where he opened up a restaurant that Martin Luther and JR Gutenberg (the illegitimate son of Johann Gutenberg) frequented which led to ……. but that is part of the longer story - see Chapter 6).

ways than one. His family were the ones who marketed the idea of Bartering (in fact it was they who made carved pictures of the early barter pairs in the caves around Bagdad (e.g., cow for arrows etc.) and were also the chiselers who took the (n) out of Pronto money so we call it Proto money to this day.[25] But Morris said yes to Zug's proposal because he saw the possibilities of the idea of a Roulette wheel and it interested him.[26] Of greater importance is that one day when Zug was with Morris and, when Morris was working on Gus's Roulette Wheel, it (that is the Roulette Wheel) fell off its stand and rolled out the door of the mud hut. Zug yelled out **"Aha, I Have An Idea. Cows Can Be Used as a Common Source of Trade."** Now the idea was really wheel with Cow means multiple things, transport grain, conquer countries, have a race (chariot). The multiple use of a wheeled vehicle which required cows to pull it increased the need for Cows and their worth as money. Thus, the idea of Cows can be used as a common source of trade since they (that is cows) were used in multiple areas of life, work, war, entertainment ……This was a really great idea and this idea became the Origin of Money. This is such a momentous moment that it bears repeating.

"Aha, I Have An Idea. Cows Can Be Used as a Common Source of Trade"

"Aha, I Have An Idea. Cows Can Be Used as a Common Source of Trade"

"Aha, I Have An Idea. Cows Can Be Used as a Common Source of Trade"

"Aha, I Have An Idea. Cows Can Be Used as a Common Source of Trade"

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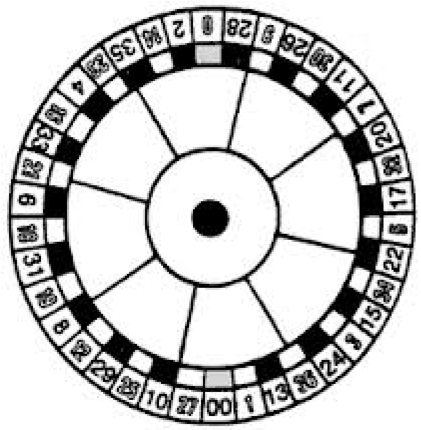
[25] Morris's family eventually grew their advertising firm into one of the world's largest, the William Morris advertising firm.

[26] Morris did not ask for payment since he thought he got value from learning about this new instrument. While it would take centuries for Morris and his decedents to fill this idea out, this insight as to the multiple outcomes of a Roulette wheel and the idea of probabilities led eventually to real option theory (Morris's implicit return based on his assumption as to the real options imbedded in the idea of a Roulette wheel) as well as the Black-Scholes option pricing model (Black was the family name from one of the Casino owners (named after one of the colors on the Roulette wheels) and a guy named Scholes (really from the rocky shoals off of Dubai where in time the chips (then sea shells) were used in payment for gambling gain and losses.



Roulette Wheel

So here is the story of the Origin of Money. Zug, soon after seeing the Roulette wheel roll away, quickly asked Morris if he could make a stone Chariot Wheel in the same shape as the Roulette wheel and if he would trade two of those stone wheels for a cow. Morris agreed since while you can eat off of a stone wheel you have nothing to put on it without a cow.

Morris's First Stone Wheels

Zug then went to Gus and offered another cow for another hut. Gus said that while he could use cows what he really needed was a way to haul more goods to Dubai. Zug described to Gus that with a cow and a cart or chariot he could make his dream (or thought) of a casino into an idea.

Drawing of Gus's First Chariot

Gus at the Reins of His Chariot

Zug **"Aha I Have An Idea"** said it made no difference**.** (Zug had mathematical abilities which were later used by Gus to help set up the gambling casino in Dubai, as well as the first central bank, the first insurance company etc. As we said Zug was an idea man). Zug pointed out to Gus that everything was denominated in Cows. Gus asked why a Cow? Zug pointed out that they had agreed originally that one cow (X) equals one mud hut (Z) and since one cow (X) equaled two wheels (Y) and two wheels (Y) also equaled one mud hut (Z) that also meant one cow (X) equaled one mud hut (Z) just as they had agreed to originally. Zug added an addendum. In the future, Gus could simply trade the cow he got for the mud hut to Morris for two stone wheels. Gus just nodded his head and began to dream of gambling casinos but from that time forward wheels, mud huts, grain, and all other tradable and non-tradable items were denominated in their relationship to "cows." But of course, there is more to this story. But as a sidebar, it is important to realize the importance of casinos in the development of the wheel beyond that of the Roulette Wheel being the source of the commonly used wheel. Without casinos or something like it, there was no reason to go anywhere and therefore no need for a wheel. People would simply wake up and walk from one place to another. Only if there was a long way to go somewhere and a really good reason to go there would anyone waste their time coming up with a suitable means of getting there, such as, a cow, a chariot and of course a wheel. It is basic economics.

As a second sidebar, Gus was also known in the area as a dealer and as the first president of the Bagdad Rotary Club (the term rotary comes from Gus's idea of the Roulette Wheel and it later formed the basis for the Rotary Club as well as the whole Ben-Hur moment that was made into a movie with Charlton Heston[27] centuries later). After he came up with the Roulette wheel idea he was known as **Gus the Wheeler-Dealer.**

[27] Someone may note the close resemblance between Gus Wheeler-Dealer, Moses, and the Charlton Heston (actor and ex-spokeperson for the NRA). It is this historian's belief that this is more than a seemingly random connection through time. It is just that certain facial stereotypes lead men to think they are God-like or act as if they are. Going forward, I would only recommend that we closely track any individual who looks that the recently deceased, Charlton Heston.

Earliest Forms of Wheels

Money as an Idea

The point is that someone, and in fact a host of someones (that is more than a single someone) knew they needed something called **'?'** to help them get a tan, rent an apartment, build a wheel, and take a trip. They needed a unit of account, a store of value, medium of exchange but someone had come up with that "?". But up until the time Zug and Gus got together and Zug had this whole "Cow as a unit of account, store of value, and medium of exchange" no one had the idea that Cows could be used as a basis for conducting monetary exchanges so essential to doing business. No one knew what that word was or what to call it. Among our ancestors, **Zug's Idea** that cows could be used as a form of commodity money and as the basic form of monetary exchange became known as the **'Zug Theory of Monetary Exchange'** to distinguish it from a similar model created by his wife which dealt with a different Theory of Monetary Exchange as which later formed the basis what is called today the World's Oldest Profession (as a third sidebar, Zug's mud huts for tanning eventually grew to include other services including a host of massage and other personal services managed in part by his wife and her family. (But this is a family friendly book and those looking into the history of early entrepreneurs must go elsewhere to satisfy that interest) so it is back to Zug, commodities like cows and this whole money thing. Now I am sure that Zug or Gus would have eventually come up with some special word 'like commodity money' or something that could have been used to define it as 'money', but they were very busy building up a tanning business and gambling casino.

As a sign that Zug's idea leading to Gus's idea which lead to others having ideas is noted in one of the only 'anthropological' findings we have on the history of money.[28] Zug had a weird cousin known as B. Zar. After Zug told him of the cow equally one mud hut or two wheels which meant that all previous two item Barters could be explained in terms of one commodity, B. Zar was weird enough to see its importance. Previously as we said N barter trades between N people meant approximately (N*N)/2 barters.[29] If there was a common currency that would cut the number of trades to N so one could do a lot more trades in the same amount of time. Zar decided to make it more efficient for people to trade by setting up a marketplace where people could meet and trade their goods based on this common cow currency. Today the place where people meet to sell goods is known as a BZar (Bazaar). Of course, to keep this all in the family, B. Zar went to Zug's brother (Morris the Chiseler) to chisel down these prices (even to this day a common practice in the Middle East). Fortunately, only recently we have found a copy of one of these BZAR price lists (OK, I admit it, having a Bazaar started by one B. Zar is really bizarre, but if you have been willing to get to this point without throwing the book down because of its bad puns I thought I would just throw another one in for good measure).

[28] In chapter 8 on the history of money in other countries we discuss the difference between paleological findings and anthropological findings and its impact on reported findings.

[29] Really it is (n*n)/2 -1

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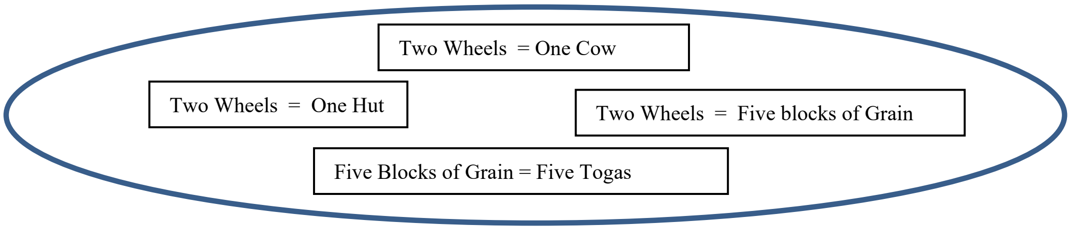
Pre-BZAR Price List



BZAR Price List Post Cow 'Single" Currency

Cow = One Mud Hut

Cow= Two Stone Wheels

Cow = Ten Blocks of Grain

Cow = Five Togas

Cow = One Good[30] Night With Salome

Now back to Morris Chiseler. It was Morris the Chiseler who heard his brother Zug describing his Theory of Monetary Exchange and since he did not want to be chiseled himself by Gus, he decided to chisel the mathematics of Zug's monetary theory into stone. In short, he knew that **Monetary Idea 1**[31] (**The Zug Theory of Monetary Exchange)** could be transformed into a more complete set of monetary transactions which is today known as **The Chiseler Model of Monetary Transitivity or Monetary Idea 2**. With the invention of the wheel and its place in overall monetary pricing, the History of Money was on a roll **(count the number of puns in this book and you win a prize)**. What Morris chiseled was to show was how much of 'X' (e.g. Cow) do I have to give to you to provide me with 'Y' (two stone wheels) when there is another who

[30] For some this is where the idea of Goods came from.
[31] Ok I said this was complicated. What of Zug's first idea, Barter or B. Zar's idea of a Bazaar. Well, those were good ideas but this book is about money so if you want to create your own list go ahead and write your own book.

wants to determine how much of ‘Y’ (two stone wheels) he or she has to give to someone to provide them with ‘Z’ (mud hut) such that one can determine how much of X (cow) does one have to give ‘for Z’ (mud hut). Before one gets all critical that they did not come up with a proper word for **“?”** well Morris did **‘put it in stone’.** OK I think this is a pun, but it is debatable what we do know is that this is an earthquake area and while we find bits and pieces of it today we are still a long way from putting together the whole story. Anyway, the Chiseler Model of Monetary Transitivity soon led to other ideas like logic which led to philosophy (which the Greeks copied years later) as well as later on to a host of other ideas. But back then it was just known as the basic **Chiseler Model of Monetary Transitivity.**

If $Y=X$ and $X=Z$ then $Y=aZ$. (1)

The **Chiseler Model of Monetary Transitivity** was later plagiarized by the Egyptians into the concept of linear algebra as well as the basis for how they paid their workers (often Jewish) who built on the stone pyramids which formed the basis for the first Egyptian Banks. The Jewish people later came to feel that they were taken advantage of by the Egyptians and to this day remark on how ‘**They were chiseled.’** The Jewish people also felt taken advantage of. So much that they took action in an effort not to be taken advantage again. They were so successful that their name soon became a moniker for being taken advantage of as in “I was “…..” down..

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Only Known Drawing of Gus Wheeler Dealer and Morris T. Chiseler

Why is this so little known among current day monetary historians? Well first of all no historian or anthropologist ever took or at least passed a math course or a course in basic logic in their entire lives. So, when faced with a bunch of Xs and Zs written on rock walls, they had no idea that this was merely Chiseler's way of keeping his books and that the concept of differential value and the tradeoff of relative value was well known among our ancestors. Note it is important that all this took place before the rise of organized religion. For an idea to succeed you need both a great idea and the cultural and behavior environment for the idea to grow. At this time, neither Gus nor Zug (and certainly not Morris) had religious restrictions about the transfer of goods or of even lending something to someone during Lent or after Lent and they did not run into the religions sensitivities of future Christians who would have to give up tanning for Lent or for early Presbyterians who never would take a vacation, to even the Islamic faith for whom lending now means that you never get to see the seven virgins (Note, there is considerable debate about what the cost of lending is among those in the Islamic faith in that some believe that you if you lend out money you only miss out on seven raisins rather than seven virgins).

In short, the origin of money was unrestricted at this time by religious fanatics. This permitted Zug to take the grain for the tanning and then to pound the grain into small blocks which he used as special buckwheat pillows and also to feed the cows that he gave to Gus for mud huts who accepted this as payment for the hut he had built who later gave the cows to Morris for the two wheels he put on the cart to take the trips to Dubai to set up a casino and soon cows became the basis for a commodity currency which could be used to determine the cost of about anything else.

Drawings of Cows Done by M. Chiseler

What evidence do we have of the use of cows as the store of value, unit of account and medium of exchange? It should surprise no one that the early drawings of our ancestors were neither pictures of their kids nor the seasons of the year (all very valuable things) but were pictures of cows, some bows and arrows and men with both. These as we said were examples of Barter. However, in more recent cave drawings there is always a picture of a Cow on the wall. These were merely the Chiseler's way of accounting for cows as the unit of account (one cow equals aZ (something)), a store of value (who owned it) and the medium of exchange (cows per bow and arrow set). Of course, sooner or later people lost faith in the Chiseler's recounting of the monetary agreements and therefore the cow as a store of value started to decline and eventually was replaced by other forms of currency but that is for later discussion. But the whole process so angered people that Morris and his like were later banished to Italy. The fact that Italy would later be the center of the transformation of money is one of those little threads that links the development of money, but you will see how those ***threads tie*** together later in the book (For those interested reader's there is a game book known as the "History of Money: Chutes and Ladders." (See Appendix E).

The real question is why did it take so long to move from **commodity money** (where some item of value (e.g., cattle) was the underlying unit of account, store of value, and median of exchange) to what later was called a **reference currency** (where shells often reference some other commodities or contractual claim) to what we call today **fiat money** (where we say it has value because our army is bigger than yours and one can rule by **fiat** or by 'f - it' (F also meant What F still means today[32] and 'ait' was an early form of 'it'). As we mentioned earlier, it takes a real "***Aha'*** moment for change to take place. Think of it, the concept of zero did not even exist in European society until the 12th century. It took centuries for someone to say, **"Aha, I Have An Idea. Why not a Zero?"** Should we expect anything more from their ancestors? These were people dominated by a very 'make it if you need it' rule of existence. The idea of modern money may have simply been a little too frivolous for individuals whose lives were threatened every day by the four Horsemen of the Apocalypse and five of their friends.

[32] For the History of the Big "F" and its importance in literary history just listen to any B. Black's comedy routine. It tells all you need to know about the Big "F".

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Even more important is that cattle equal money worked just fine. First of all, cattle are now known as a commodity-based currency; that is, currency with an underlying value other than just a unit of account, store of value, and medium of exchange. One of the common criticisms of cattle as a currency is that it may act poorly as a unit of account since some would argue that it is not easily divisible into smaller units. As an ex-butcher I know that is wrong, for years individuals have sub-divided a cow into parts some more valuable than the whole. In short cows are a typical example of the economic concept where the overall unit's value was is less than the simple sum of the parts. (This was also the first example of Seigniorage but I will let interested parties Google that and move on).

Some argue that cattle were a poor medium of exchange since there is no 'common' cow. People forget that while today there are multiple varieties of cows, back in say 10,000 BC, there was only one strain of cow or the brown one I believe. The brown cow could hide easily in the desert of today's Iran and Iraq and were less likely to be pick off by beasts or someone trying to rob your money. Lastly, you could put a number on each cow (known today as a brand just like a serial number on today's paper money) it was also an easily monitored store of value.

Drawing of Cow As Money To Be Divided into Sub Currencies

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As important, cows were at the source of the early **'Monetary Theory of Value.'** If one wanted more money, one could merely make more cows and that is just the point. Today, the whole idea of the Federal Reserve is to promote the creation of money. Mind you we were still several centuries before the "Bronze Age" and even more centuries before this whole "Gold Thing." Back in the day, again 10,000 BC, if the cattle guy wanted more money he made more cows (Well he did not personally make more cows but this is the source of the myth that many early ancestors were too friendly with their animals).[33] The increase in the number of cows led to the increased the demand for grain which one used to feed the cows and the relationship stayed constant so that grain and cows were inter-changeable as for how much grain to match a cow. The use of cattle and its close substitute grain as commodity money led to the increase of agriculture and the movement from a hunter gather society to one based on agriculture and the eventual growth of an urban society. **Thank You Zug the Idea Man.**

Things You Should Remember

We rarely think of our ancestors as moral people. Perhaps the fact that they did not have forks and spoons and for the most part worked in areas that got their hands dirty has given our 'vegan, puerile' driven society to under appreciate the Zugs of this world. These were people that had it rough but understood the value of their word and that a promise is a promise. If one cow was a

[33] I am not sure if this will remain in the final version, but this whole 'old testament' thing on bestiality got started because they basically did not understand this whole history of money thing.

fair tradeoff for one mud hut and two wheels could be traded for the same mud hut that was it. A monetary system built on a fundamental moral core of do unto others worked just fine for our ancestors. For those who bent the rules and attempted to chisel others it was simply up and out (often to Italy). This did not mean that there were no potential problems. As society evolved (some would say for the worse), as individuals became less connected to others, as the moral imperative declined, the fundamental moral code started to sift from "unto others as they do to you" to "unto others before they do it to you." In that type of society new monetary systems had to be developed. But one does not move overnight from a monetary system built on a personal code of trust to one where we have to find a system built on our lack of personal trust overnight. The following chapters take you on parts of that voyage.

What You Will Be Tested On:

Basis of Barter
Store of Value, Unit of Account, and Medium of Exchange
The Aha moment
Pronto and Proto Money
Zug's Theory of Monetary Exchange
Chiseler Theory of Monetary Transitivity
Commodity Money, Reference Currency, and Fiat Currency

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Chapter 3: The Wheel and Ancient Money

Summary Introduction

While we have not spent a lot of time on it, the relationship between the creation of ideas and money was not well formulated in 10,000 BC. Both ideas and money kind of resulted from the 'I have a need' and a need needs a solution. The concept of **Ideas*Money = Progress** would have surprised them since this whole thing was just getting started. Progress is a relative term since it assumed that after it, we are somewhere better than where we were before. The whole period of Zug, Gus, and Morris was the before. The after consisted of our ancestors spending considerable time coming up with better ideas or even better ideas including better ideas on how to make even better money to fund those ideas.

That is the point of this chapter, once you have come up with an idea you have to continually come up with better ideas and then even better ideas and here is the problem. Why, if you don't come up with the new idea someone else might. In short, the creation of money led to many changes in society including the rise of global competition in how money is viewed and how it is created. One can therefore see in the evolution of money the very evolution of society. The main purpose of money is to provide a means to move an idea forward. But money's value as a store of value, a medium of account or a unit of value depends on its form and function. As important, the form it takes over time may even change as our ancestors found new ways for money to function more efficiently. And that's it. Ideas and money exist in kind of efficient market. While it took centuries for an academic to get a Nobel Prize for the idea of efficient investment markets in which an all assets of equal risk have equal returns, back in 10000 BC they pretty well had this efficient market idea figured out. Zug, Gus and certainly Morris would wake up each morning and think I have an idea, but as they turned around, they soon saw that the very idea they thought of had already been thought of by other individuals. In short, faced with the same resources, the same market, the same opportunities the increase in the number of idea men we soon had an efficient market in ideas including the idea of how to create a single monetary unit.

However, even in a world of efficient ideas and capital markets, change does not happen overnight or easily. When you finally get to a place of power and influence change is especially risky. In fact, the whole idea of what risk is and how our ancestors came to view it or accept it is for another book[34]. What this book does is show that the primary idea in our previous chapter; that is,

Ideas*Money = Progress

could better be presented as

Change in Ideas* Change in Money = Change in Progress.

or as my Grandfather also told me, “Change is the driving force in this world; that is, without change they could simply hire a monkey and feed it bananas.”

[34] Or two books. See Peter Bernstein ‘Against the Gods: The Remarkable Story of Risk”, 1998 and Capital Ideas: The Improbable Origins of Modern Wall Street, 2005. As to the whole efficiency in ideas, financial or real, just remember how often you think, Hey I thought of that. Of course, you did, efficiency in ideas has been the hallmark of our society for 12000 years. It just that it is not who thought of it first but who marketed it first or owned the rights to the idea.

So, this Chapter is about change, change in how we understand money and its place in society and change in who made it, who regulated it, and who insured how it was made. Things do not just happen, and money does not just make it itself. Others are involved and as with most human endeavors when humans are involved things can advance into new areas of understanding including things we know today such as the quantity theory of money and models of asset valuation. Things can also get a little messy and before it becomes too messy humans generally found ways to regulate it so that it remains just a little messy. It should come to no one's surprise that as ideas about the use of money multiplied our entire understanding of money and its place in society matured. We even broke down the primary unit of money into smaller units for money to meet its needs as a medium of exchange. We called those smaller units "Change." In short, without 'Change' there would be no 'Change').

Change (small coins) in the Stone Age

The last concept discussed in this chapter is why with all the advancements in idea generation including the advancements in monetary theory including the Quantity Theory of Money (MV=PQ) and the Cost of Carry Model (FP=SP (1+R)), that is, why is the development of money in ancient times viewed in such a primitive state. Well sometimes we just want to look smarter than our ancestors and sometimes bad things happen (e.g., Noah's flood). At other times

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ideas are simply lost in time or maybe people just got stupider over time. But just because we do not have it on paper does not mean it did not happen.

The Wheel and Ancient Money

Time does march on, or, in the case Zug, Morris and Gus, at least the cow did. As mentioned above, the cow as currency not only provided a central means to pull society forward (or at least in the case of Gus to his casino on the beaches of Dubai) it also increased our concept of finance and asset valuation. It is important to remember that one cow equals one mud hut equals two wheels did not just happen. It was based on the relative value of the items produced. It took about the same amount of time and effort to raise and monitor a cow for a month as it did to build a mud hut and likewise it took about one month to carve two stone wheels. Ok, if you are asking yourself why did they use stone wheels rather than wooden wheels? I don't know what to say, other than to point out that if you have ever been to the Middle East you will see that there are no forests and the wood that they have is worth a whole lot of more than two stone wheels. The real benefit of cows was that any individual could take it with them to store (the oft stated 'store' of value) at Gus's stable (the source of cows as a 'stable' unit of account). But cows as a monetary unit were much more.[35]

[35] One other proof of cows as the primary medium of exchange is that most Middle East cities are about two miles from each other (Dubai, Abu Dhabi…). The reason is that a cow can travel about 10 miles out and back in one day. So, the optimal distance between any two cities is about 20 miles since optimal place to set up the cow depot or (cow bank) would be placed about 10 miles between each town.

Gus's Early Casino In Dubai

Gus the 99th: Casino in Dubai

As Zug's Tanning Salons Franchise began to grow he needed more and more mud huts. He also spent less time on his cow herd and the number of cows decreased. As the number of cows decreased the value of each stand-alone cow increased and he found it necessary to decrease the number of cows per mud hut price (the first recorded evidence of cow deflation). Soon it was 1/2cow for one hut or one cow for two huts. Just as important as Gus saw the price of cow per mud hut decrease, he started to increase the number of mud huts so that he could get at least one cow, but soon individuals were even willing to give more huts per cow the transfer price of cows per mud hut feel even faster (more deflation). In short, Zug came to see (e.g., he had an 'idea' or at least a **'thought'** (which remember is like an incomplete idea or a kind of mini-idea) that the number of the mud huts increased the price of each hut went down (each mud hut was worth less of a cow) and as the number of mud huts increased or the number of cows required cow per mud hut decreased. Zug soon came to realize that:

Cows = Price * Huts.

Since cows were also used to trade for most other 10,000 BC goods, the overall price of doing business in Bagdad were a function of the number of cows but as the price per cow of other goods when up whene there was the same amount of cow but more goods. In contrast, later that year others started to increase the number of cows, soon the relationship changed and individuals started giving more cows per hut a concept known as inflation.

The complexity of all of this was becoming too much for Zug. So, he called in his brother Morris again and asked him to chisel it all down. It was at this time that he also decided to get out of the cow business and concentrate on the tanning business. He sold his herd to Morris the Chiseler who took the herd and set up a restaurant which served a pretty good falafel. As the herd's velocity moved among the local entrepreneurs Zug noticed that though the cow's herd size did not change, the price of the various goods increased. Zug send a message to Gus, I have an Idea (ok this is ***Idea number 3*** – but it is a very good Idea);

MV = PQ. **(2)**

In short, cow money times cow velocity = Overall price of goods times the quantity of goods. This would have gone down in the history of money as **Zug's Monetary Theory of Value** but once again, Morris was a little cheap in terms of the quality of stone and only bits and pieces of it are found today. Morris was a little unsure if he got it right and not wanting to embarrass himself in front of Zug, showed it to Gus.

In any event, Gus got the message wrong and thought it meant Morris's Venture is P.D.Q (pretty damn quick). Gus thought the message was related to a new venture by Morris to create wheels that were faster than his first creations. Now Morris was in trouble with the local authorities for his attempt to cut costs on the 'Pronto' episode but in creating the stone wheel he had hoped to reestablish his credibility and, if not, he had to have a way of getting out of town quick. But Morris also needed a way to market his new line of "Morris Wheels." Gus thought that Zug believed that Morris's new wheels were P.D.Q. (pretty damn quick) and given that Gus had to get to Dubai in a hurry he asked Morris to make him more wheels immediately. Morris may have been a Chiseler but he knew an opportunity when he saw one. Gus bought a number of Morris's wheels but did not realize that Morris' **real idea (OK Idea 4** but this is really the last time) was to add a few 'Ads' on the stone wheels. Now Gus just thought they were decorations but when he found out that in fact that Morris was advertising a series of "Cheese Wheels" he created from the milk he got from the cows he received from Gus as payment for the Stone Wheels. Soon Morris's reputation as a Chiseler was **SET IN STONE (Ok this is a pun)**. In discussing the origin of the cheese wheel Morris was well on his way to the creation of the first of the great advertising firms (today known as the **William Morris Agency** – his real name – and to this day most advertising firms are believed to also be chiselers) but that is not the reason for this paragraph. What is important is that Gus began to charge Morris for a portion of the Cheese Wheels which offset some of the cost of what he had paid for Zug's Cows or for what he planned to pay for Zug's Cows in the future? Now in addition to selling mud huts, Gus also made some money carrying goods from Bagdad down to Dubai. Since he never knew when he would need a cow to transport the goods, he often had to make a contract today at a price today for the cost of the cow in the future. When he started receiving money from the Cheese Wheel he had that ***Aha*** moment which is the foundation of any great idea (are you counting them, I am not). He used his understanding of how much it costs to carry good from one town to another to create the concept of a **True "Cost of Carry Model"** in which the future or forward value of an object (e.g., a future price of a cow set today) is equal to the value of the current cow spot price less the cost of borrowing money to purchase the cow (close to the rent on the a mud hut) less the dividend or income from owning the object (milk or in this case part of the Cheese Wheel). This model became known as the **Gus-Morris Forward Pricing Model** which to this day is the primary model used in determining the forward or futures price for contracting for real and financial goods to be delivered in the future. Without this idea, civilization would have never traveled anywhere. One might have raised enough cows for their own family but why make more if there was not a way to sell them to someone else today for delivery sometime in the future. Similarly, why make more grain than needed to feed one's own family if there was no way to sell today's grain or future anticipated grain to someone in the future at a price determined today.

$$\mathbf{FP = SP\ (1+r-d)} \qquad \mathbf{(3)}$$

In short, as long as 10,000 years ago Zug, Gus and Morris (alone or together) had already created the necessary financial concepts necessary for an advanced urban society. They had established a cow unit of pricing that helped establish the first system of relative pricing of goods **(X =aZ)** as well as an understanding of the basic concepts between the underlying commodity and the pricing of other goods **(MV=PQ)** as well as the future cost of delivering those goods in the future at a price contracted today **(FP=S (1+r-d)).** [36]

The question is often raised as to why these fundamental concepts of money and its place in society were lost and only to be rediscovered centuries later. Well, many of our ancestors had the workings of the world well understood only to have their decedents lose track of their discoveries. For example, most people knew the world was round. Anyone with a brain knew it had to be round since they could see the top of the mountain before they saw its base. The reason we think that our ancestors thought it was flat was that all their maps were flat but that would be a 'Big Wrong.' Carrying a globe with you in a backpack is not easy. Carrying a flat map that can be rolled into a circle is. Everyone knew the globe was curved it is only historians who have never traveled on the back of a Camel who got it wrong. But once they put it into print, everyone was afraid to contradict them (Type I Error).

There are many theories as to why Zug's, Gus's or even Morris's discoveries failed the test of time. As discussed earlier, Zug got out of the cow business and focused on tanning salons and Morris was expelled from the country and settled in northern Italy. Moreover, most of the ideas

[36] It is important to note that the only pricing model not advanced by Zug and his team is today's well known Black Scholes Option pricing model and the Put-Call parity model. This should come of no surprise. Back then the whole idea that one would have an option (choice) for delivering something in the future was not well received. This was a deliver the damn cow or be shot society. Nor was the whole idea of insurance advanced beyond the most rudimentary stage. Mind you this was the start of human activity, we had little experience with the probability of recorded disasters, so the ability to determine what should be paid to who needed a little time to develop. Similarly, the development of financial valuation models such as the CAPM or financial instruments such as fixed income securities and stocks needed the development of ideas of contract law, regulatory authority, and risk valuation. For those interested please read Peter Bernstein's Against the Gods and Theory of Risk. Both of these books are among the top ten TS (Tam Schuppipus) Best Books to read as primers for this book. One needs to crawl before one walks.

were set in stone which 1) broke easily, 2) were hard to carry so the ideas really did not travel very far, and 3) were chiseled into stone so small adjustments to the model were difficult to make as times changed. But the real reason was that Zug, Morris and Gus were all members of a very small group of very smart people (today's Rotary club). To this day, most of the 'crazy ideas' of the age such Gardens of Large Stones or detailed markings of earth from above were not due to aliens but all due to Zug, Gus, and their families. Knowledge of the seasons is necessary for any good tanning business and as for the detailed markings on earth, Gus had spent hours overlooking the gambling casino from above and his ability to render detail drawings was well known among the Wheeler-Dealer family.

But what really set the human race back was that soon after the establishment of the Chiseler Monetary Transaction model, the Zug Monetary Theory of Value and the Gus-Morris Cost of Carry model, people started getting a little uppity about how smart they were. One of Gus's best friends, Noah came over to Gus's house one day and wanted to borrow two of his best cows. Gus, of course, asked why? Well, Noah said God had informed him that things were about to get a little damp and that the two cows would become the basis for the development of all future money when things dried up a bit. He invited Gus's and Zug's families to join him on a little boat ride. Zug and Gus had questions about building a boat out in a desert as well as putting two cows as well as two of every other animal on it but well we all know what happened next. It started to rain.

Evidence of First Flood: Epic of Gilgamesh, account of a Great Deluge that threatened to wipe out humankind

Zug and Gus bought two of the first tickets. By the time it stopped raining, Zug and Gus's children were sick and tired of being cooped up on a boat with a bunch of cows and other animals but more importantly the scarcity of cows resulted in a drastic deflation. The price of everything collapsed. MV=PQ but with no M, P can fall quickly. In short Gus and Zug decided to combined forces to set up a series tanning salons and resorts on the coast of the Red Sea (the word red came from the sunburn that many of the 10000 BC tourist got since they still had the white skin of their ancestors[37]) and to set up system of shell with numbers in contrast to the use of branding the few cows that came off the boat (after the rain there were a lot more places where shells could be found but the best shells were at Gus's casinos). People would then use the shells to gamble, get a tan, whatever. They even started to take a few shells home with them for the trip to the Red Sea next year as a sort of store of value (usually on a string around their

[37] For our readers, Zug, Gus, and Morris were really in an area near what we call the Caucasus Mountains. In the late 1700's a writer of the time separated the known world into people and skin color. The white people were known as Caucasians. The treads of history go on and on.

neck) or as a medium of exchange (since it meant one did not have to carry a cow with them) and as a unit of account since certain Gus's shells were more unique than the common brown cow.

Gus's Shells: Each of Which Carried Different Value

When Zug saw people starting to use Gus's shells (e.g., gambling tokens) as an alternative money, Zug went to Gus with another idea. Gus's casinos were on the best beaches of Dubai which also had the most unique seashells. Gus used these seashells as the chips to pay off on the Roulette wheel and other forms of gambling at his casino. Since he controlled the beach, he controlled the production of unique seashells and since he controlled the pay out at the casino he controlled the supply of seashells to cows that the general public brought to exchange for the gambling chips (e.g., sea shells). Zug using a little common sense and observation came to realize the value of these shells in determining their monetary value (e.g., the shells to cow ratio). Since Zug had set up the payout for the various games at Gus's casino's he could also control the number of seashells in circulation (seashells were in fact the first form of portable money). Zug eventually started using unique shells (e.g., larger, more rings) as a more valuable form of shell such that individuals did not have to carry bags of shells but could trade the cheaper smaller shells for a more expensive form of currency. Thus, Gus's gambling casinos were in fact not

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only the basis for our understanding of future ideas such as probability theory and statistics but also formed the basis for our first central banks.

The only real risk is the problem of cheap shells as counterfeits for his expensive shells; that is, cheap money driving out the good money. To prevent that from happening one needs someone to enforce the rules surrounding what is money. As for most of human history, a need is soon followed by an answer.

The Law and the Development of New Monetary Forms

Now the only problems left was to ensure that everyone agreed as to the shells to cow ratio and what determines a good versus a bad shell.[38] So Zug and Gus also hired a relative who was local 'bag man' who was instructed to make sure that Gus's shells were regarded as the accepted money rather than other 'lower quality shells' we discussed earlier. His full name was Hammur Abi' who lived by a basic code 'You Pay' or "You Pay!!!!." This code became known as the "The Code of Hammur Abi", the best preserved ancient code of laws and it is these law codes that formalized the role of money in a civil society. (For those without a Ph.D. in History, google

[38] OK there were other problems such as someone winning a really big bet at the gaming table and forcing an increase in the amount or supply of shells (e.g., money). This even would be similar to the finding of a unique new source of gold (1849 gold rush, the Alaskan gold rush of the 1890's). But Zug had an answer for this also. He realized that while some individuals would bet to win a lot, there were also those who were afraid to lose a lot. When people "put' their money down he created a side bet area where one would be protected against losing to much money. He priced these insurance "Puts" as a way to protect against the unexpected "Call" against the Casino's reserves. In short, he made sure that he had a fix on the demand and supply of casino chips (seashells). He later worked with his brother Morris to refine this idea into a set of insurance companies to cover the risk of a wide range of other bets as well as to use Morris's earlier ideas of probability theory along with the idea of put and calls to create one of the first workable ideas of option pricing. For most people or let least until recently, gambling was not permitted by religious beliefs or life was enough of a gamble itself for this whole option pricing thing to take off, but by the early 1900's a Frenchman by the name of Bacheliar and later in the 1960's two guy's by the name of Black (of red and black fame) and Scholes (of sea shells from the Shoals) came to a more formal model as individuals came to accept gambling as a form of recreation rather than a bet on life.

'Code of Hammurabi'). The Code of Hammurabi set amounts of interest on debt, fines for 'wrongdoing', and compensation in money for various infractions of formalized law. The law also set the form of money and who owed what to whom. When there was just a Zug and a Gus, everyone knew everyone else. If you owed someone something (two wheels, a cow….) everyone knew it. Personal responsibility (moral order) insured the payment system. As society grew there were too many Zugs and Guses. As a result, even written forms of exchange were easily dismissed as one simply changes their name and headed east (see later discussion on the development of money in China).

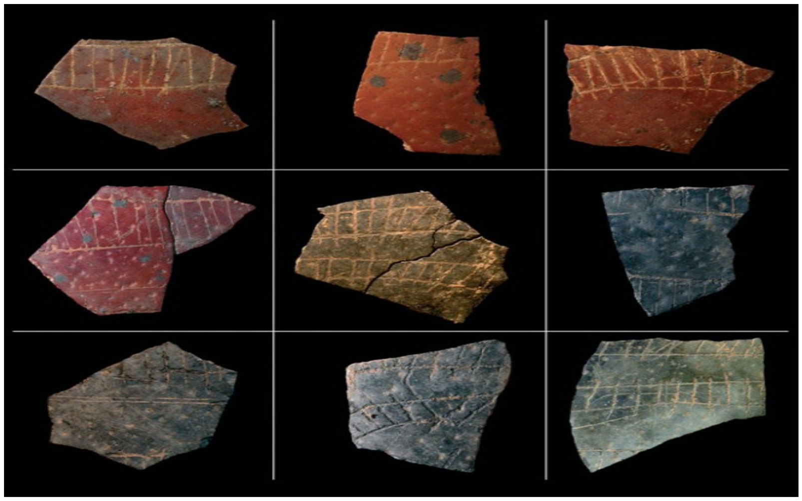
Cartoon of Hammur Abi in the Babylon Bulletin

As moral order declined we needed a solution to this agency based monetary problem[39]. A market based solution was not available since at this time there were few markets. Fortunately,

[39] 12000 years later the issue of agency theory (the benefits and costs of having an agent working for someone to protect them from the lack of direct oversight of others).

government order in the name of Hammur Abi (or at least his club) was there. If you failed to show up or pay as dictated, Hammur or one of his men did. This government based 'monetary oversight' provided just the framework needed for an emerging human civilization <u>on a particular commodity</u>. But if money was a necessity, cows or even shells may not be sufficient since necessities require by necessity something of permanence.

Now the importance of authority in the determination of money is well known. Most commodity based currencies had defects. Cows had many values but over time their natural value decreased. Wheels had longer term value but were easily stolen. Shells were fragile and their quantity often decreased as one moved farther inland. In contrast, the Code of Hammurabi was a response to the rise of a nation state. Nation states came into existence if for no other reason that the attempt to use heavy tablets (which referenced the commodity holdings) lead to the concept that only the strong survive (it often took more than three people to carry $50 dollars). Moreover, stone age based currency had its shortcomings as we will see later in the Egyptian use of large stone blocks. These large stone blocks prevented their subjects from stealing the wealth of the nation but also limited commerce and resulted in people feeling chiseled. Humankind did however, attempt to come up with solutions. In fact, the earliest forms of solid currencies were transferable 'IOU' written into stone chips. However, as we discussed earlier, the use of these 'Honor Chips' as they were called were based on someone enforcing the Honor of Those who had no Honor. In short Honor Chips required a nation state (or a Hammer Abi) to enforce payment.



Honor Chips or First Stone Based IOUs

We will see in the next chapter that the need to move away from "cow power" or even the early form of shell or stone based currency gave rise to the creation of a reference currency based on the creation of coin-based currency and of course new fashion designs to carry those coins. In fact, it was the movement to coins (and the acceptance of purses as a fashion accessory) that forced the move from a tribal society of the Zug's and Gus's to a nation state in which the Kings and Queens to manage their subjects through the '**Power of the Purse.'**

Egyptian Relief of God King With Coins and Newly Designed Purse

But more to the point, the origins of money were based on the fundamental need of men to advance their state of well-being and the fundamental conservation of human value. No Chiseler would have wasted his time carving pictures of cows, mud huts, bows and arrows if they did not fundamentally have value. We also have evidence of the move from a commodity-based currency to a reference currency based on base metal. We have numerous drawings of men and women in togas; however, in the centuries after the first establishment of the cow-based commodity model, we find an increase in jars, containers and cloths with pockets. From this we also know our ancestors had money in some more transportable reference form (probably in shells on a string form). As stated above, the fundamental theory of economics is conservation of value (ok maybe that is physics but a fundamental theory in one area should work in any area if it is fundamental). Well, this fundamental theory says no one would waste their time making purses and clothes with pockets if they did not have a reason for it and more than that a really good reason. Now one might posit that the pockets were used for lots of reasons, but this what reason could be a better reason than to carry "?" around or at least some reference of ownership. But more on this in the next chapter.

Behavior Science and in the History of Money

More to the point, why do we need nine additional chapters when the Zug, and Gus-Morris and Chiseler models of financial theory were well known among their contemporaries? To put it bluntly, after the events discussed previously; that is, after the deluge, Zug's and Gus's descendants got together and decided to try to keep the money within the family. In short the family generally married within the family and thereon and thereon and as in all great families of wealth (the Hapsburgs to some unnamed Royal family in England) the mental aptitude of the Zug\Gus family (who later changed their name to Ipso Facto) deteriorated and the brilliant concepts of their fathers were lost to time. (It took centuries later for a Guy called Darwin to take this whole passing of the genes (not the pants) into account but C'est La Vie (again a chance again to use my French)). With the failure to carry on with the ideas of their fathers, society faced a rapid decline over the next centuries. By that time, they leveled off and they had dispersed across the world it was nearly 9000 years later and while linguistic anthropologists agree that all people in all places started with ideas from "**Aha I Have An Idea**" people, we had to start this whole money thing all over again.

<u>Things to Remember</u>

First, just because you have an idea this does not make you a God. A little bit of humility would be a good thing to take with you on any journey. While it took a few centuries to take hold, our ancestors had this hubris thing fairly well documented. Second, ideas are really tough to come by. How many of us have ever really had an idea (and not one stolen from others). Most of us are lucky if we have one really ‘good’ idea in our whole life. We may have had a few thoughts, but a thought is not an idea. Perhaps that is where our ancestors got off track. Just because Zug and Gus had a couple of good ideas did not mean that all of their following ideas or thoughts were good ones. The shell idea had improvements over cows and stone blocks but its value as a store of value has been on the minds of some of the people of the time. Moreover, an accepted ‘Code’ of Behavior among individuals is always is better than an “Enforced Code” of Behavior by a guy whose name is Hammur Abi (Government Order). But at the end of the day an item’s price must merely reflect its actual relative value (Moral Order) or the item price must reflect its value in the real market economy (Market Order). But for a monetary system to work perhaps one needs all three (government, moral and market order) and that a concentration on one without the others leads to disaster. Perhaps, this had gotten just a little too easy and we needed a little deluge (or later a financial collapse) to clean this out (the shells, the mud huts). At least someone was kind enough to leave us with a few cows. It was back to the beginning.

What You Will Be Tested On:

The Importance of the Letter “I”
Thought versus Idea
Code of Hammerabi
Forward Pricing Model
Darwinian Model of Gene Decline
The Ipso Facto History

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Chapter 4: Metal Coins - The Earliest 'pocket change' Money

Summary Introduction

A central focus of this book is that money, its function, and its form, is a basic reflection of the changes in human society. As a result, in this chapter, we concentrate more on the changes in human activity and the characters involved in those events and their impact on the development of money than on the impact of money in the development of those events. Money, as with most human activities, is a constrained event; that is, its form and function is impacted by the realities of the world around it, the technologies of its age, and the cultures of its time. While money as a theoretical concept does not require money in the absolute, money as a real world exists in a place and time.

For those who feel more comfortable with a money as a functional form rather than money as a theoretical concept , in previous chapters with have detailed the need for money to meet its three primary objectives (store of value, medium of exchange, unit of account). In this chapter we provide a more grounded view of the development of money over time; that is, from the Stone Age to the Bronze Age, to the Iron Age.

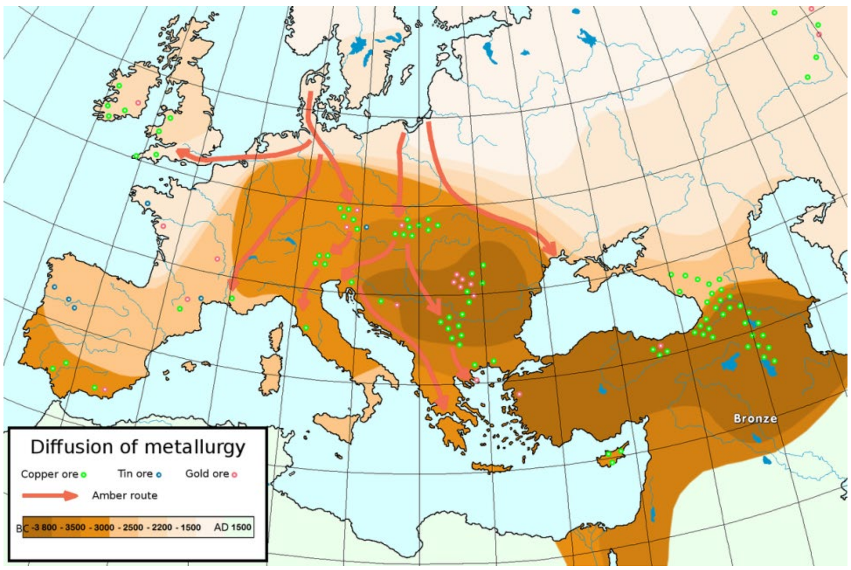
Metal Coins - The Earliest Money

In a popular TV show of the 1980's entitled 'The A Team' the end of the show concluded with "It's Great When a Plan Comes Together". I am sure that after the deluge and the experience of breakage in shell-based coinage or the problems in trying to carry large pieces of stone, the fact that humans finally settled on the use of a simple piece of metal which provided the ease of transfer of shells with the permanence of stone should surprise no one. Now change (except if it is in coin form – and yes that is a pun) never comes easy So I want to thank whoever was sitting around pounding out a bronze pot for cooking dinner and cried out "**Aha, I Have An Idea.**" What was his (or in this case most likely her) idea? Well, he saw the small pieces of bronze he was pounding and suddenly figured out that the time and cost it took to make these pieces of bronze was about the same as the time it took in his previous job (as herder of cows) to raise a cow. Now if one is smart enough to see an idea in a pile of bronze chips one is also smart enough to figure out that people were comfortable with circles and the whole wheel thing. So, he knocked off a few circle shaped metal bronze pieces and put the picture of his oldest daughter (Coinelius). He called them coins, after the name of his oldest daughter.[40]

Early Bronze Coins With Faded Picture of Coinilius

[40] It is important to note that some monetary historians maintain that the whole coin thing with pictures of women on them was due to the fact that they (that is the coins) were payment for certain services offered by the women whose pictures were on the coins. These pictures were the basis for the differential value of the coins offered. The reason that some give for the failure of this particular line of thought is that much of later history was written by church historians who had little to gain by marketing the services of a competing "Sunday Service". I am not taking sides on this debate, and I leave it up to the reader as to which makes more cents (later evolved into sense).

The acceptance of bronze coins as the representative currency by which all commerce was soon to be conducted fundamentally changed the world. The reason for the exploits of the Greeks was not due to their great need to conquer the world, it was simply a search for a better idea of money; that is real money – metal coins. It was all part of moving out of the Stone Age and into the Bronze Age and later the Iron Age.[41]



Metals and Money

[41] According to Wiki, the term "Bronze Age" ultimately derives from the *Ages of Man*, the stages of human existence on the Earth according to Greek mythology. Of these, modern historians categorize the *Golden Age* and *Silver Age* as mythical, but consider the Bronze Age and *Iron Age* historically valid. The overall period is characterized by the full adoption of bronze in many regions, though the place and time of the introduction and development of bronze technology was not universally synchronous.[2] Man-made tin bronze technology requires set production techniques. Tin must be mined and smelted separately, then added to molten copper to make the bronze alloy. The Bronze Age was a time of heavy use of metals and of developing trade networks

Stone Age

Mindful, the Stone Age and monetary systems based in part on transaction systems established during the Stone Age had major impacts on Civilizations. However, for certain societies such as the early Egyptians, who had the stone thing down, showed very little interest in heading out and trying to see if there was something that could replace it. For other societies, especially those who were required to move quickly or often, stone was just too inconvenient for it to remain a primary form of currency.

First Portable Stone Money

This problem is endemic to any society and business. It takes time and resources to create an advantage in a particular course of action. Taking a portion of those resources to create a new mode of activity that would, if successful, destroy that process in which you have a current monopoly expertise is a difficult decision. The eventual collapse of the Egyptian society was due in part that a major portion of their success was based on an early stone based monetary system. For many the early Egyptian Pyramids were really large banks and the smaller ones in front just associated AMTs. Throughout the ages, attempts by many European archeologists to find their way into these stone monoliths were merely false fronts to find their way into these banks. . Even the original Egyptian banks were more in the form of a basic stone block. It did not take long for early bank architects to see the benefit of shaving off the sides (reduce cost) and give the bank owners a nice perch at the top better to survey their holdings (or incoming armies) rather than the original half circles. A little known fact is that the story of Noah and the Ark had little to do with an actual boat but the creation of a floating bank (60 cubits and all that) which would carry both animals and other assets into the next creation.

Early Egyptian Bank (60 cubits by 100 cubits)

Note Deposit Entry at Top

Similarly other societies such as the early inhabitants of England or Denmark and Sweden stored their money in what are today unfortunately regarded as religion shrines (Stonehenge) or the Ales Stenar (burial grounds).

Early Egyptian Banks with ATMs

Stonehenge - Bank Deposit Centers in England (3000 BC)

Ales Stenar (3000 BC) in Sweden: Banks Close to Sea (pre-Viking ATM)

Individual Bank Accounts within Large Bank Denmark (4000 BC)

Later the U.S. put a picture of the pyramid on the front of the U.S. dollar bill to commemorate that very first piece of solid currency (the pyramids). The eye above the pyramid is to remind all that the Pharoses or whoever has the authority is watching over the bank. The words under the Pyramid “Novus Ordo Seclohum” is thought to be a Latin inscription proclaiming the ‘New Secular Order” when in fact it was an advertising sign for a restaurant near the bank and meant “New Orders Taken.” We will see later in this chapter how other misinterpretations of restaurant menus affected the History of Money. This should not surprise the ready. Man is more easily influenced by his stomach than his mind (see the early Greek Epicureans).

Picture of the U.S. Dollar

It was not that the Egyptians did not consider improvements to the stone based monetary system. The improvements in the design of the Wheel and its use on chariots was based on the desire to move their money from one part of Egypt to another. It also was the basis for their religion. Note the Egyptians created a complicated religious system in which the afterlife played an important part. The importance of the Wheeled Chariot in which the wheels were made of stone was merely an attempt by the Egyptians to find a way **‘to take it with you’** in order to pay for the necessities of the afterlife or to bribe yourself into a higher level. Similarly other stone based societies attempted to move away to more commodity (e.g., sheep) based monetary systems.

Egyptians Taking It With Them

Dual Based (Stones and Sheep) Based Monetary System

Their relationship with money of course impacted not only their own civilization but, as hinted at in the earlier chapter, the development of other cultures in the surrounding area. The historical relationship between the Jewish people and money can be traced to the psychological history of the Jewish people having made all that money (who do you think made the pyramids) and then having to leave most of it all behind. For many in early Egyptians, mud tablets (but not mud huts) were an alternative to metal coins. We have very little evidence of the Egyptian dependence on a stone or mud tablet based monetary system since the great floods and various shipwrecks over time have removed much of the stone/mud tablet history upon which the monetary system was based. Similarly, the impact of the loss of their mud tablets (e.g., money) after Moses[42] inadvertently brought the Red Sea back down on the carts holding the tablets and which impacted the Jewish nations future mentality and personality. It was one of the reasons Moses never made it to the Promised Land. Everyone was just so mad at him. This historical event came down through the ages as a reference to body of water (Red Sea) that Moses opened and then closed on all those red mud bricks (or currency) as well as on the mud tablets which kept record of how much the various families were in the 'red' to other families. From that time on, one often hears the phrase '***Awash in Red ink."***

Moses Bringing Back the Red Sea and Destroying Most of the Jewish Savings

[42] Many historians have commented on the resemblance between Moses and Gus the Wheeler Dealer. We have no evidence of a direct relationship but idea men often beget idea men so a linage is possible.

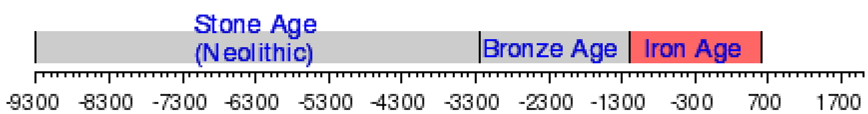
The reason the Egyptians had settled on mud tablets and written cuneiform writing to keep records of commercial transactions is that their earlier attempts at a reference currency was a failed attempt at paper money. Ok it was really papyrus flattened out to look like paper, but papyrus failed to make it through the centuries as a source of paper money since if failed as a store of value as many Egyptians saw their money go up in smoke since the population was addicted to cigarettes and used papyrus for rolling the tobacco into cigarette (note the word papyrus (was a combination of (**pa)** id by **(y)** ou to **us)).** The additional p and the r were added later to make it grammatical.

Bronze Age

It took a while but centuries after the whole Noah thing, humans continued to move up the 'Aha' channel to think of new forms of currency that removed the negatives of earlier stone based attempts (as a medium of exchange it sucked) as well as more liquid shell based forms (as mentioned its lack of permanence hurt its 'store of value' value). The movement to Bronze as a means to make new forms of cooking apparatus was as much a follow up to the creation of bronze-based currency into other daily duties (see footnote on coins as a means to obtain certain sexual services). For centuries, the bronze coin dominated trade throughout the region but over time we realized that society could not advance if it was based solely on bronze-based currency. Coins that could be bent or twisted to meet someone's whim. We wanted and needed more permanence. Fortunately, we were about to enter the Iron Age.

Iron Age

Now it is a little presumptuous to believe that from the time of Zug onward we were not reading and writing but just out there having a good time. It is just that as discussed previously mud tablets have a tendency to fall apart after large God induced deluges. Stone breaks apart when God decides to wreak vengeance on various people or to wreck entire advanced civilizations (the Myneons) and lastly, bronze currency could easily be reformed into pots and pans for bronze ever remain in one form long enough for current historians to believe it formed the basis for any civilization.



Dates are approximate, consult particular article for details[43]

What iron provided was a means of monetary transfer in a period in which we felt more comfortable that we were finally getting around to writing this down and in a form that the knowledge would last a little longer than it took to break a stone, burn a piece of papyrus, or twist a piece of copper. It is now known that Alexander the Great's mission was based primarily on the rumor that someone had created in India had new even more permanent form of capital – the solid metal (often gold) or an iron-based coin. It was well understood that it was only after the move to iron-based coins that human civilization really took off. According to Wiki, "In historical archaeology, the ancient literature of the Iron Age includes the earliest texts preserved in manuscript tradition. Sanskrit literature and Chinese literature flourished in the Iron Age. Other texts include the Avestan Gathas, the Indian Vedas and the oldest parts of the

[43] Let's face it, who do you trust if they don't.

Hebrew Bible. The principal feature that distinguishes the Iron Age from the preceding ages is the introduction of alphabetic characters, and the consequent development of written language which enabled literature and historic record.[1]

It is, however, hard to keep a secret especially when the secret of the secret is that there is now a way to communicate globally. Like all of us if we find something really neat we want to tell others. As discussed, this is especially true when the thing we have invented is a way to tell people that we invented something. Of course, there were immediately secondary effects. When people start bragging about one thing they often start to feel full of themselves and start bragging about other things, like guess what I have that you don't. Examples include; I have some really neat looking coins and a great way to make them. This message eventually made its way to Greece which had a lot of stuff but not that much gold. So as common place throughout history, if you have a large army and no way to pay for it, one has limited choices. You can reduce the size of your army or increase the size of your ability to pay for it. One notable Greek chose the latter.

The name of the guy was Alexander the Great. It is not the fact that Alexander was all that "Great." Before Alex (as his friends called him) there was Jim the Magnificent and Ralph the Better than Jim. It is only that Alexander made it all the way to India and supposedly put his picture on the first iron coin that he found there that he is known today as "Great" rather than Alexander the "Pretty Good". In fact, the first visage on the first gold coin was not even that of Alex but a picture of his "best" friend Bill. In truth, Alex was one ugly man, I mean butt ugly. One of the reasons we generally see him with a helmet on was that he wanted to cover up a really bad hair transplant. This and that fact that he knew the importance of image in a good marketing campaign. He knew he was no 'Charlton Heston' and as a man who understood history he felt that his accomplishments would be better represented in the future by someone like Brad Pitt than a Danny DeVito.

In addition, it is well known today that Alex had a thing for men, and he had to buy Bill's silence some way. Using coins both as bribery and as a way to insure one's long-term place in history books came from these early Greek coins. The Romans just did this one step better (stealing as they did everything else from the Greeks) by making more of them with many more pictures of themselves. One of the reasons for the eventual success of the Roman Empire over the Greeks was that the world of the time (really just a small patch of water) was much more accepting of Roman coins than Greek coins. One reason for the success of Roman coinage was that the Italians to this day are simply better looking than Greeks. If you had to carry these coins around with you and look at them on a daily basis, what would you use? The Romans also benefited from the cost of production versus the real value of the final coin because people paid a premium for holding coins with picture of better-looking people.[44] Some of these coin visages were simply false. However, most of the people that the Romans conquered over the years believed that the Romans were superior because the people on the coins just looked better. Rome constantly had to change emperors as they got old. The reason was simple. They had to replace the sagging visage of the old man with a younger more vital version.

[44] The ability to sell a coin for more than it cost to produce was essential to the use of metal coins. Coins did not fall out of the heavens like manna. You needed a 'coin maker' do melt down the metal (metalsmihting) and to put the required stamp on it. This difference in the cost and the value of the coin was known as 'gross profit'. This difference in value versus cost is today known as seinoirage which was a middle age French term for the money the serfs paid to the lord (value versus cost). It is a great word. As discussed earlier the evolution of coin making or to this day "paper money' making has evolved into what color to use and what face to put one it. In the future I expect even greater marketing possibilities (e.g., coupons as transferable value).

The impact of the growth of coins as the primary means of money exchange had other political and social impacts. The story of Jesus and the Temple where he threw the coins at the money changers would have been much less impressive if he was reported as throwing paper money. Ok. Time for a sidebar. This book contains very little on the role of Jesus in the history of money. There are several reasons for this.

First: I like my life and anything I say could but some sort of religion edit on me that forces others never to talk to me or to go out and kill me.

Second: As I have often said 'None of Us Were There" and the written records are at best sketchy.

Third: We know money had an impact on his life (he was born in a stable because his parents had so little and any psychologist may take this as a basis for Jesus long term concern over money and its place in society) but since we have very little record of his upbringing it would be presumptuous for me to speculate.

Fourth, his stepfather (Joseph) was tick off when he wanted to give up the carpentry business when Jesus was twelve but who wouldn't . In certain ancient texts, Jesus left to set up a union of carpenters which was the start of his social efforts. Later he would try to unionize fisherman and money changers in the temples. While not emphasized in most texts, it was these unionization efforts that tick off the Synagogue and Roman authorities.

Fifth: He fed a lot of people with twelve loaves and fishes. These were not the primary form of currency of the day. Many individuals, but especially the money changers were more than concerned over his ability to modify current monetary forms. There is a whole book on the role of money in Jewish society, but we leave that for the next section (see below).

Sixth: We know he got ticked off at money lending in the temple but give us a break. Today churches raffle off about everything (I remember the Catholic Church in Cologne Germany with a drawing for a Ford parked outside of the church with all of those who came to the service getting a chance of winning). So, in this case, Jesus was a little off the mark. You have to get them in before you can convert them.

Lastly, whatever his true feelings we do know that he supposedly said, "Give unto Caesar the things that are Caesar's and Give unto God the things that are God's". Ok but since gold and other metal coins of the day were original made from God's earth, I am sure that there is some contradiction in terms here that even worried the Romans. Of course, as discussed earlier the Jewish people had a long but contentious history with money. I am sure that an arrangement could have been made but we all know how this whole thing ended. It ended badly for Jesus and eventually the Romans but it opened up a whole new world (here and beyond) for everyone else.

Now back to the story. Again, Wiki points out that "The shekel was an ancient unit[58] used in Mesopotamia around 3000 BC to define both a specific weight of barley and equivalent amounts of materials such as silver, bronze and copper." The concept of shekel grew from Zug and Gus having to 'Shackle the cows' together on their trips to their Red Sea Resorts.

Now the previous description as to the source of the rise of coins is not without controversy. It should be pointed out in the Wiki history reference "that in another version the oldest coin currency that we know is a Sumerian bronze piece dating from before 3000 BC.

> On one side of the coin is a representation of a sheaf of wheat, and on the other, Ishtar, the goddess of fertility. The Sumerians called it the "Shekel" where "She" meant wheat, "Keel" was a measurement similar to a bushel, and hence this coin was a symbol of a value of one bushel of wheat. (The word "shekel" of course survives in Modern Hebrew as Israel's monetary unit.)"

The Wiki discussion continues that:

> "The original shekel had as its purpose payment for sacred prostitution at the temple of Ishtar, which was the temple of life and death. The temple, as well as being a ritual center, was the storage place for the reserves of wheat that supported the priesthood, and also the community in lean times. So, farmers fulfilled their religious and social obligations by bringing their contributions of wheat to the temple, and receiving in exchange a shekel coin, entitling them to a visit with the temple prostitutes at the festival time."

Now since this is a family book and it is not my purpose to bring sex and money into the discussion just to sell books (although the video is for sale) but if you need coins as a means of value transfer there is nothing wrong with putting a good looking girl or guy on the cover (see previous discussion on Alexander the Great).

In addition to the tanning salons of Zug which were helped by the increased use of coins, coins always led to an increased urbanization of the area and the increased power of Rome. The reason was again simple, coins are hard to run with. It was much easier to simply accept Roman rule and agree not to try to run from one place to another when you had to carry a bunch of coins with you (As a sidebar, the Jewish people would have made it to the promise land a lot quicker than 40 years if they were not hauling around a bunch of mud bricks). As important, if the Romans ever fell from power what would happen to the value of the coins they owned? Of course, the Romans forgot one thing from the Alexander the Great thing. If individuals cannot carry it with them they have the tendency to go where it is. It was in fact the rise of coins that led to the collapse of the Roman Empire. The Vandals, Goths, and the Huns came from areas where there was little usable metal or the ability to make coins. So in the great history of Alexander the Great, they simply went to where it was easy to steal it.

Gold and the Evolution of Money

The final story in the importance of coin as the reference currency was found in the final splitting of the Roman Empire into the Christian and Non-Christian areas. Muhammad in about 600 AD had come to realize that while he had a great book and a great story but he needed some money to promote both. Unfortunately, he had a lot of sand but he had very little metal. His problem was similar to that of people who knew that coins ruled the world and he had to put together an army to get it. The importance of a coin-based reference currency in Muhammad's world is illustrated in the long used comment that if you cannot have the mountain (money) go to Muhammad; Muhammad has to go to the mountain (where the money was). In fact, at this time, Muhammad used a more time tested approach to finance his mission; he married it. In this case his first wife, Khadija bint Khuwaylid capitalized his efforts. While not the focus of this book, the concept of women as a source of money for the future entrepreneurs as part of the concept of 'dowry' was an essential part of the history of money.

Muhammad (Man with a Mission)

The centuries of warfare between Moslems and Christians that followed the collapse of the Roman Empire, were basically about Muhammad and his followers trying to get their hands on the money that the Jewish people had taken with them from Egypt. After the Moses thing, the Jewish people had lost a little of their faith in mud tablets and decided to concentrate on something called gold. They even attempted a new monetary system which melded (or melted) the commodity money of Zug with a new metal-based system based on gold and called it the Golden Calf, but they got message to get rid of the commodity part (or face another deluge) and from that time on the Jewish people concentrated on the gold part.

So, the Moslems immediately took off for Jerusalem. Now the Christians were just as interested in gold coinage as Mohammed's followers. So as soon as they heard that Mohammed's followers had taken off for Jerusalem they too tried to set up camp there. The Moslems also headed out to Spain in an effort to garner gold, but like most greedy people they let their hearts get in the way of their minds (sorry for the attempted pun). In any event they set up shop in Spain waiting for

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the Spaniards to do their gold thing but that took place centuries later and is discussed later in Chapter 9 (Fool's Gold). While many historians try to make the various Crusades part of some religious fever, in fact it was the Catholic Church as well as the Moslems trying to set up some financial institutions to manage gold and other precious metals found there and to finance this monetary system by simply promising to pay their financial emissaries (e.g., soldiers) with a straight path to heaven if they died in the effort.

Looking back at it, this whole gold coin thing cost a lot of human lives, resources, time, and effort that could better have been spent on coming up with some additional 'Ahas'. One generally looks at the principal idea and fails to consider both the costs and the benefits of the secondary effects (Crusades, Black Plague). Fortunately, we were about to have another "Aha' in the History of Money.

Things to Remember

It often takes time to move up the food chain or in terms of this book the monetary chain. However, this chain is easily broken. A deluge here, barbarian rampage, a religious movement and there we are, trying to put that chain back together again. Here is the good point. Each time something is broken we learn something of value as to what works and what does not. A monetary system built on Government order only lasts as long as there is a Government. A monetary system built on a moral order only works if someone is moral or if we all agree on some type of moral constraint (e.g., gold). Lastly a monetary system build on a market order (we trade what we need and for what we need) only works if one has a defined market. If you can't go to market because something or something is getting in your way, the market as a way of monitoring or determining the monetary exchange collapses. As discussed in the next chapter, when things are not going well it can always look bleak to the current participants, sometimes almost dark. Perhaps as discussed in the next chapter, there were attempts to light candles of monetary change even in the periods of darkness. Remember, it is often 'Darkest before the Dawn.'

What You Will Be Tested On:

Bronze Age Versus Iron Age
Alexander the Great
Attila the Hun
Mohammed
Shekel

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Chapter 5: Paper Money

Summary Introduction

Today, for many young people paper money is just history, but since this is a history book what is more appropriate than a chapter on paper money. Now paper as a physical object had existed for centuries before its evolution into its use as paper money. For example, it had been used for centuries in the production of kites in China before knowledge of its use made its way to Istanbul. From then on, the history of paper money is a story of chance, of disasters, of intrigue and the interaction of between man's entrepreneurial spirit and the opportunities of paper money in creating personal wealth and economic value. The question has to be asked why did it take almost a century from its creation before its use as a monetary vehicle. We will see that there are many reasons but by about 1200 AD paper had made its way to Istanbul where Zug and Gus's families had taken residence. It is also the place that Marco Polo took up residence until he returned to Venice with some of the first paper money (really a form of credit note). In Venice things were also changing. But why change unless there is a real driving force. Now there are a lot of driving forces (global floods) but since this book is about the history of money and man's participation in that history, we are concentrating on the role of man and money as part of the driving force.

So, from a people's perspective a driving force is normally something that pushes them in a particular direction. First, if you finally got your hands on some money (normally the gold form) and like Zug and Gus you were afraid to send it out on the road so why not simply write a note stating that this note references something of great value back in Istanbul. Well, if Zug and Gus could do that why not others and of course others did (the Medici's etc.). Ok that is one reason for the rise of what we call "bank notes" written on what we often call today 'note paper." But it is always good to be a driving force if there is something also helping with the pushing. With the rise of city states (e.g., Florence, Venice) people got tired of sharing. To get what others wanted often took force. Force required new means of inventions. We were moving to a period of 'new ideas' including new weapons such as cannons. These cannons made out of bronze and other metals previously used as the basis for money. We needed a new form of money, money whose value was written on something other than metal maybe something on paper or "Paper Money". Now as discussed later, this did not mean all metal based currencies disappeared. Paper money (primarily bank note form) was still relatively rare and since it cost to insure its value (you had to have a fairly large army to insure that people trusted you that the real gold was safe) one generally wrote this form of paper money only for large values of exchange. For smaller monetary denominations, one needed a metal a so rare it could and would not be used in warfare and that in really small sizes still provided a level of monetary value; that is something like gold. We still had a way to go but we were on a roll. History is really a series of connections. As discussed in this Chapter, the rest is history.

Early Paper Banknote

The Story Behind Paper Money or Gold for that Matter

Of course, the demand for either paper money or gold did not come out of thin air. For centuries various groups of so called barbarians (Attila the Hun, Alaric the Visigoth) went on their warring and wandering ways looking in part for what we today call money. Attila and all those guys actually got their hands on the coin based money but, they ultimately did not know what to do with it. This crowd had to move quickly and being laden down with heavy coins did not help when you were chasing or being chased. One of the reasons Attila and other of his ilk did not stay around Rome after sacking and pillaging but quickly moved on (generally west to Spain) is that they had a lot of horses to feed and had to find a less advanced nation for which grain rather than coins remained a primary means of transactions. So, what did they do with the 'coin' money'? They simply buried it.

Unfortunately, they often could not write and they had no way of keeping a record of where they put it. In short except for a few coins left in shipwrecks we would have no history of what coins existed at the time. But with the fall of the Roman Empire the power of government order declined, and a new moral order (Catholic Church) rose. Note that while the rise of religion as the dominant force in mankind after the fall of the Roman Empire did not destroy the market in for money it did reduce its development. Of course, if there is no money then there is no commerce. If there is no commerce there is no trade. If there is no trade there is no reason to send a message via the semaphores that Rome had set up throughout Europe. These semaphores used fires on top of mountaintops to send messages[45] all the way from Rome to Hadrian's Wall

[45] For a greater discussion of this point see footnote 38. In that footnote we explore the importance of technology in the development of communication and the evolution of money. The use of the Romans of binary code to sent messages (0 is A, 1 is B, 01 is C, 11 is D, 00 is E, 001 is F ….) predated computer codes similar messaging systems.

in England. The fires were used to send early 0/1 binary messages like, sell English Beer Short. With the collapse of commerce, trade, and fire-based semaphore communication across Europe, the land soon fell dark. **That is why they called it the Dark Ages**.

If there is no communication between people, then people are just staying at home, sitting around in the dark waiting for something to happen and waiting for someone to say, “Aha, I Have An Idea.” As a short sidebar and pointed out previously, this period was not all that Dark in that there were small moments of light. Production of candles did increase, and people did go out once in a while to meet others if for no reason that to trade a cow for a wheel etc. But this harkens back to the days of Zug and Gus. At various times of the year, people might even leave their homes to meet at a predetermined area to trade amongst themselves. Unfortunately, this only happened every now and then and that is why they were called “annual festivals’. It takes more than a few ‘let’s get together parties’ and a few financial institutions run by men called ‘Templars’ (Banks were later thought of as the Temples of Money) to move a whole society forward. It needs crazy people doing crazy things and coming up with crazy ideas.

Crazies in the Dark Ages

Now the Dark Ages did not last forever. Kids are kids and sitting around in the dark is really dull. It just took about a thousand years for one of these teenagers to get sick and tired of living in the dark and decided to take a trip east. Why East? Because that is where the action was. Consider Istanbul the New York City of its day. It was where things were happening and where one could meet cool and interesting people mostly in what we know today as Turkish Baths and Tanning Salons. Even after decades of human history, Zug Tanning salons were known throughout the known world (many ships carried a 'William Morris' ad for Zug's Tanning salons on the side of the ships as the family still kept in contact after all these years) and the best tanning salons were in the Near East. In reality they were not that close, but certainly they were closer than the Far East.

Often historians fail to consider the 'geographical prejudice' inherent in the concepts of Near East and Far East when in fact a broader view of the world may have seen Zug's tanning salons was being in the Far West, and Hadrian's Wall as in the Near West, but Zug was nothing if not a good marketer. His pictures of the sun rising and men with their arms open toward the sun have often been misinterpreted as our ancestors worshiping the sun instead of them just out there trying to get started on a good tan.

But Zug and his family were not the only folks trying to move forward in a "cash' restricted society. This may surprise many but by the 11th and 12th century things were getting better. First people got sick of killing one another whether it be by Moslems in the Middle East or Vikings in Europe, or Mongols in Eastern Europe. Second, the Catholic Church itself was in favor of moving away from the restricted barter-based society to one in which various forms of money either in silver and gold coinage dominated. Increasingly the Church was losing control of its members in certain geographical areas. What it could do was almost force people to show up on Sunday or at least after sunset on Saturday and decide to strike when the iron is hot. In short, ask for money. At this time, we find evidence of the first collection plate and of course there is no advantage to pass around the money plate in Church if there is no money. This of course led the Church down a dark path of needing and wanting more money which led to the later decision of selling indulgences which led to their need to change their views on the importance of money in society (render to Caesar) as well as in religion (render to Gods).

Church Collection (Money Basket) of the 1300 AD

Now if the Church really knew the secondary impacts of its actions, it may not have pushed this collection basket idea or as we will see later these whole indulgences for money thing. But the Church's getting money for insuring ones 'future life' soon encouraged other institutions, who had the power, to send out their own collection baskets (see section on taxes in the IRS in Romania) to insure one's citizens current life. When one opens up a door we simply often do not know who else may follow.

Second, people were finally finding a way to feed themselves (the clearing land cultivation of new land and the spread of the three-field rotation system; technological innovations like the heavy plow and the horse collar). Once your stomach is full and you have a chance to sit back and think (or smoke something), crazy things can happen. One can even start seeing patterns in things. By the 13th century, even concepts as well known as π[46] (Ok admit it you had no idea what this symbol meant. Just a reminder of how much wiser you are going to be after reading this book) were undergoing a transformation. For example, an individual, Madhava from India (an old friend of Alex), used a new form of algorithmic based infinite series to estimate π to 11 digits around 1400. In short, people were spending time on things that already worked (the world had ways of calculating π since the before coins (B.C.) period) but they thought they would find ways of doing it just a little bit better. This is important. Again, this is important. People were slowing thinking of things more than just how do we keep things going as they are but how can to get things going differently than they are.

Once people start to think of how to change or improve things that already exist it is a small step to think about things that never really existed before. For example, a guy named Leonardo Pisano Bigollo (c. 1170 – c. 1250) – known as Fibonacci, and also Leonardo of Pisa, Leonardo Pisano, Leonardo Bonacci, Leonardo sat down one day and came up with a way to create a repeated series of numbers based on a mathematical formula in which the next number is the sum of the previous two: 0, 1, 1, 2, 3, 5, 8, 13, ... –

[46] OK let's not embarrass our readers on forgetting their fifth grade math test on circles, diameter, and circumference. Just remember 3.14….. and you will always sound like you remember even if you do not.

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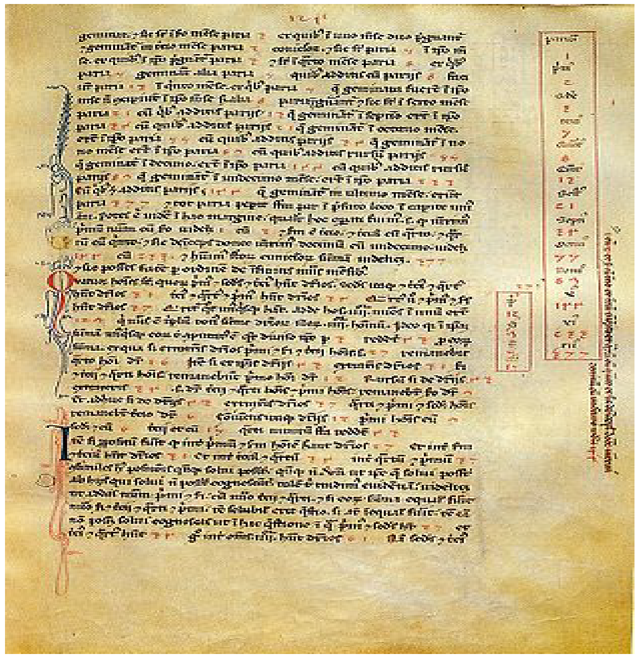

A page of Fibonacci's Liber Abaci from the Biblioteca Nazionale di Firenze showing the Fibonacci sequence (in the box on the right)."

Now It is not the purpose of this book to recount how individuals have expanded this Fibonacci series to describe many patterns that can be seen in many aspects of nature (the golden ratio) but in how coming up with a meaningless set of repeatable numbers may seem meaningless but is in fact unbelievably meaningful. Here it is, only in a period in which one can do really meaningless stuff (like a tanning salon or casino in 10000 BC) can one really move society forward. As a sidebar, Fibonacci also did some really cool stuff. In the *Liber Abaci* (1202), Fibonacci introduced the so-called *modus Indorum* (method of the Indians), today known as Arabic numerals. The book advocated numeration with the digits 0–9 and place value. The book showed the practical importance of the new numerical system by applying it to commercial bookkeeping, conversion of weights and measures, the calculation of interest, money-changing, and other applications.

But for the purposes of the history of money, what was important was that one of the individuals who picked up his book was one Marco Polo. Now Marco grew up in the same town as Fib. He had heard the story of how Fib had traveled throughout the Middle East and where Fib had supposedly come up with some of his ideas. He also knew that Fib himself did not claim ownership of these ideas but that they came from other people (at this time using one's own name to promote new ideas was a little risky). This using another person as a pseudonym came later to be known as the DeVere Postulate (17th Earl of Oxford who some people say really wrote the plays now cited as Shakespeare's works). Even more important, Marco saw in the Fibonacci series a way to break the bank or Zug's casino.

Marco Polo

Now as discussed briefly in the previous section there existed at this time a young Italian who was certainly not of the religious kind but was looking for a good time and a good tan and for him it always made more sense going to where the sun simply rose than where it fell. Today it is known that this gentleman (known as Marco Polo) never went any farther than Istanbul and Zug Tanning Salon. But never mind a story is a story and it was believed by all his contemporaries. First of all, he did come back with a great tan. It had to come from the only place where tan people come from (the Far East). The entire attempt by Columbus to find the Near West rather than the Far East was simply an attempt to find a place to get a great tan quicker. Imagine his excitement when the first people he ran into had great tans. Even to this day, many 'Non-Tanned' (or Zug's white skinned progenitor from the Caucuses (Caucasians)) people take pilgrimages to the "West Indies' to get a 'Great Tan.'

But in addition to a great tan, Marco did come back with another great idea. Note these were not his ideas. They were stolen, Ipso Facto, from the sons and daughters of Zug and Gus. While the decedents of Zug and Gus were not as inventive as their ancestors they still showed evidence of idea ship. These ideas were driven in part by their gambling casinos and included ideas such as "Numbers" and not just any numbers but numbers with zeroes and negatives in them as well as concepts such as addition and subtractions and division and multiplication. Now for centuries, most Christians and Moslems alike had not promoted these ideas. One reason for this is simple, both Christians and Islamic had prohibitions against gambling. The farther East one went the less the prohibitions. Gus and his family had moved most of his gambling resorts to just outside of Turkey and around the Black Sea (hence the monetary concept **"In the Black"** or if one spent too much time and money in the tanning booth **"in the Red."** (It also led to the rise of roulette which has two colors; Black and Red).

Colored (Black and Red) Roulette Wheel

Well, Gus and his decedents had to develop an entire set of accounting and mathematical ideas to promote and manage their casinos. Probability theory as well as the use of addition and subtraction and the inclusion of zeroes was necessary to gambling then as today. These are ideas that today every third grader knows but this is 14th century Italy. Marco was gone for a good two years and unfortunately while he had a great tan he was a lousy gambler. In short, he owed a lot and a lot to a lot of bad people. His answer, open up gambling parlors in Venice.

Marco Polo With Tan

One thing was in Marco Polo's way. Zug's and Gus's family, Ipso Facto were not so stupid as to let Marco leave with real coins. So as a means to finance his new venture they gave him a piece of paper which they had designed from a trader from China who used paper to create 'paper kites'. These kites had pictures on them to distinguish one kite from another. Zug figured that he could put his picture on it and use it both as proof of a contract based on real coins and as a means to market his tanning salons and casinos. Paper provided a means to all previous problems: It was easily transferable; one could easily change the picture on it (Zug's family put pictures of some of their Girl's (or those who offered a certain 'tanning' service) to promote those services. This idea was later expanded as 'discount coupons' in the 14th century). One did not have to carry coins, but paper money as discussed previously as evidence of a claim on those coins.

Marco Polo's Notes on Paper Money

Moreover, this whole coin thing was getting a little old by now. Of course, all else equal, coins (mostly bronze and iron) were regarded as superior to paper, but as mentioned earlier with the rise of city states, people got tired of sharing. To get what others wanted often took force. New armies required new means of weaponry. Cannons made out of bronze and other metals previously used as the basis for money. As discussed earlier, we needed a new form of money. Money based on a metal so rare it could and would not be used in warfare (gold) and as important could be used in small amounts to provide small coins with value[47] or a money based on a material that would always make a poor weapon; that is, paper as well as provide evidence of higher levels of monetary ownership which was just too big to be hauled around as gold. [48]

[47] During the Renaissance, the city was literally the golden source of money. The florin – the little gold coin that takes its name from Florence, minted there from 1252 – was the most trusted currency in Europe. On the back of the florin, banker dynasties flourished in the city for three centuries. The word *ducat* is from Medieval Latin *ducatus* = "relating to a duke (or dukedom)", and initially meant "duke's coin" or a "duchy's coin".[1]The first issue of this type of coin is thought to have been under king Roger II of Sicily, who was also the Duke of Apulia and who, in 1140, coined ducats bearing the figure of Christ and the inscription, *Sit tibi, Christe, datus, quem tu regis iste ducatus* meaning roughly "O Christ, let this duchy which you rule be dedicated to you." This seems to be a reference to Matthew 22:19-21. The ducat was introduced by the Republic of Venice in 1284, with emblems featuring the Doge of Venice kneeling before St. Mark on the obverse, and Jesus on the reverse. This Venetian ducat was a 24-carat gold coin. It was called ***ducato*** in Italian, although the same coin was later called a *zecchino* in Italian. During the Late Middle Ages the pure gold ducat gained much popularity, as it was easy to mint and packed a large value into one relatively small coin. Several cities and small states in Europe issued multiple, single, and fractional ducats. The standard coin was adopted in Hungary, and for a long time all foreign coins bore the name *Ongri*, "Hungarian" in Venetian, as Venice was where the trade of the world at this period was concentrated. Ducats did not become popular in Germany until a later date.The Golden Bull of Charles IV gave to all members of the empire the privilege of issuing gold coins with any stamp they chose, but only gold guilders, equivalent to the florin. Ducats became a standard gold coin throughout Europe, especially after they were officially imperially sanctioned in 1566. The ducat remained sanctioned until 1857. There was also a silver ducat minted in many European nations. The Royal Dutch Mint still issues silver ducats with a weight of 28.25 grams.

[48] This is not the only time forms of money were changed due to warfare. In the U.S. due to wartime needs of copper for use in ammunition and other military equipment during World War II, the United States Mint researched various ways to limit dependence and meet conservation goals on copper usage. After trying out several substitutes (ranging from other metals[1] to plastics[2]) to replace the then-standard bronze alloy, the one-cent coin was minted in zinc-coated steel. This alloy caused the new coins to be magnetic and 13% lighter.

Secondly, people were ready for a change in their personal life also. Italian clothing was designed to meet the needs of the money of the day (cod pieces were not evidence of a man's physical endowment but his monetary worth (where do you think he kept his roll of coins). Of course, the bigger the roll of coins the more impressive is the cod piece. Cod pieces were a simple way for individuals to display their "Personal Wealth" if not their "personal wealth". Paper money permitted wealth to be displayed in other ways, such as a bigger bank account rather than having to carry it around with you.[49]

Marco Polo's return and his introduction of paper money in Venice not only resulted in a personal "Rebirth" but in a Rebirth or a Renaissance for the entire culture (A term which later became to reference the two or three centuries following Marco Polo's return). The biggest problem with paper was that it was not easy to create (calligraphy was big but not that big). In some ways this was an advantage. Bringing paper to Istanbul from China was difficult and from Istanbul to Venice was not easy. So, Marco's family wanted to control its production. To this day Italian paper is regarded as the finest of its kind. Of course, paper money is not the whole story since paper could be produced anywhere. But one day Marco's son known as Marco's son was playing with some early Venetian Paper Script. It looked something like this

[49] On a personal note, the rise of bank accounts provided the same evidence of wealth as the 'coin' based cod pieces. For example, recently at a convention a short rich man was turned down by a young women because of his height. His response was that if he stood on his wallet he would be the tallest man in the state. I saw him later with her.

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Now Marco's son was a bit of a sports fanatic which is those days really mean betting on things like men dueling with swords. He even became an "agent" for many of the best sword men of the time. Being their agent meant making sure that the duelers were not being taken advantage of personally or financially. One day when he was making out the daily dueling sheets Marco's son (Deloitte) turned the Script on its side and the idea of 'Double Entry Bookkeeping" was created. A friend of his (Ernst the Younger) then reversed it one more time, and the idea of "The Bottom Line" was also formed.

Soon an entire industry was formed with the sole goal of moving numbers above and below or to the right and left of those lines in an effort to keep score or to determine who won or who lost. It did not take too long before an entire industry was formed. Soon firms such as Ernst and Young which were formed from his friend and his friend's son (Ernst and even Younger) in which they used their knowledge of the use of lines and numbers to become agents not only for dueling sword men but a whole host of other individuals (ship owners, traders, bankers) and to determine the winners and losers of other business duels.

Now a single good idea (paper money) is great. The two great ideas (paper money and numbers) are noteworthy **(pun intended)**. Three ideas (paper, numbers, and double entry bookkeeping) create an industry. For the first time in history, one could easily keep a record of who owed what to whom. No more having to rape and pillage to take what was yours just because someone said they did not have a record of it. Of course, there were impacts. First, city states started to take over. As long as you had an army big enough to protect the books (government order), you were in. It also was the period that some of the first 'western' banks (or at least west of Turkey) were created. The Medici Banks began to keep track of who owed what to whom (which was primarily them). This paper money issues as proof of one's deposits are at that bank. However, its value to others depended in part on how others viewed the word of the Medici. It is for that reason that the Medici took such efforts to keep their image pure and other bankers attempted to destroy it.[50] Lastly, the rise of paper, numbers and double entry bookkeeping also promoted a market based order on the monetary system. It also gave rise to today's well known truth. **THE PEN IS MIGHTIER THAN THE SWORD.**

As a sidebar, Marco Polo and his family move into the accounting and banking area did not only open up job possibilities in Italy. It is little known that Marco did not immediately go to Italy from Istanbul but passed through Romania on his way home to meet an old friend called Ivan. Ivan was looking to branch out from his family business which was to make sure that the Kings of Romania received their proper taxes. So when Marco put together this accounting idea he wrote to Ivan that maybe he would like to use this idea as a basis for a new firm. Ivan thought this was a great idea and set up shop doing people's taxes and turning that money over to the authorities. Soon Ivan had extended his business services to areas such as Slovenia in order to be closer to Florence. He renamed his firm IRS (Ivan of Romania and Slovenia). It did not take long before someone got ticked off about the services he thought he was receiving from Ivan and wrote above his office's door: IRS Sucks.

[50] They fostered and inspired the birth of the Italian Renaissance along with other families of Italy, such as the Visconti and Sforza of Milan, the Este of Ferrara, and the Gonzaga of Mantua.

Ivan of Romania: President of IRS

Now year later in the late 1800 hundreds an Irishman by the name of Bram Stocker who had graduated with honors as a B.A. in Mathematics and was active as an auditor of the College Historical Society had a run in with the local tax men. Sick and tired of trying to keep a failing theater alive he thought he would get into the publishing business. He was also familiar with Romanian folklore taken several trips to the area. Being an accountant and businessman, Bram had many friends in the industry and stay with them during his trips to Romania. It is here that he heard stories of many of the locals considering accountants and especially tax accountants to be nothing better than Blood suckers. So much so that the tax accountants feared going out during the day and spend much of their time indoors. This resulted in their pale skin and sunken eyes. Soon after his most famous book 'Dracula' was written. While there are many theories as to the source of his character Dracula from Vlad the Impaler onward; it is from Ivan's bloodsucking IRS tax and financial accounting firm that the Dracula legion really sprung.

Bram Stocker's Romanian Friend and 19th Century IRS Agent

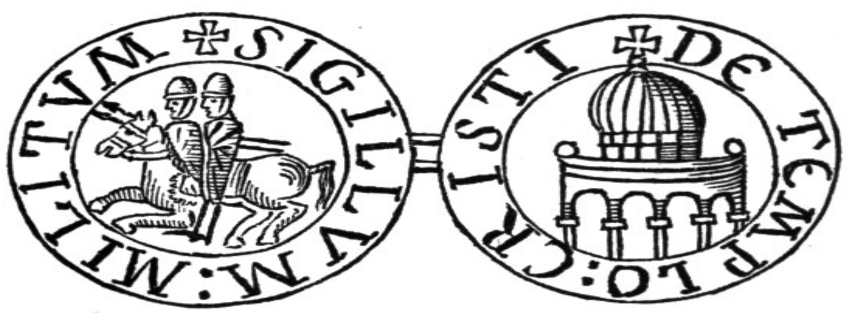
The Renaissance and the Rebirth of Money

Change, however, does not come easy. Gold and paper were increasingly becoming the desired forms of currency. But gold had its shortcomings. It took days if not weeks to move it from Individual X to Individual Y. At most, a stack of coins could only be moved three to four times a year amongst individuals, so at most the same stock of money could only be used four or five times a year and if you saw someone bent over from the weight of all that gold, it was a great invitation to rob him. That limited the number of new ideas that could be financed in any one year. New forms of financing were required. Despite the rise of banks in the period, new ideas without financial backing soon become old ideas without financial backing. In contrast, the ability to transfer paper money from one individual to another led to the rapid increase in thought and new forms of architecture, medicine, and farming. The rapid movement of money (V) combined with the actual stock of money (M) led to the demand for this and the beginning of the "REBIRTH OR RENAISSANCE" of most important concept in monetary theory:

MV = Demand for Stuff.

If everyone had an idea of the power and the problems created by the left hand side of the above equation, they probably would have prohibited the development of new forms of currency including paper money (OK, we have said it before, it still would be a while until we started handing out paper money like tissue paper so for the foreseeable chapters when we say paper money we really mean bank notes in various forms which showed evidence of ownership of what was typically called real assets (gold, ships etc.) held by the bank referenced in the note. Of course, these notes could be passed around and sold at discount to others but even this was difficult if for no other reason that you had the "Church Police" still active in the economy. As we discussed earlier, most Christians had passed the management of money to the Jewish people who had no restrictions on its use because they were still pissed about losing it centuries before. But even they had taken it a little too far, so it was time for a change (money for a pound of flesh was not where the world was going despite Shakespeare's writings).

Paper money, however, required a means to manage its management and ownership. However, much of the quantity of money was controlled by Rome and the Catholic Church. Since they already had all they needed (simply by taking it from their parishioners in the Sunday collection plate) there was very little interest in developing the idea. As important, this seemed to be working out well. As mentioned previously, the banks, known as the Bank of the Templars, that the Church had set up in the Middle East provided a means to transfer money across all of Europe. These banks' practice was to take in local currency, for which a demand note or coin would be given that would be good at any of their castles across Europe, allowing movement of money without the usual risk of robbery while traveling. Moreover almost 10000 years after the Gus-Morris forward pricing model, forward pricing contracts came into existence in which the price of an item could be delivered somewhere else in the future but the price would be determined today. In the following centuries, the use of such contracts grew rapidly, particularly since profits from time differences between when something is promised and when it was delivered were seen as not infringing against usury.



Early Templar Currency

This whole usury thing was a problem. It is hard to move an economy along if no one can charge for lending money for risky projects. For the Christian of the day, this conflict was of little direct importance since getting to heaven was certainly more important that making it on earth. The Jewish population, of course did not have this problem since for them the afterlife was clouded in mystery. As Wiki has pointed out:

> The Jewish trader performed both financing (credit) and underwriting (insurance) functions.[51] Merchant banking progressed from financing trade on one's own behalf to

[51] Financing took the form of a crop loan at the beginning of the growing season, which allowed a farmer to develop and manufacture (through seeding, growing, weeding, and harvesting) his annual crop. Underwriting in the form of

> settling trades for others and then to holding deposits for settlement of "billette" or notes written by the people who were still brokering the actual grain. And so the merchant's "benches" (*bank* is derived from the Italian for bench, *bancah*, as in a counter) in the great grain markets became centers for holding money against a bill (*billette*, a note, a letter of formal exchange, later a bill of exchange and later still a cheque).These deposited funds were intended to be held for the settlement of grain trades, but often were used for the bench's own trades in the meantime. The term bankrupt is a corruption of the Italian *banca rotta*, or broken bench, which is what happened when someone lost his traders' deposits. Being "broke" has the same connotation.

For the most part the world was ruled by the moral authority and the government order of the church. Moreover, the market had created within that context a workable set of processes. But things were about to change. Not only did Marco bring some good ideas with him to Venice from Istanbul, the paper he also brought with him offered a nice bit of food and nesting material for rats (Rats, they ate the food and killed the Cats). Ok that is what the poem says but they also carried fleas that carried a little thing called the Black Plague. This thing killed up to 60% of the European population. I mean this was a big thing. It (combined with something called the Little Ice Age[52] (kind of a Noah's flood but much colder)) that changed everything.

The Black Plague and the Little Ice Age also reduced the immediate discussion on the MV = PQ since for a short period there was little need for money. There was no trade, no forward contracts, no lending no borrowing. People just stayed home and closed the door and tried to stay

a crop, or commodity, insurance guaranteed the delivery of the crop to its buyer, typically a merchant wholesaler. In addition, traders performed the merchant function by making arrangements to supply the buyer of the crop through alternative sources—grain stores or alternate markets, for instance—in the event of crop failure. He could also keep the farmer (or other commodity producer) in business during a drought or other crop failure, through the issuance of a crop (or commodity) insurance against the hazard of failure of his crop.

52 There is no consensus regarding the time when the Little Ice Age began,[10][11] although a series of events preceding the known climatic minima has often been referenced. In the thirteenth century, pack ice began advancing southwards in the North Atlantic, as did glaciers in Greenland. Anecdotal evidence suggests expanding glaciers almost worldwide. Based on radiocarbon dating of roughly 150 samples of dead plant material with roots intact, collected from beneath ice caps on Baffin Island and Iceland, Miller et al. (2012)[12] state that cold summers and ice growth began abruptly between AD 1275 and 1300, followed by "a substantial intensification" from 1430 to 1455.[13]

warm. It would take a while for things to change to encourage a situation where M and V can provide an adequate base for a growing P and the basis for humans to advance Q as well. Fortunately, the Black Plague ended and while the climate varied up and down for the next three hundred years the change in climate promoted certain industries like clothing production and a focus on business (what else to do when it is 20 degrees outside and it is still June 1). But like pervious disasters (The Great Deluge, the Fall of the Roman Empire, the Black Plague of 600AD in Istanbul) after the disasters ended, the world was primed for change. We had fewer people but each person had a little more M and less people to contend for it with. In short while bad things happen at least we had enough of us left to have a Chapter 5.

Things to Remember

Bad Things Happen. Bad Things Happen.

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And then Good Things Happen. If they did not there would be no next chapter and we would not even be around to remember that Bad Things Happen.

What Will Be on the Test:

Marco Polo
IRS
Double Entry Bookkeeping
Bram Stoker
Black Plague
Survivor Bias
Backfill Bias
Cause of Black Plague

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Chapter 6: Guttenberg the Forger

Summary Introduction

But the truth behind the development of paper as money is more than just about the Dark Ages, the Black Plague and the Little Ice Age, it is also about individual people, like decedents of Morris T. Chiseler and others like Martin Luther and JR Guttenberg, and individual things like the printing press (and you thought the wheel was a big thing). It is a story about the reintroduction of Zug's 10,000 year old idea that MV=PQ; that is, the very idea of money as a change element and as a fundamental part of economic growth. For Q to grow or for prices to rise so that one can sell something for more than its costs, requires M or V to rise. There was simply not enough gold to increase demand for goods.[53] But by making money out paper, JR and his buddies (including good old Morris Chiseler's family who if you remember had moved to the area back in 10000 BC) found an immediate demand for paper and with the printing press in full operation and a life of forgery ahead of them, life was good.

More importantly, by combining paper with the idea of money our bigger picture of Idea* Money= Progress became the new norm. It also led to a change in the evolution of society. If money was the new religion, what happens to the heads of the old religion? If money can finally bring the "goods" that the old establishment could not, he who controls the printing press controls the people. The creation of paper money brings up the question as to the very source of

[53] Now it just so happened that after the creation of the printing press and the ability to create really good banknotes, that some Yahoo in Germany came up with a better way to separate gold from silver. This reduced the cost of gold mining and literally increased the amount of gold being produced. This decreased the immediate need for a least small denominations of paper and by the by, until this whole city state, nation state thing got straightened out one reliance on the power or authority behind paper money was still a little questionable. But things take time.

the value of paper money; that is, do people value it because of some moral standard, some market standard, or some government standard. Over the following centuries, the battle would be fought.

Religion and the Rise of Paper Money

This whole Black Plague thing, just like the Noah incident, just like the Barbarian invasions and just like the collapse of Rome kind of reset this whole history of money thing. There was just less of everything, less people, less trade, and less money or at least less certainty on which money people would trust. We have mentioned it earlier, but monetary forms are centered on acceptance of a particular order. It could have been a Moral Order; that is trust in other individuals to act according to an accepted form or to have a base currency such as gold, that forced a moral order on individuals that they could not willy nilly increase or decrease M. In the absence of moral order one needed a form of Government order where the government set the rules and oversaw those regulatory constraints. Lastly, if there is no single moral or governmental Oversight then the "Market itself" will attempt to find an answer such as the movement to discounted bills of lading or contracts; the acceptance of family banks and other means of promoting global commerce. Of course, by their own none of these approaches, Moral, Market or Government order may be preeminent, but their inefficiency in any one area often led to some combination of the three forms.

Gold coins where trusted by most individuals in that other individuals seems to value them and they seemed to be based on God's order (he/she put it here for some reason) versus man's whim (market based paper money). In addition, the prime problem with paper money was they it simply took just too long to make and who would make it (See articles on agency theory). Even in this period, accountants were paid to be agents of the owner's money and to check on the quality of the banks or individuals creating the money. Sure, it kept a lot of people employed (ex-priests who took time off from making Bibles) but if the truth be known even if they could have created enough currency with numbers on it, no one knew what it meant since very few individuals in the fourteenth could write or for that fact count.

What was required was a picture of someone or something on each piece of paper on the money (see previous discussion on the Medici's moral order)) was one way out so that the average individual would have an idea of its worth. The Church had eliminated the earlier monetary approach of using a "girl on the front kind of thing" by damning the person who used it to get local 'tanning' services. In fact, a noted mathematician of a few decades later (Descartes) tried to determine the proper discount rate for dealing with this paper money. He eventually gave up on this and became a monk with the theory that a small probability of eternal life dominated a high probability of immediate satisfaction that depended on the use of money (this really happened). Since the worth of the money was often discounted based on the quality of the face on the money the Church used the picture of the most recent Pope on the then $100 dollar bill. As one moved down the ranks of Cardinal, to Monsignor to the everyday priest, the value of each picture indicated a piece of paper with lower value. Even to this day, we have so many people who cannot read or write that we continue to put pictures of Presidents or notable men on our dollars so that many Americans can tell the difference between higher value and lower value U.S. dollars.

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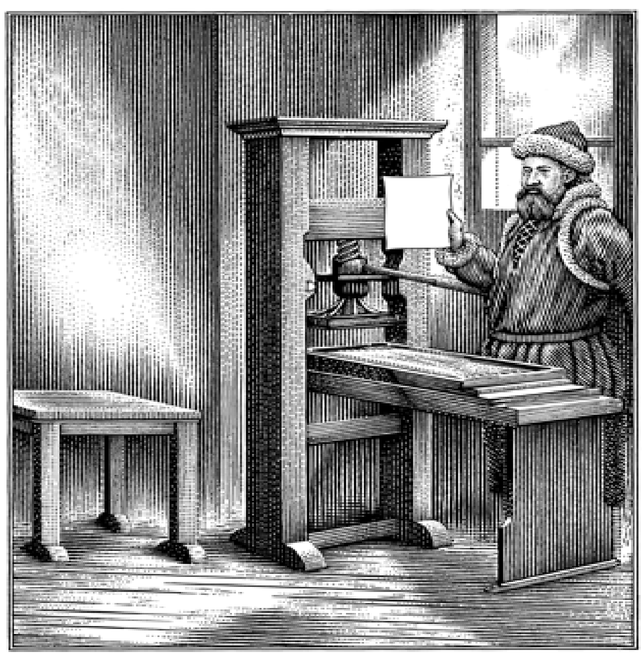
Another problem was that the artists of the fourteenth century had yet to discover the concept of perspective. In short, it was almost impossible for them to draw individuals with any depth so that individuals could tell the difference between the Pope and the peasant. There were a few men of talent who were just starting to figure out how to move beyond stickmen but these artists were primarily Italian (see DaVinci, Tintoretto, Michangelo). As a result only Italians could make money. This limited the hopes and dreams of non-Italians everywhere. Fortunately, there did exist a non-Italian, Johann Guttenberg who was about to change the world of money.

Marty, JR, and the Inception of Paper Money

There are few people who really change history. Zug, Gus, and Morris were several of them. The 15th and 16th centuries also had its own Idea Men. Unfortunately, while we know his father well, Johann Guttenberg, we know little of his illegitimate son, Johann Guttenberg Jr. or better known to his friends as JR Gutenberg the Forger. Now JR was more than a little peeved at being left out of the family fortune following his Dad's invention. Now it is important to point out that Johann Gutenberg Sr's investment made very little money for his family if for no other reason that few people read at the time and second, the church had very little interest in mass marketing a bible to individuals who could not read or if they did might discover that many of the stories promoted by the Church were not there in the bible. Lastly, Johann Gutenberg had already squandered most of the money made from his investment. It is a little known fact that Johann's investment was the result of his friendship with the bottle and while his drinking bankrupted him (note that this is the period in which the word bankrupt became popular. If one owes a "bank" and cannot pay them back, it would "rupt"ure the entire fabric (An Italian specialty also) of a family) it also led to him spending considerable time at the local vinery. During the making of some of this wine, he noticed that a wine press could be used to put pressure on anything under it (he almost lost a brother this way). It Johann's familiarity with the wine press that gave him the idea for the printing press in the first place.

But our story continues. So while Johann Gutenberg was famous for the creation of the printing press, in fact, he had very little business since he had nothing to print on it as the following wood print illustrates. As a sidebar, the creation of the printing press eventually led to direct upheaval in the Church itself. One reason for the lack of change during the period prior to the 15th century, is that numerous priests and brothers spent hours creating and copying church documents. Since whiteout had not been invented yet, change was not an option. The printing press, which permitted adjustments to previous work without taking on the entire monastic system, was essential to both promoting change and creating a lot of unemployed priests who eventually found jobs in starting new enterprises (e.g., new religions with little connection to the Church).



J. G. At Press With Paper But Nothing to Say On IT

Now back to our story, in the early fifteen hundreds JR Gutenberg was having a drink at the local bar with Martin Luther, a poor monk who despite his letter after letter to Rome was simply getting no respect. Luther pointed out that it was all about money. In short, he complained that "Those Roman &&^&&%*$$$ are all getting rich selling indulgences. The greater the length of time taken off your time in purgatory, the more money it took to buy it. Soon the church had set up its own paper making business in the basements of various monasteries throughout Europe and had priests draw the indulgences on the back of a piece of paper. In fact, for many these pieces of paper became money themselves and were used as a form of capital (Three Our Fathers equaled 10 Hail Mary's equals one cow, one mud hut and two wheels and so on). Of course as the number of these paper indulgences increased (M) or were transferred easily amongst the peasants of the day (V) the price (P) of each indulgence rose for the same quantity (Q) of days out of Purgatory. So in time, paper money disappeared, and the paper indulgences took their place. This is one of the first examples of where the "Good" (God) money drove out the bad.

Sale of Indulgences

Luther asked JR to take a look at one of his letters on the church's door and see if he could improve upon it. Before heading home, JR stopped to look up at one of the notes Marty had pinned on the door of the Church next to a bar they often stopped at. The top note, in bold print, read something like MV=PQ and under it something in Latin (MORESO VELOCITO PRICIPITY QANTICIMO) or in short the more of it (Money) or the faster it moves (Velocity) the more stuff (Quantity) one can get at a good Price – or at least that is what JR (thought it said). Note JR was in fact not such a good Catholic that he could read Latin all that well so that fact that it really meant "**M (M**orris) serves food **V (V**ery fast) = **Q (Q**uantity) of food for a low **P (P**rice)" was lost on him. (Marty Luther was one of the first really good marketing geniuses and had a deal in a chain of EAT AT MORRIS (yes the same Morris who was a decedent of the Chiseler who was run out of Bagdad, 10,000 years earlier). The whole thing went bust when the Church refused despite Marty protestations to make Fridays a required "Fish Day" for all Catholics. Marty thought his idea was a natural since The Sign of the Fish has historically been associated with the Catholic Church since the time of Jesus. Marty was really pissed about this and dedicated the next decades of his life to getting even with the Churches hierarchy. Centuries later when the Church enacted just the same "**Friday is Fish"** day to get back at Marty but for that one is referred to a different book – The History of Religion.

JR Gutenberg (J. Guttenberg II)

JR returned home with MV= PQ in his head. Money – Faster; Money -- Faster kept him up night after night. One night after returning from a 2:00 AM walk in the rain outside and stopping at MORRIS' Bar, Bed and Breakfast he returned to his room and noticed that when walking down the hallway his shoeprint left the same mark on each of the planks on the floor. JR had one of those moments of inspiration, one of those "AHA, I have an Idea" moments that one only has at 2:00 AM in the morning after an evening at MORRIS' restaurant. If one could only reproduce wooden planks efficiently each plank could have the same print on it. Why not use his father's invention for other business than printing bibles? Now it was fortunate that JR did not run a flooring firm but as we said earlier was a goldsmith who stamped out gold coins. In addition, as discussed above he was a baker. So, after seeing the footprints on the floor he had to go immediately to his bakery to start the ovens. But before shoving the bread into the ovens, he used his father's presses to put a stencil on each piece of flat bread (a German tradition to this day).

Early Stenciled Flatbread

He took his idea to Morris. Now Morris was not only a vintner, restaurateur, a bar and bed promoter, but as we mentioned earlier had an interest in advertising. Now this was Easter weekend so to drum up some business, Morris suggested to JR that he stenciled the picture of the Pope on some the bread and convince the church to sell it as part of the indulgence thing. The bread would be a kind of an earthly dividend on the payment for the indulgence they paid for a break on eternal life. The idea of adding bread-based indulgences did not suit the Church. As long as the Church could control the quantities of paper indulgences all was well so why expand the competition, but this is where Marty returns to the scene. First, as mentioned previously Marty was more than a little pissed that he had lost a bag of money on Morris' Chain of Fried Fish establishments. It is also well known that one of the reasons he felt for the failure of the Church to support his franchise idea was that the Church wanted to make sure the locals were spending more of their money buying indulgences rather than buying fish at Morris.

M. Luther With Nice Beret

When the Church responded that they would not support “the Pope on a flatbread as an indulgence idea”, Marty came up with an idea for JR to produce their own paper indulgences, in short to flood the market with fake paper passes to heaven using his Father’s printing press (While JR’s father (Johann Guttenberg) had left him little he did leave him with a perpetual claim on the use of printing presses for any use he could come up with). As soon as the Church found out about the scheme, they immediately threw Marty out of the church, but the damage was done. The huge increase in the quantity of paper (M) indulgences collapsed the price of the handwritten ones especially since the church had already maxed out the quantity of indulgences (everyone already had enough of them to make it to heaven). Now, one does not have to feel very sorry for Marty. He eventually started his own religious offshoot (see previous discussion on the printing press creating a number of unemployed priests) which supported the average man having his own bible and got himself into the Bible Printing business along with JR Jr. As for JR

Sr., he retired to Nice, France. Even to this day Nice has become a globally known location where businessmen of ill-gotten gains moved to either hide or live off their fortunes.[54]

Money and the Transfer of Social Power

What JR had also done inadvertently was cause the collapse in the Catholic Church. If Rome could no longer control the value of money it also had little control over the everyday actions of its parishioners or of people throughout Europe and Asia. He who pays the piper plays the tune, and with the development of paper money he who controlled the printing presses played the tune. Printing presses had the potential of creating greater value than the Church itself. And, in time, each country started to use printing presses to create its own money with its own pictures on it.[55] Relationships between countries were based not on their common relationship with Rome but on the value of their own country's currency. In short, the growth of paper money permitted the growth of independent countries and the growth of independent thought.[56]

[54] Now JR was not the only forger in the 15th century. Mind you this is still only a few centuries after the Black Plague and people could easily change their name and move on. This was also true for entire people. The Vikings basically moved to Ireland, changed religions, and called themselves Catholics, but continued to drink beer and fight the English.

[55] While it took centuries, it also provided an entire new industry in which countries attempted to use new colors and new technology both to create new presentations of money (if you are going to have money with you it ought to be at least interesting, fun, or pretty). It also had a second use, the more colorful the money the more difficult it was to counterfeit. It should come of no surprise that the best counterfeiters were in Nice where JR set up home and started to support local artists in his counterfeiting businesses.

[56] The term **price revolution** refers to the relatively high rate of inflation that characterized the period from the first half of the 16th century to the first half of the 17th, across Western Europe, with prices on average rising perhaps six fold over 150 years. This level of inflation amounts to 1-1.5% per year, a relatively low inflation rate for the 20th century standards, but rather high given the monetary policy in place in the 16th century. Generally it is thought that this high inflation was caused by the large influx of gold and silver from the Spanish treasure fleet from the New World, especially the silver of Bolivia and Mexico which began to be mined in large quantities from 1545 onward. According to this theory, too many people with too much money chased too few goods. Other accounts emphasize the role of urbanization which increased the velocity of money in circulation, or the increase in silver production within Europe itself, which took place at the end of the 15th and beginning of the 16th centuries

It would be amiss to dismiss the negative impacts that this growing independence within nations and within the church itself led to. As everyone who eventually moves out of their home knows that with independence comes costs. In case of the rise of the nation state, city, and the church itself; that is, the costs of an army, a navy, a legal system, and government system. As the world demanded more money to meet these needs, governments had to find a way to get it. Since we were still a couple of hundred years away from states developing their own monetary systems, the only way to get more money was to take it from others. The increasing necessity for money was in part the participating force for the Inquisition (take money and properties from the Jewish population), the Protestant Reformation (money and properties from the Catholics), the English Reformation (take money from any one not part of the official 'State' Church), and even later on the rise of global empires (Spain, England) who took from the local indigenous people (Indians in South America, North America, or the inhabitants of people in other parts of the world). Independence is wonderful but it is expensive.

Things To Remember

Change is never easy and the bigger you are often the harder it is. When you think that your way of doing this is also ordained by God, Change is really tough. But without or because of divine intervention (and some might believe that the Black Plague was divine intervention to cause the change), change did happen. But if one is to reject the current government order (The City States), the current moral order (The Church), and the current market order (the tradesman), one has to replace it with something 1) Big Governments versus Small Governments for order, 2) Moral order based on Individual responsibility (man as his own church) or an accepted alternative (gold)); or 3) Market Order which attempts to hide ourselves from the previous 2.

But change again has costs. Change is a learning process and often that learning process is painful. Onward to Chapter 7.

What You Will Be Tested On:

Johann Guttenberg
Martin Luther
The Medici

Selected References

Nicholas A. Basbanes. On Paper: The Everything of Its Two-Thousand-Year History

Chapter 7: Bubbles, Bubbles and More Bubbles

Summary Introduction

If money is the manure for the growth of real goods, who determines what those goods are? As discussed in the previous chapter, for centuries the Catholic Church had set the perimeters as to what was valuable and what was not. The development of the concept of money and the development of new sources of money (gold from South America and paper from other national governing bodies) left the perimeters of what was important and what was not pretty much in the hands of the people. The market system also determined the value of something. If it was Tulips, then it was Tulips. If it was a claim on a piece of land in South America, a claim it was. If you were promised ownership of land in the new land, then that ownership claim increased in value based on the amount of money chasing that object increased.

This demand for a common object pushed the value of these objects to the sky similar to bubbles rising on the wind. But all bubbles, especially those that have risen the highest, eventually burst. The bursting of those bubbles has impacts on the overall perceived financial worth of society and on valuation of other societal assets. In short, the democratization of money along with the various means by which it was created and structured led to globalization of the idea of money and its use. Gold at least was limited by the amount "Mined," paper money was only limited by what one regarded as 'Mine." More importantly, if governments could not promise 'Mined Gold' they at least had the ability to promise individuals "My Money." The existence of bubbles and the basis for their development was coordinate with the growth of government and its bureaucracies including the development of national banking which, under government auspices, could attempt to manage the production of paper money even if it had no control on the production of more “moral” God given forms such as gold which were not subject to immediate government dictums.

Money and the Creation of Bubbles

Some readers may wish to skip this chapter. Past chapters have been principally about the development of money and how it was made, I really mean made (from mud huts, papyrus paper). This chapter is how it was lost (and not by letting a sea diverge and then come back destroying years of hard earned mud bricks – See Chapter 1). This chapter is how people came to learn to lose money the old fashion way; that is, by being incredibly stupid. While some people forget, it is important to point out that previous to the creation of paper money, it was hard to find it but somewhat hard to lose it once you found it (it was hard to hide a stone or a pyramid or even a large horde of gold) but with paper money it was both easy to find and easy to lose.

Now JR Guttenberry proved that more money is generally good, especially if one is producing the money. Now, as our grandmothers taught us early in our lives as we tried to eat all of the peanut butter cookies at one sitting – too much of a good thing can become too much of a bad thing. Well JR Guttenberry had created too much of a good thing. In addition to creating the driving force of the industrial age by providing the source for the new Capitalist spirit he also made the common commonplace. Soon bibles were everywhere, and everyone had the same one. Everyone was Everyman. Everyone wore basic black. Everyone had plates and a house in the country. In such a world only what was special had value. While JR failed to see the significance of his creation of the common: what he had done in fact was make more valuable the unique. Presenting the common as unique is the very driving force of modern marketing to this day.

By flooding the world with paper money to provide a light and easy way to carry a reference currency he had devalued its very existence (just as Marty had devalued the Catholic religion by giving every man his own personal bible and soon everyone creating their own church). But if one could find something really special its value was almost incalculable. In a world of MV=PQ the issue was not in managing the MV or the P but the Q.

For the first time we had the M (potentially a lot of it), we had the V (and getting faster since paper is lighter than the gold or silver coin of the day). The search was on for the Q. But this was 1600’s and 1700’s hundreds, the rise of Jonathan Locke and the rational man. The logical outcome of the Renaissance was that man finally found his place in the Universe and that was at the very center (As the Sun replaced the earth as the core of the Universe in the 1400’s by the 1700’s man replaced the heaven with himself as the central focus of being). We had finally risen to where we could create our own future or at least borrow on it so we could partake in some of it today. (See Shakespeare and the creation of loans (monetary and otherwise such as a pound of flesh)). We could find and create new worlds and we wanted to do it fast and easy.

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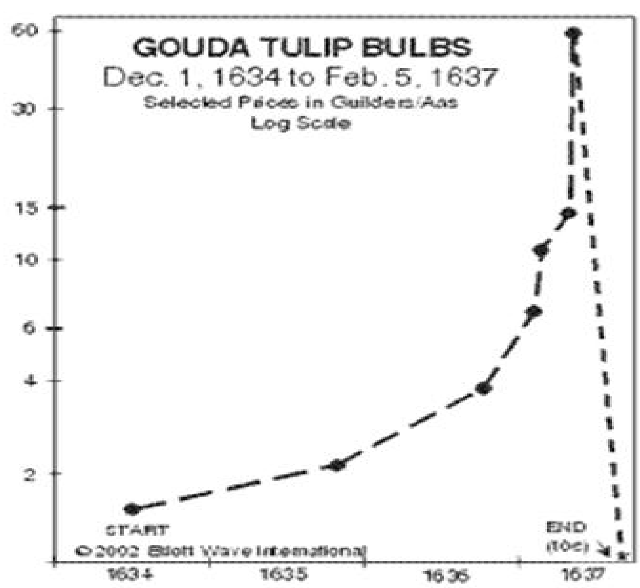
Bubble 1: The Tulip Bubble

Now with the Renaissance and the rise of Europe, Zug Ipso Facto XIII and Gus Ipso Facto XV were starting to feel a little left out. After almost 10 thousand years the tanning thing was getting a little old and while they owned a portion of their casinos, profits were down. One day they were sitting in the back yard of one of their many houses in Turkey watering their garden while smoking what would later become their primary cash crop (see Chapter 10). This smoking made everything look better even the color of their favorite flower their 'Turkish Tulip." As luck would have it, a Dutch ship was in port that day with the Captain of the ship known the 'Heavy Heart' who was partaking of the joys of Zug's tanning spot and Gus's Casino. Now Zug and Gus regularly gave gifts to their returning clients as a way to keep them coming back. So that before the Captain left with a "Heavy Heart," Zug and Gus gave him one of their most favorite "Turkish Tulip." The Captain was especially down since the goods he was supposed to take back with him to Amsterdam had failed to make it to Istanbul. As a result, the only thing he brought back with him was this single Tulip. Now one is not the Captain of a major ship by being dumb, so upon his return he handed over the Tulip to those who had backed the venture. This Tulip was not just a "Turkish Tulip." This was THE TURKISH TULIP.

The Turkish Tulip

The Netherlander's knew the cost of flooding the market with too much of a good thing such as water can also lead to too much of a bad thing such as drowning. But they were also aware of the value of the unique, so they went about creating a one of a kind event; the one of a kind Tulip. Soon everyone had to have it, that one unique Tulip. Well good old MV=PQ came back with a vengeance. A whole lot of M with a Whole Lot of V with only 1 Q means it costs a lot of P to purchase that Tulip. What the Lord gives he also takes away. Just like our old cattle story, if one finds a way to increase Q in a world of limited M or V, P can fall just as. In the case of Tulips this all happened at once. Consider the Tulip craze a kind of "Musical Chairs" where everyone was trying to find a place to sit down in the fear that someone would not find a seat. Everyone was willing to pay a lot for a chair (Tulip) for fear that when they needed one it would not be available. Unfortunately, think of musical chairs where unknown to the players there is someone in the backroom making chairs as fast as they can. Soon there were more chairs than were needed to play the game. In Netherlands there were more Tulips that were needed to play the game.

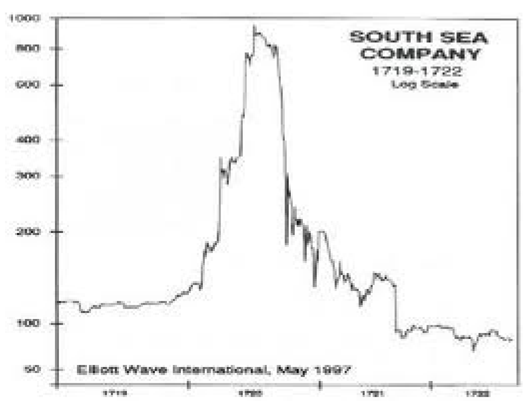


The Turkish Tulip Price

The results was the realization that one had to find a base currency that was in fact scarce and which could be used as a base for money as a reference currency.

Bubble II: South Sea Bubble

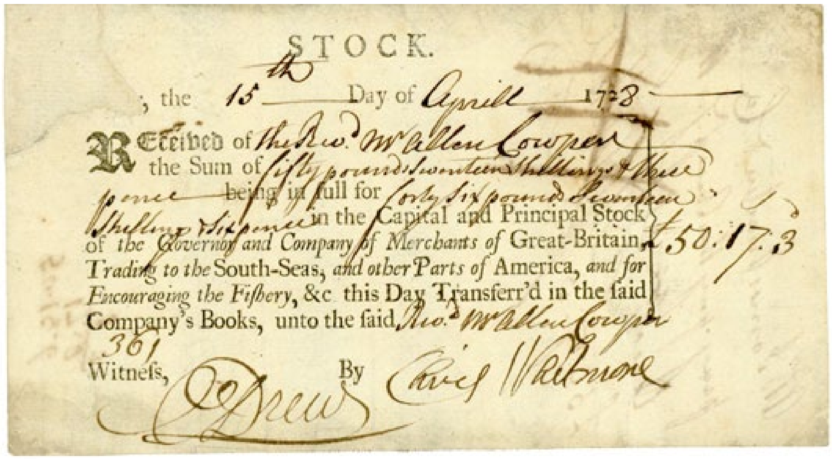
What did we learn from the Tulip bubble? If Tulips could be devalued simply because more of them could be created what we really needed as something really scarce so that was difficult to reproduce. It would even be better if it was far away so that one could create the story about how unique it was. Of course, someone had to determine the value of such an investment. The purpose of this conversion was similar to the old one: In addition, it would be better if the "claim" on the scarce difficult-to-sell investment asset came in the form of shares which could be readily traded. It was even better if these shares were backed in some form by national state and so were considered a safe investment and a convenient method to hold and move money.



Prices of the South Sea Stock

Here is the quick story. The Bank of England, supported by Whig interests, was established in 1694 and given permission to circulate paper money (and yes H.G.'s family was involved in this also). There were two substantial reasons for creating the bank: the need for a national bank or fund of money to facilitate trade as new, international markets expanded rapidly and the need for money to help manage the sizable national debt that was generated by recent wars. When the South Sea Company was established in 1711, it received substantial support from Tory interests who favor a competitor for the Whig based Bank of England.

Everything was coming together in a perfect storm, the rise of paper money, the evolution of the nation state, man greed, and man's stupidity. Note the South Sea Bubble was not even about investment in the South Sea's. The Dutch owned that area and they had just lost all their money in Tulip's so the English Entrepreneurs had rented the name from the Dutch Ship-owners Association. The South Sea Company was about developing trade in South America. At the very least one should be careful about investing in a project in which the name has nothing to do with what it is investing in. When investors finally found out that South Seas really meant the profits from selling goods to poor Indians in the jungles of South America the whole thing came crashing down.



STOCK.

, the 15th Day of Aprill 1728

Received of the Rev. Mr Allen Cowper the Sum of fifty pounds seventeen Shillings & three pence being in full for forty six pounds seventeen Shillings Sixpence in the Capital and Principal Stock of the Governor and Company of Merchants of Great-Britain, Trading to the South-Seas, and other Parts of America, and for Encouraging the Fishery, &c this Day Transferr'd in the said Company's Books, unto the said Rev. Mr Allen Cowper £50:17:3

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Witness, By

South Sea Stock (with mention of South America – Who Knew)

Bubble III: The Mississippi Bubble

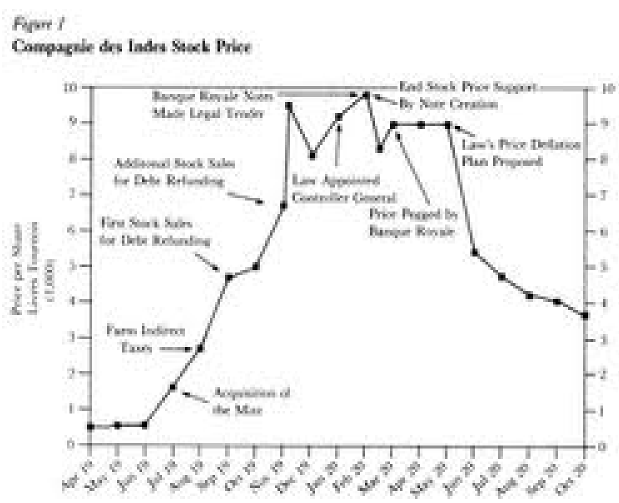
The **Mississippi Bubble** was a speculative stock bubble in France in the early 18th century that occurred at the same time as Britain's **South Sea Bubble**. However, at least the French thought they were smarter than the idiots in England. The French had already received a real dividend from their investment in North America in the form of great 'beaver' hats. Most of these hats came from the Mississippi river valley. If the Dutch had their Tulips, the English their South Sea, the French had their Mississippi Valley and beaver hats. They had also the condensed version of how to leverage up a bad investment through the use of credit and the ability to finance a national banking system by lending out money to 'real good' based investments with the hope that the success of these ventures would repay their failed policies in other areas.

Mississippi Bubble Money

When John Locke, the English philosopher talked about the common man, I suggest that he did not realize how common they really were. Faced with enormous debts form the Spanish/French War, the French sought out a Scottish economist under the 'still commonly' held belief that since the Scots are cheap they must know something about money when in fact they are cheap because they have lost all their money in idiotic ventures (see King Charles….). Even worse they sought out a man whose last name was Law, a John Law. OK, calling it a cow does not make it a cow, calling it a South Sea investment does not make it a South sea investment and have having your chief economist with a last name of Law does not make it legal.

John Law

Law decided to create a national bank that would accept deposits of gold and silver currency and issue “paper” money or bank notes in return. Very soon, Law’s national bank began to issue much more paper currency than it received in gold and silver currency deposits, which created an inflationary economic “bubble boom.” One of Law’s international trading companies, the Compagnie des Indes, became one of the prime beneficiaries of the inflationary boom as its shares skyrocketed and created many millionaires (this is how the French word *millionaire* came about). For a time, it seemed as if France’s financial problems were over, until people stopped wearing beaver hats and the Mississippi Bubble popped and Law’s trading company shares and paper bank notes plunged in value and threw France into an even greater economic crisis than it had before the bubble.



Mississippi Stock

Bubbles and Banking

If there is anything to learn from the Bubble incidents was that as soap bubbles generally come from too much soap, financial bubbles come from too much finance, or available credit in this case. (For a given V and Q, if M goes up P goes up and if M goes up a lot, P goes up a lot). As we discussed in the previous chapter , the traditional banking of the Italian families or Templers was the function of accepting deposits, moneylending, money changing, and transferring funds through with the issuance of bank debt that served as a substitute for gold and silver coins when they were not available. By the end of the 17th century, banking was also becoming important for the funding requirements of things like the French and Indian Wars, 100 years wars and other competitive global involvements. But wars require money, money requires someone to monitor this money (governments and later government central banks) but who or what would put a level of monitor on government or banks. For most of this period, however, most governments had an external moral constraint since they could not control themselves. The quality of their paper money depended in part on the belief that the paper they printed was based on the gold that they held.[57]

[57] Wiki points out the Modern banking practice, including fractional reserve banking and the issue of banknotes emerged in the 17th century. At the time, wealthy merchants began to store their gold with the goldsmiths of London, who possessed private vaults and charged a fee for their service. In exchange for each deposit of precious metal, the goldsmiths issued receipts certifying the quantity and purity of the metal they held as a bailee; these receipts could not be assigned; only the original depositor could collect the stored goods. Gradually the goldsmiths began to lend the money out on behalf of the depositor, which led to the development of modern banking practices; promissory notes (which evolved into banknotes) were issued for money deposited as a loan to the goldsmith.[188]These practices created a new kind of "money" that was actually debt, that is, goldsmiths' debt rather than silver or gold coin, a commodity that had been regulated and controlled by the monarchy. This development required the acceptance in trade of the goldsmiths' promissory notes, payable on demand. Acceptance in turn required a general belief that coin would be available; and a fractional reserve normally served this purpose. Acceptance also required that the holders of debt be able legally to enforce an unconditional right to payment; it required that the notes (as well as drafts) be negotiable instruments. The concept of negotiability had emerged in fits and starts in European money markets, but it was well developed by the 17th century. Nevertheless, an act of Parliament was required in the early 18th century (1704) to overrule court decisions holding that the gold smiths notes, despite the "customs of merchants", were not negotiable.[189][189].
According to Wiki, the first bank to begin the permanent issue of banknotes was the Bank of England in 1695.[190] Initially hand-written and issued on deposit or as a loan, they promised to pay the bearer the value of the note on demand. By 1745, standardized printed notes ranging from £20 to £1,000 were being printed. Fully printed notes that didn't require the name of the payee and the cashier's signature first appeared in 1855. [191]
In the 18th century, services offered by banks increased. Clearing facilities, security investments, cheques and overdraft protections were introduced. Cheques were invented in the 1600s in England and banks settled payments by direct courier to the issuing bank. Around 1770, they began meeting in a central location, and by the 1800s a dedicated space was established, known as a bankers' clearing house. The London clearing house used a method where each bank paid cash to and then was paid cash by an inspector at the end of each day. The first overdraft facility was set up in 1728 by the Royal Bank of Scotland.[192]

The problem of printing money and the place of banks in that creation is at the core of the history of money. For example, in the 1690s, public funds were in short supply and were needed to finance the ongoing conflict with France. The credit of William III's government was so low in London that it was impossible for it to borrow the money he needed to fight the wars of the period (the whole Armada thing etc.). In order to help in this process a limited-liability corporation was created and allowed to issue bank notes. Wiki pointed out that:

> The establishment of the Bank of England, the model on which most modern central banks have been based on, was devised by Charles Montagu, 1st Earl of Halifax, in 1694, to the plan which had been proposed by William Paterson three years before, but had not been acted upon.[196] He proposed a loan of £1.2M to the government; in return the subscribers would be incorporated as *The Governor and Company of the Bank of England* with long-term banking privileges including the issue of notes. The Royal Charter was granted on 27 July through the passage of the Tonnage Act 1694.[197]

The Bigger the Building the Better the Bank

Early bank architects knew that to be regarded as solid the building had to look solid. Often however, however, solid the bank looked like, it was only as solid as the quality of the money it was based on. The greater amount of currency it created relative to the gold it actually held, the weaker that foundation became.

The rest of the 17th and 18th centuries were a type of petri dish on the creation of money through the creation of State owned banks. For example, the currency crisis of 1797 in England was caused by panicked depositors withdrawing from the Bank led to the government suspending convertibility of notes into specie payment. The bank was soon accused by the bullionists of causing the exchange rate to fall from over issuing banknotes, a charge which the Bank denied.

While many of the participants names have fallen from history. A brief rundown is of order. As Wiki points out:

> Henry Thornton, a merchant banker and monetary theorist has been described as the father of the modern central bank. An opponent of the real bills doctrine, he was a defender of the bullionist position and a significant figure in monetary theory, his process of monetary expansion anticipating the theories of Knut Wicksell regarding the "cumulative process which restates the Quantity Theory in a theoretically coherent form". As a response 1797 currency crisis, Thornton wrote in 1802 *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain*, in which he argued that the increase in paper credit did not cause the crisis. The book also gives a detailed account of the British monetary system as well as a detailed examination of the ways in which the Bank of England should act to counteract fluctuations in the value of the pound.[198] Walter Bagehot, an influential theorist on the economic role of the central bank.
> Until the mid-nineteenth century, commercial banks were able to issue their own banknotes, and notes issued by provincial banking companies were commonly in circulation. In England, Wiki points out that many consider the origins of the central bank to lie with the passage of the Bank Charter Act of 1844.[200] Under This law, authorization to issue new banknotes was restricted to the Bank of England. The Act served to restrict the supply of new notes reaching circulation, and gave the Bank of England an effective monopoly on the printing of new notes.[201] The Bank accepted the role of 'lender of last resort' in the 1870s after criticism of its' lackluster response to the Overend-Gurney crisis. The journalist Walter Bagehot wrote an influential work on the subject *Lombard Street: A Description of the Money Market*, in which he advocated for the Bank to officially become a lender of last resort during a credit crunch (sometimes

referred to as "Bagehot's dictum"). It is always dangerous to one's name associated with any dictum it is only a matter of time before it is returned with interest.

As a writer one is always warned against burying the lead. But here is the upside of the three bubbles discussed in this chapter as well as some of the financial crises which continued to follow. The above three examples are big bubbles and if one could learn from the past they might have warned individuals about 1) mixing government policy with monetary policy, 2) unwarranted increases in currency and credit, and 3) the use of land/real estate as the fundamental source of repayment. Over the following centuries, these three common features were repeated over and over in smaller bubbles across the world and in the United states (U.S banking collapse in 1840 to the Credit Crisis of 2008). To paraphrase others, "We Grow Old Too Soon and Smart Too Late."

17th Century Bubble Cards (Tradable)

Things to Remember

People make mistakes. OK, but there is the belief that if they are small people they will be small mistakes and that if they are big people they may be big mistakes. Moreover, big people mistakes can only be offset by even bigger people. In this case, the failure of people to monitor themselves (Tulip Craze and South Sea Bubble), as well as the failure of certain government organizations to monitor individuals (Mississippi Bubble) needed even bigger institutions (central banks) to monitor and managed the financial system. The question left unanswered or where the answer was too painful to accept was that who would manage the central bank. For much of the 18th and 19th century the questioning of the central bank authority was as much a questioning of their moral authority. The Victorian era was as much about one's moral positioning as what position you took. The people at the top of the financial pyramid had ultimate responsibility for those under them. The development of the central bank meant the bank had the final authority both the moral and regulatory authority to monitor and if necessary backstop the market. What good was a government if it could not govern? If financial bubbles came into existence, it was never the government's fault it was the failure of people's or markets moral order (people stole money, smaller banks issue too much debt). It was the Government to the rescue when it started to see bubbles rising or bursting. Of course, as we see in later chapters, what is to stop the government from starting bubbles themselves or bursting those that may or may not exist? In later chapters, the conflict between those who believe the only answer for big is bigger versus those who believe the only answer for bigger is smaller and smaller. But bigger is not always better and smaller may just be smaller. But whatever the solution, the stories are wrapped around the intellectual authority of those proscribing the solution (government rule, market rule, and moral backdrop).

<u>What You Will Be Tested On:</u>

Tulip Craze
South Sea Bubble
Financial Crash

Law

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Chapter 8: Other Money and Other Cultures

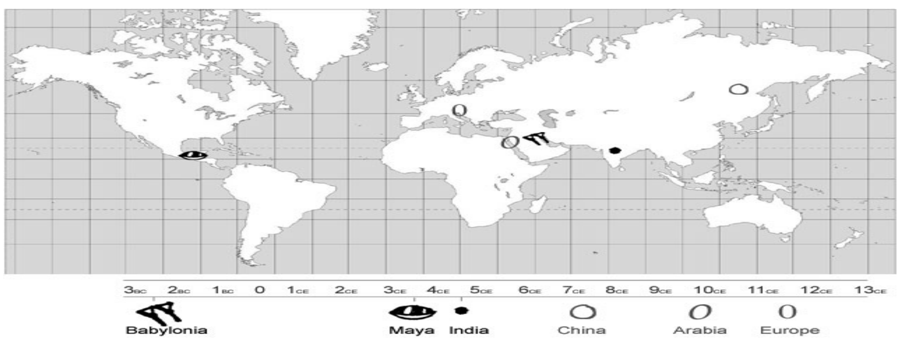
Summary Introduction

For most Americans and in fact for all of those who have grown up in nations that came up through the European migration, the history of money emphasizes the evolution of money that directly impacted our society. We are the people of the people who created the Greek and Roman coins, the Spanish pieces of eight and eventually of pieces of paper with pictures of Kings and Queens on it. As important, the people whose faces adore these monetary alternatives looked a lot like us. But what of other nations or of entire societies that never interacted with our European Ancestors.

One would hope that all countries and all people would have eventually come up with the idea of money as a means to enable the transfer or the production of real goods. In fact, most people did. We, that is us, for the most part do not know their names or how they had their own “Aha, I have an idea”. Faced with common problems and common resources, most people would create common solutions. However, when faced with different problems and different resources it should surprise no one that unique solutions also were created. However, hopefully no reader feels so superior as to the success of their own monetary system. Each of us may have just been one Zug, one Gus, one Morris T. Chiseler away from using round stones as our primary monetary unit for the last 12000 years.

Other Money in Other Places

One of the greatest controversies of human evolution is whether we all came from the same family tree or in fact were the seeds planted in various parts of the world and several trees grew up independently in each part of the world, separate from each other but similar in form and substance. Similarly, among monetary historians one of the controversies is how or if money changed in every part of the works as independent contractors or if the whole idea of money was created in a single spot and then migrated to various parts of the world. In short, was there one Zug and Gus or were there a number of them at different places and different times.



Money: Where and When

We have said it before, but it is increasingly relevant in this section, much of what has been written on the history of money is merely conjecture since we simply do not know what really happened. In short, in reading this section, it is reader beware. What is interesting for the reader is the reason why; that is, why do we have so little information about the ancient history of money in U.S. and non-U.S. lands. Most monetary historians point out the typical reasons (e.g., shells break, paper burns, all stones look alike) as to the paucity of historical artifacts related to a country's or region's monetary history. What they have failed to detail is the impact or importance of money in how we understand the history of money. I call it the anthropology versus the paleontology focus of our ancient heritage. Anthropology often refers to the study of historical objects related to human history whereas paleontology generally concentrates on animal and non-human remains. Ok, that seems simple[58], the issue remains as we have a huge history of both, that is, centuries and centuries of historical garbage. With all that garbage (human, animal, and others (including alien artifacts), why so little information on the history of money? The answer is simple, and it is found in the words presented in the very first part of this book; that is, follow the money. Most historical finds happen by happenstance, but historical archeological digs take money. If there was money in it, you would see holes everywhere. Instead, most digging today takes place as part of a business venture; for example, digging the foundation for a new commercial venture, placing footings for infrastructure projects, drilling for energy related exploration. So, what happens when one of these entities comes across a mammoth tusk, a burial plot with all of its associated artifacts including resources (often money) for the next life)? In brief, what happens if any evidence is found is that any such evidence of a find is immediately hidden.

One might think that archeological findings would be a reason for excitement. Just the opposite, the first thing one wants to do is to hide these results. If one finds a sunken boat loaded with coins or other artifacts, one must find a way to get the money ashore before the authorities find out and demand their share. That is why 'sunken treasure' is called ill-gotten gains. Finding an object of archeological significance on land can shut down an operation for months, weeks, years if not for ever. Even Attila the Hun, Alaric the Visigoth, Alexander the Great had archeologists

[58] Ok it is not that simple. If you really want to be board for an evening get an archeologist, a paleontologist, and an anthropologist together and have them debate who does what or is restricted from doing what. From one such discussion I understand that it simply comes down to who finds what first and then let the fur fly.

with them who kept track that no ancient burial ground, historical city, and family spirits were disturbed in their conquests. Similarly, today, no construction work is conducted without some pen pushing, tablet holding, wire rim glass Ph.D. making sure that no historical remnant of some past animal, mineral or human is disturbed in the name of the advancement of civilization. To put it bluntly it is more important to hide the findings than to find the hide. As a result while there is a true history of money lying just meters below the ground, but we only have access to the few samplings that somehow make it to the surface or that have been scattered on the service by self-serving monetary historians trying to salt their own theories. From our calculation this covers less than 1/10th of 1 percent of the actual money ever made. This lack of certainty on the value of the historical findings of archeological finds lead to the well-known Latin warning:

Caveat Emptor. [Latin, Let the **buyer beware**.] A warning that notifies a buyer that the goods he or she is buying are "as is," or subject to all defects.

The reader has been forewarned.

The Tigris and the Euphrates: The Birthplace of Money

The previous chapters have summarized the History of Money from the prospective of the rise of money in the Fertile Crescent and its importance in the rise of the European State and human progress. It is important that even in the previous chapters we simply do not have the time to detail all the aspects of the history of money especially in the area of its birth; that is between and around the Tigris and the Euphrates. We failed to detail attempts by Constantine to set gold as the standard in 303 (e.g., the gold standard), we failed to detail how years later the Caliph in

Constantinople, short on money, decided to devalue the gold coin by adding some copper to it. In fact, countries soon found that they could often make more money making the money than in finding it in the first place. (Note: it is often said that there is more money in selling the shovel to the farmer than there is in actually using the shovel in farming). If people in other areas of the globe had access to the Dragon App which provided immediate translation of what was being said or going on in other parts of the world and they might not have made the same mistakes. If one is honest, the primary form of communication for years was individuals on camels. And if anyone remembers from the first grade as one formed a line and told a story to the kid next to you – the tail of a camel soon becomes the key to heaven. This is good for those of us for which the historical line of lies was somewhat short but in other parts of the world, it was a long line of tails to tails so that the story of the History of Money did not travel so well. This is what we know:

India

We are starting with India, since for many in the History of Money community this is where is all started and then stopped.

At the time, Zug's and Gus's operations were very close to India. People sometimes forget that most India 'Indians' are regarded as Caucasians, that is, of the White persuasion. In short, India's was populated from people that originated mostly from the Zug's tribe. It should surprise no one therefore that the use of commodity money was commonly used in India. It should also come as no surprise that the cow was at the core of the commodity money use within India. For centuries, India, as other countries, experimented with other forms of commodity money. No alternative was deemed more useful than the 'cow' as a store of value, medium of exchange, and unit of account. The cow was so successful that it became the source of its own failure as a form of money. India became so enamored with the 'Cow' that they made it a God (albeit a minor one at that). The Cow remained a unit of Account and perhaps a medium of exchange its store of value changed. No longer could one reduce the population of cows as the value of cows decreased. The number of cows simply increased since there was no means to manage the supply of cows or to use them in any commercial manner in the society without being stoned (that is you not the cow). If for MV=PQ, M can only go up the M in the model or cannot be used in any commercial way, its starts to lose its value as a store of value, a medium of exchange or a unit of account in commerce.

Therefore, it should surprise no one that India with the failure of cows as a basis for its first currency, was also one of the primary areas where the concept of metal coins whether bronze or gold was first fomented. Note that in our earlier conversations, Alexander the Great's primary goal was to make it to India and not for the cows but for the metal coins. However, the problem of a 'Nation' becoming enamored with its own is further illustrated with India's fascination with bronze, silver, and gold. The Cow became a God but bronze, silver and gold were close in second place. The populous of India's soon surrounded themselves with as much bronze, silver, and gold they could get their hands on. With the constant coming and going of various invading tribes they decided not to have banks so they kept it in a range of forms; Plates, rings, brackets. At least in this manner, they did use money as a store of value. So much value, that when it came time for the economy to move forward through the use of paper money, they simply could not reject what they had. Money can move a country forward but the inability to change over time can stop it in its tracks also.

China

While Zug and Gus's families were sitting in Bagdad moving society from the hunter stage through the agricultural age onward to urban society two of the decedents (Ok, we have no idea of their names so for our purposes we will call them Frick and Frack) just got fed up and decided to head east. They took a few of Gus's Cows, a few wheels of cheese and some of Zug's Tanning powder with the intention of setting up a sort of Bagdad East. Unfortunately, they had not thought this out quite as well as they should have. The very fact that neither Zug or Gus tried to make them stay in Bagdad and in fact give them the money (Cows), Cash (Cheese Wheels) and the business plan just to get them out of town should have been indication enough. But whole societies have been built on less. What Frick and Frack had not planned for was the simple fact that there were very few people out East, and that Out East was very, I mean very big. The killer was the fact that the people they met had yellow skin so the whole idea of tanning just was not a 'go to' kind of thing for them. Moreover, while it is hard to imagine it today, most of the folks roaming around the steps of Mongolia thought that life was enough of a gamble without attempting to throw part of it away in a casino.

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Money for People with No Pockets

But for those whom fortune is not thrust upon, hard work is the only substitute. Frick and Frack's family set upon opening a series of gambling casinos in the south sea of China near what is now known as Macau. It took longer than they had hoped but eventually they got the Chinese 'hooked' on it as well as a series of opium huts which were their substitute for tanning salons. Like their brothers back in Bagdad, the family soon realized that cow and cheese simply did not do it, if for no other fact that it turned out that most of the Chinese were Lactose sensitive. Since the casinos (as back in the Mediterranean) were near the Ocean, therefore one moved immediately to 'shells' as the preferred form of currency. Again, rather than get it wrong the following is often lifted straight out of WIKI.

> "Cowry shells are definitely believed to be the earliest form of currency used in Central China, about 3000 to 4500 years ago. In the Chinese writing system, the traditional characters for 'goods' (貨), 'buy/sell' (買/賣), and 'monger' (販), in addition to various other words relating to 'exchange', all contain the radical '貝', which is the pictograph for shell. (Simplification changed 貝 to □ .)" However, similar to their brothers' experiences

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> in Dubai shells had their shortcomings. As they moved their enterprises inland, copies of these shells made out of bone, wood, stone, lead and copper are common enough to suppose a trade system in them was used……. "**The** Chinese seemed to invent the first metal coins before 900 BC, in a tomb near Anyang.[1][2] At that time, the coin itself was a mock of more earlier used cowry shells, so it was called the Bronze shell.[3][4][5]"

In fact, the bronze coin enabled the Chinese to begin to trade with the West for the first time. Traveling on horseback up and down the mountains of Tibet through what is known today as Afghanistan across the Deserts of Saudi Arabia etc. is hard on shells, that, and the simple fact that no matter how special Chinese Shells where it was hard to make them seem special to the folks of the Mediterranean who were up to the armpits in Seashells.

The Chinese coins money did differ from their sister coins in the Greece and Rome in one major area, since no one family or nation had come to dominate Chinese society the Chinese coins reflected the area from which they were coined. According to Wiki:

> During the Warring States period, (and that is what the period was really called from the 5th century BC to 221 BC,), Chinese society fought to determine who was number 1 in their hearts, in their souls and on their money. During this period, Chinese money was in the form of bronze objects that were of three main types. According to FW "The Zhou, the Wei (魏), the Han (□) and the Qin (秦) all used coins shaped like a spade (*bu*). The Qi (齊) used money in the shape of a knife (*dao*). The Zhao (趙) and the Yan (燕) used knife money before switching over to spade money roughly halfway through the Warring States period. The Chu (楚) used money in the forms of "ant nose" coins (*yibi*)." ….. Similar to its counterparts in the Mediterranean when a single authority finally came out on top, the ruling party, Qin Shi Huang (Chinese: 秦始皇; pinyin: *Qín Shǐ Huáng*, 260 BC – 210 BC) abolished all other forms of local currency and introduced a uniform copper coin based on the coins previously used by Qin. These coins were round with a square hole in the middle which was the common design for most Chinese copper coins until the 20th century.

Now this section is very important. I say this only because this section is very important. The development of currency in China from the use of shells to the development of metal reflects the ingenuity of man and especially the Chinese. One seeming commonality among men everywhere is the underlying desire of humankind to gamble. However, as in any area there are unique cultures differences. If one looks at Chinese clothing one notices one unique difference from Western cloths; they never developed pockets. It is often believed that is due in part to the low value of an individual coin. For instance, the Chinese have traditionally strung a thousand copper coins onto a piece of string. In fact, it was simply due to the fact that their clothes had no pockets and the string made it easier to carry the coins around their neck. In addition, it made it possible for the government taxes to be levied on both coins and in products such as rolls of silk which were used to create the strings on which the coins were hung.

The negative of no pockets and long strings of copper coins become evident during the middle ages in China. Over the centuries, the northern states tended to prefer copper coins while the southern states tended to use lead or iron coins. While it is thought that the separation of China into two regions above and below the Yangtze River was due to differing warlords, it was in fact the differences in the form of coinage. However, strings and strings of coins however were not sufficient to conduct trade. They broke easily and after one bad year of silk production in 1200, Song merchants (**see a penny for a song**) rapidly adopted forms of paper currency starting with promissory notes in Sichuan called "flying money" (*feiqian*). One reason for the term flying money is that the Chinese found the paper money to be excellent in creating tails on their Kites. Moreover, kite battles took place in which the money in the tail of the Kite went to the victor. These proved so useful the state took over production of this form of paper money with the first state-backed printing in 1024. By the 12th century, various forms of paper money had become the dominant forms of currency in China and were known by a variety of names such as *jiaozi*, *qianyin*, *kuaizi*, or *guanzi*.

The Chinese approach to money creation had become so sophisticated that it is the model that the Zug and Gus families in Istanbul used in their transactions with Marco Polo. The only difference was that the paper money that Marco Polo took with him was backed by the coins ZG enterprises held in their vaults underneath the gambling and tanning salons back in Turkey. The Mongol-founded Yuan dynasty (Chinese: 元, 1271–1368) went one step better. Unlike the Song dynasty, they created a unified, national system that was not backed by silver or gold. The currency issued by the Yuan was the world's first fiat currency, known as Chao. "or in Italian "Here is the Paper Money and Good bye" A Fiat currency required a government who could force its use by its very existence and a reference currency is based on the belief that it would not randomly reduce the value of the coin by forcing slaves to punch holes in copper rather than based on the probability that it could not simply go out and dig up more copper etc. In either case, it is based on the moral order of the government. In this area China has always come up a little short. Like most people, greed overcame theory. The Yuan government attempted to prohibit all transactions in or possession of silver or gold, which had to be turned over to the government. Inflation in 1260 caused the government to replace the existing paper currency with a new paper currency in 1287, but inflation caused by printing eventually ended the Dynasty.

Silver sycee (*yuanbao*) ingots

The failure of the Mongol's to control the production of paper currency, resulted in the following dynasties to return to the use of silver coins as the primary form of currency. The use of silver coins however rather than paper also led to the collapse of the Chinese economy. Frist there was very little silver in China and since the writing style in China used forms rather than individual letters or words for communication China never developed MV=PQ. Even if they did since the Chinese read right to left it never would have made sense. With no M and very little V, P and Q the Chinese never felt the need to go global. It should come as no surprise that to this day, the Chinese react to their natural lack of silver by being a large source of the principal demand for gold and silver even to this day.

American Indians

It is commonly and correctly believed that the original American Indians had come into North America from a land bridge from China. The most obvious anthropological evidence is that the money used by American Indians is directly related to the string theory of the Chinese. (See today's extended discussion of String Theory by the greatest leaders in Physics) Wiki points out:

> that the term "wampum" is a shortening of the earlier word "wampumpeag", which is derived from the Massachusetts or Narragansett word meaning "white strings [of shell beads]".[3][4] The Proto-Algonquian reconstructed form is **wa·p-a·py-aki*, "white-string-plural."[5]

It is also of no coincidence that similar to the Chinese, the use of string money was required since Indian clothing was, similar to the Chinese in that they have no pockets. If one is chasing down a deer what makes more sense, taking off your necklace of money and putting it around a tree and then off you go rather than going chingling and changling through the forest looking for a deer. Of course, putting your wampum around a branch and returning expecting to be there requires a lot of faith in one's fellow tribesman. However, it also created a basis for Indian tribes learning to live in peace. I won't take your wampum if you will not take mine. According to Wiki:

> "In New York, wampum beads have been discovered that date from before 1510.[1] The Haudenosaunee Great Law of Peace, the founding constitution of the Iroquois Confederacy, was codified in a series of wampum belts, now held by the Onondaga Nation".

A couple final notes on the use of Wampum. As for almost any form of money, while Wampum became the primary form of money it also provided a range of other services especially as a kind of numerical code used to remind people where the real money is sorted.. It is commonly believed that shell money in the Mediterranean, China and in North America were also used as a memory aid, as loose beads that were within a common size, shape, and color spectrum were usually not considered to be high in value. A typically large belt of six feet (2 m) in length might contain 5000 beads or more. In fact, while the beads were a memory aid, they were primarily an aid to remember where their money came from and where it was stored. Call it a form of a walking bank. There are, in fact, a number of monetary historians who support the theory that many of the Indian forefathers were not from China over a land bridge around the Last Ice Age but it was individuals from Europe who first came to Americas in about 8000BC and brought with them both the idea of shell money and the idea of the casino from the Gus and Zug days. I am not taking sides on this argument, but it could be more than just a statistical coincident that to this day Indians are regarded as especially adept at running casinos.

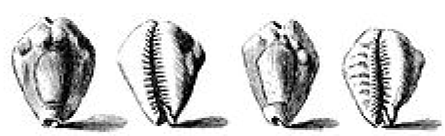
Commodity based money however remained susceptible to the whims of the gods. The wampum market demise as the result of a deadly red tide that decimated the whelk and quahog populations. Again, this is similar to the cold winter of 1033 in China which destroyed silk production and destroyed the strings required to the copper coins. As a side bar most of the great Indian nations lived near water if for no other reason that only the coastal nations had sufficient access to the basic shells to make wampum. The Dutch had learned something from their Tulip Bubble. Dutch colonists began to manufacture wampum and eventually the primary source of wampum was that manufactured by colonists, eventually destroying the Wampum market

South Sea/Asia Shell Money

I am bored with this whole shell thing as I am sure you are too. So, we will summarize. **Shell money** is a medium of exchange similar to money that was once commonly used in many parts of the world. Shell money usually consisted either of whole sea shells or pieces of them, which were often worked into beads or were otherwise artificially shaped. The use of shells in trade began as direct commodity exchange, the shells having value as body ornamentation. The distinction between beads as commodities and beads as money has been the subject of debate among economic anthropologists.

Again, according to Wiki:

> Some form of shell money appears to have been found on almost every continent: America, Asia, Africa and Australia. The shell most widely used worldwide as currency was the shell of *Cypraea moneta*, the money cowry. This species is most abundant in the Indian Ocean, and was collected in the Maldive Islands, in Sri Lanka, along the Malabar coast, in Borneo and on other East Indian islands, and in various parts of the African coast from Ras Hafun to Mozambique. Cowry shell money was important at one time or another in the trade networks of Africa, South Asia, and East Asia.



1742 drawing of shells of the money cowry, *Cypraea moneta*

But to put not too fine a point out it. Shells were thus a common form of currency for early civilization. Small and abundant and in certain cases unique and hard to produce, they were especially valuable in countries with no pockets. And in countries with little coastline (Inca) some civilizations never developed a monetary system

Japanese

This is a very short section, as Japan simply stole every good idea from someone else.

Japanese Money: Look Familiar

Other Currencies

One could continue forever. National pride as well as the cost of transporting currency across miles of water also led to the establishment of a range of alternative forms of currency in various countries. Our readers are referred to future books which cover the range of alternative currencies such as Ireland (four leaf clover); Norway (pine cones); Scotland (salmon).

As a summary, each nation came to rely on the creation of its own unique currency. While there were commonalities (cows over nothing, shells over cows, coins over shells) due to a range of geographical (no silver in China) as well as behavioral differences (cloths with and without pockets) differences did emerge. Today many people would find it hard to believe that each culture developed money in its own way. Today, as technology has reduced geographical barriers, as global trade has removed differential sources of scarcity, and as political differences have increasingly been settled by words rather than war, today currencies differ between countries but only in form. Zug's original idea that one cow equals two wheels has been extended to currencies. They may differ in how they are described but just as there is a simple transitivity between goods in 10,000 BC there is a simple transitivity between global currencies in which they are all the same thing.

Examples:

Yen-US = 104 (104 yen equals one dollar)   US – Yen = .009 or One yen equals 1 penny

And by the way, we have saved money in some form by getting rid of all the individual currencies (pine cones) or individual forms of the same currency (Franc, Marks etc.). What we have reduced however, is the ability of an individual to break from the group with his own unique form of currency. We sometimes forget that there is a cost to commonality in currency. There are always winners and losers when multiple forms of currency are collapsed into a single currency. The fact that various cultures and peoples remain wedded to a particular monetary form may reflect not only a human desire to keep what one has made but to keep a first mover advantage however so small.

Things to Remember

We are all different and all same in different and in similar ways. The problem is our history is the only history we have. Just as much a problem we do not have an idea what that history really is. As discussed in previous chapters, we were not there and for much of that history we have little information on what took place. What we do have is people and as my Grandfather said, "People is as People does." One of the problems with my Grandfathers observation is that since most problems have an optimal solution and if people chance upon it, there is very little reason for most people to question it or to change it. We have the tendency to bumble along (See Dickens).

From one optimal solution to the next. But this approach lessens the opportunity of an “Aha, I Have An Idea.” The Aha moment depends on what is currently going on, what simply does not work or may not work in the future. What the world needed was not a bunch of people doing the same thing because the same thing works but a bunch of people making mistakes that don’t work so that we can bumble on to the next thing that does. Often these individuals were known as Crazies. The question is if we can come to grip with our own idiocy and that of the organizations, we have around us. We do not want problems with a single solution we want problems that when the single solution fails, imbedded in the previous solutions are a host of potential “Aha, I have an Idea.” These folks are often regarded as Crazies but Craze is as Crazy does. .

What You Will Be Tested On:

Unitary versus Multi-Source Human development
The Gold Devaluation of 1203
The String Theory in History of Money
Memory Beads versus Monetary Beads

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Chapter 9: The Rise of GRAZIES

Summary Introduction

In any society beset by change, ex post there will be those who in later years will be proclaimed as seers and those that are considered crazies. The difference is razor thin. A theoretical understanding of the cosmos as well as our own planet is important but the lack of practical understanding of the daily aspects of living can rise up and bring you back down again (Isaac Newton). It the late 1700's it was less about how good a banker you were but how good a gunshot you are or how good a shot your enemy is (Alexander Hamilton). In the wild west of the mid 1800's money was less about who you were or where you were born than it was about the advantage of being a first mover (George Smith). The later part of the 1800's had more than its collection of weirdoes but all it takes is for one who with a series of ideas (40 hour week, benefits of paper money) to upset society by constantly knocking at the door of change (Ignatius Donnelly) and even to the extent that in certain cases the door opened. And nothing lists you as crazy more than a moral man in an immoral society (William Jennings Bryan) <u>or a somewhat aloof man in a society which favors the common man</u> (John M. Keynes).

History is a cruel judge, but a judge it is. This is especially true when what we are judging is something like money that has become a focal point of society. The individuals in this chapter are only indicative of other individuals who may be regarded as crazies but for the most insignificant of events (a road taken or not taken) would today have been regarded as seers. The very fact that each of these men had other facets of their life, their kids, their wives, their lovers, as well as other activities, good and bad, made their accomplishments even more dramatic. What they did was to advance the idea of money as a central part of human activity and progress. Is that crazy or what?

This is one of the shortest chapters, but it could have been much shorter or it could have been much longer. We are all crazies in our own way, in what we believe and what we choose to believe. Only the future will decide what end of the distribution it wishes to place us in.

What is a Crazy?

With something as important as money, it should come of no surprise to anyone that money attracted both end of the distribution of humankind that is the crazies to the right and crazies to the left. Those who wanted money only to be gold and those who only wanted money to be everything else. In short, while nuts never became a primary form of money, money did bring out the "Nuts." One may fail to believe that even some of those individuals who we believe to be the finest example of human brain power had problems when it came to money. But every country needs a few 'Crazies.' As we have said many times, we have only one history. Those who come up with "Aha, I Have An Idea" moment is often regarded as geniuses even in areas that they have no expertise. How often do we take an individual who excels in one area and then ask them for their opinion on a host of other issues that have no connection to his or her one "Aha Moment"? Similarly, how often do we regard an individual as Crazy only because he or she dedicated themselves to an idea that was never fully accepted by those around him or her?

Entire books and college courses are centered on how ideas come into existence and become accepted by those around them as "Truth." For any individual the distance between the Crazy and the Genius are often decades of debate. Often the first generation those who have an invested interest in the original idea need to die off before a new idea can transplant it. One of the most famous books on the History of Science, Thomas Kuhn's the History of Scientific Revolution , details the hard slog that a 'successful idea needs to take" before it can be Reborn in the public's interest A few examples in this chapter prove the point:

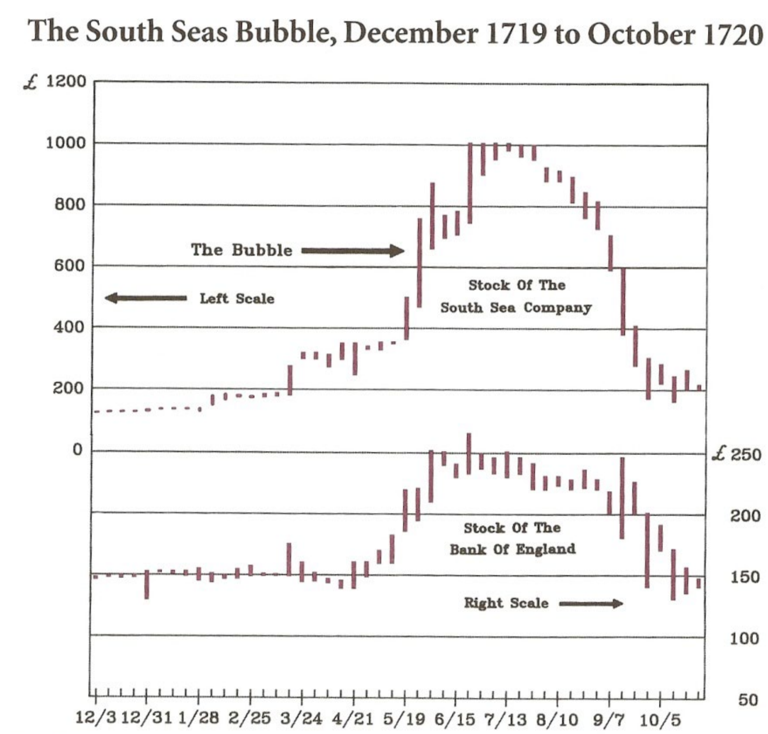
Isaac Newton (Mathematician/Financier/Weirdo)

Isaac Newton is best known for this theory of gravity, which came to him while he was sitting under an apple tree on his uncle's apple farm. Now this was no coincidence. While Isaac had a big brain, (look at his picture below), he was also incredible lazy. He also was an arrogant SOB. He was supposed to be out gathering apples from the tree when he laid his body next to one of the smaller trees and all the apples fell to the ground. This is great, he thought. No more picking apples since they fall naturally if one just shakes the tree. I should come up with a theory on this; ALA gravity. It also resulted in many more apples being gathered, the price of apples collapsing (See Tulips) and Isaac without a job.

Picture of Isaac Newton: Pre Crazy (Age 26)

Picture of Isaac Newton: Post Crazy

Today he is revered as the father of modern physics and the inventor of calculus, however in his time Isaac Newton was primarily an unemployed academic hack looking for an easy way of making a buck so he could lie around apple trees coming up with ideas like gravity. Of course, Isaac was smart enough to know where money came from. It came from a printing machine (already invented) with pictures of Kings on it (already had one) backed up by gold (of which he did not have). He knew number 1 and 2 were out of the question so he took up number 3. Get Gold. No problem or big problem. Newton was, as I said lazy, and there was little gold on his uncle's apple farm (he knew of the golden delicious apple but like the title was more literal than figural). Moreover, Isaac was a perfect example that academic smarts does not equal business smarts. Now Isaac thought he was pretty smart in fact thought he was the smartest guy in the room (and this was a room with a lot of smart guys such as Leibniz). So, when Isaac made a little money in the South Sea Bubble he thought he was smart. When a few others made even more money, he had to show he was even smarter. As shown in his South Sea investment he should have spent a little more time on stock market cycles instead of calculus, but it was the start of behavioral economics.



James E. Rogers, *A History of Agriculture and Prices in England, 1703–1793,* New York: Clarendon Press, 1902.
Scanned from: The Wall Street Waltz, Ken Fisher (page 85)

Isaac Newton as Market Technician

So off he went trying to make gold which at the time was called alchemy as a la chemistry. In the parlance of the day, it was calling the search for the Philosophers Stone since a philosopher who had enough of it would spend most of their time Stoned. Now as crazy as this may sound today, at the time it seemed eminently reasonable. Back in the day, alchemy was not the misguided pseudoscience that most people thought it was. Rather, it was a valuable and necessary phase in the development of modern chemistry. Moreover, this was the period of the Enlightenment where man believed he could do about anything. If they could define the movements of the Universe what was coming up with a few basic metals that formed gold.

As discussed in Wiki, historian P. Newman has said.

> "There were reasons that alchemists thought they could make gold," Newman says. "They had theories about the nature of metals that made them believe they could manipulate their structure. They also conducted experiments that they believed proved minerals could be made to grow." In an age when there were no microscopes to penetrate

> living cells and no understanding of the nature of atoms and molecules, the alchemists were not misguided so much as misinformed, doing their best to make sense of a world they could not see. That they understood as much as they did is the real marvel: In pursuing what today seems like little more than witchcraft, the alchemists were in fact laying the foundation for modern experimental science."

OK that may be a little over the top. However, consistent with man's evolution, necessity does breed invention and Isaac was nothing if not in need. Here is the essence of the story. Now the following story has no relationship to Alchemy, but it is just so darn interesting that I had to include it. Wiki points out:

> that May Newton, as Warden, was called in front of the Parliamentary Committee on Mint Miscarriages in 1696. One of the witnesses for the prosecution, appearing in 1697, was William Challoner who proposed a series of improvements for the Mint, which Newton dismissed. The Committee of politicians preferred the advice of Challoner over that of the physicist and so Newton responded to this turn of events 'rationally,' by locking Challoner in Newgate prison. Newton, as Warden could do This, but had to release Challoner after seven weeks, at which time Challoner, as might be expected, stirred up a hell of a row.
>
> Around a year after Challoner's first appearance in front of the Committee, Newton was called before it to justify his treatment of the man. Newton had spent the intervening year, and £9 10s, investigating Challoner. It turns out that Challoner had started out as a labourer but through counterfeiting, theft, fraud, and duplicity, become a wealthy gentleman. His whole ploy, it seems, had been to get appointed to the Mint, to support his criminal activities. Challoner was executed in March 1699 following a prosecution managed by Newton, who was 'promoted' to Master of the Mint at the end of the year [Craig, 1946, p 17–19].
>
> Being Master gave Newton an average income some 16 times what he would have had as an academic. Today an 'average' salary for a jobbing professor is around £60,000, and we could expect the Lucasian Professor at Cambridge to earn somewhat more than this. On this basis, the equivalent salary for Newton as Master of the Mint is in excess of £1 million [Levenson, 2009, p 239]. Newton no longer needed the security of his position in Cambridge and he resigned his Professorship at the end of 1701.

So, despite Newton belief in alchemy no one should call Newton crazy. Nor did he completely abandon science or finance, He became President of the Royal Society in 1703, holding the post until his death, but Newton played an active role in finance for the rest of his life. One of his most significant acts was in setting the exchange rate between gold and silver in 1717, an exchange rate that would shift Britain from the silver standard to the gold standard. English money had always been associated with silver. This was in common with much of Europe and China (see Chapter 6) but different from the Middle East, which was based money on gold. By 1710 Britain was running short of silver coins because the amount of silver in a coin was making it worthwhile to convert silver coins into dinner services (and the follow up rise of the spoon, fork etc.). Again, from Wiki, Newton's solution was:

> the government saw the solution as increasing the value of the Britain's main gold coin. On Saturday 21 December 1717 the government asked Newton to fix the sterling silver exchange rate with the main gold coins used throughout Europe, in a report 'blinding with science' [Craig, 1946, p 108], the value of the British gold guinea increased from being worth only 20s of silver, to being worth 21s.

The Law of Unintended Consequences kicked in, Newton had undervalued foreign gold coins. As silver buys more gold abroad than at home, by sending abroad silver they bring gold in return, which buys more silver here than it does abroad. By this means a kind of trade is made of it, the gold coin increasing and the silver diminishing. So, in a way Isaac was successful. He found a way to make gold out of something else (silver).

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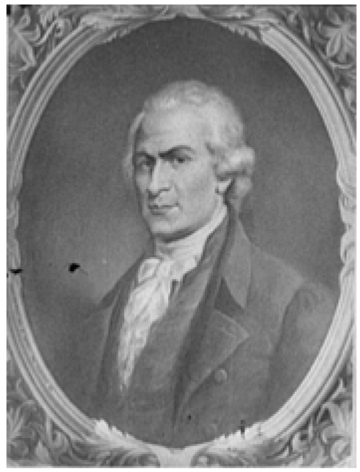
Alexander Hamilton (The Brain Behind America's Banks)

Some of our readers may wonder how Alexander Hamilton got onto our list of crazies. First of all, he was like really important in the history of money and second anyone who gets himself into a dual with an individual (Aaron Burr in this case) who was known to be the best shot in a country of good shooters is certifiably crazy. Now Alexander Hamilton had some personal issues including being illegitimate which at that time was a big thing. So let us just say that he had somewhat of an inferiority complex. As a consequence he tried to overcome it by doing really big thing, I mean like really big thing like setting up the financial system for an entirely new country that had few if any friends, few if any resources and for which 99.9% (ok may not 99.9% but a big part of it) of the business was conducted with Wampum (Chapter 6) or someone else's currency and even worse the currency of a nation that you had just kicked in the goldens (the use of goldens as a synonym for a particular male organ of importance to the generation of the individual's future family again shows the importance of gold as a monetary vehicle). To move forward the United States would need its own money as well as a few friends or at least no to piss any of the few you had off. Now to begin not only did the U.S. have no money it owed a lot to others.

According to Wiki:

> the nation and various states owed $76 million to soldiers, army suppliers, and foreign lenders. That debt, said Hamilton in his January 1790 *Report on Credit*, "was the price of our liberty," and it would be shameful to repudiate it, as some politicians urged. It would be impolitic, too: for if the federal government could convert all the various bonds and promissory notes representing those debts into federal government securities that people believed would actually be paid in full, those securities could serve as money. They could serve as a medium of exchange that would "give greater means for enterprise," extending trade, manufacturing, and agriculture. But they could do so, to repeat, only if people

believed that they were really worth what they said they were worth, and government creates such belief by keeping its promises, not repudiating them.



Picture of Alexander Hamilton (note lack of Beard – Not Hiding Anything)

Of course, the nation had insufficient gold and silver to pay these debts in full, so Hamilton proposed instead to renegotiate and restructure them into several kinds of interest-bearing annuities. He would pay the interest by levying import duties and excise taxes that he placed in a special "sinking fund." Remember we did not have a federal income tax until the 18$^{th.}$ Amendment. As to the last part of this plan, he needed a bank to issue currency and lend it, a mint to print and coin it, blended with a customs service to collect duties, and catch smugglers. Having never had much money, Hamilton understood its mystery. He knew that to the extent he had access to base currency, the bank can issue paper currency far beyond the value of the precious metal in its vault, since people have sufficient faith that they can redeem their dollar bill for a dollar's worth of gold or silver that they never do the experiment. How far beyond the value of the gold and silver can the paper currency grow?

> Hamilton arranged that, of the bank's $10 million capitalization, only $2 million would be actual precious metal; the rest would be . . . federal government bonds, so that the national debt would support an even larger superstructure of credit.

So why was this not a pyramid scheme?

> Hamilton had written as far back as 1780, the money in circulation is not a sufficient representative of the productions of the country. The bank's ability to put its capital to work, incessantly circulating it in notes or in loans at interest, so that it never lies idle (REMEMBER IMPORTANCE OF V, is to "all the purposes of trade and industry an absolute increase of capital," he observed. "And thus by contributing to enlarge the mass of industrious and commercial enterprise, banks become nurseries of national wealth." (by giving loans to the creditworthy, banks "enable honest and industrious men, of small or perhaps no capital to undertake and prosecute business, with advantage to themselves and to the community," he wrote, as one self-made man hoping to give others the same opportunity; and indeed, he took care to issue currency in small denominations, so that even the humblest could reap the benefits of the new economy.

Whatever, Hamilton had levered himself up from an illegitimate childhood by creating a mystic based on a foundation. As long as no one questioned the foundation, he could rise as fair as MV=PQ could take him as long as some idiot did not mess with the M (he wanted the national bank to be in private hands so that the government would not be tempted to just print money) or with his own history. Burr did just that. He questioned Hamilton's very personal foundation, his birth, and his approach to financing the new nation. What choice did Hamilton have but to back up his base currency? History would only prove that he should have spent more time on pistol practice than monetary theory, but Crazy is as Crazy Does.

George Smith (Entrepreneur/Immigrant/Financier)

Who is George Smith and why is he in this Chapter? Well because he was really cool and nobody knows about him though if they were really cool they would, but history is not fair and if you ever have the time and the interest an 850 page book on George and his life would be

Pulitzer Prize ready. So, am I crazy in having him a central feature in the History of Money? Well, if everyone in the world said X and you said Y, who would you call crazy? In this case, however, everyone else would. But, as pointed out in the previous section, Hamilton knew that trust is both a fiscal thing and a personal thing.[59] Once lost bad things can happen. Soon after Hamilton's death (about thirty year), the power of the nation was moving west. The West did not trust the East. Many felt that the growth of America was being held back by the industrial moneyed interest of the East including the national bank in Philadelphia. In the 1830s they finally got their wish, the national bank created by Hamilton was disbanded. Now many of its powers remained but a national currency went with it. Each bank becomes its own national bank. Each was responsible for the gold it held and the paper it issued. With no one bank responsible, no one was responsible. The old MV=PQ came out with a vengeance. Paper money flowed throughout the country. Prices rose. Debts could be paid with cheaper money. (In this case the bad money drove out the good). All went well until someone decided to go back to the bank which issued the note and said, "Where is my Gold." As has been said, Payback is a Bitch. When one has only $10 of gold for every $100 of money printed and the $100 comes back for $100 of gold bad things happen. Banks throughout the country collapsed, M fell and P went with it. The country fell into a depression as Wildcat banks when out of existence. [60]

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[59] This whole trust thing affected multiple aspects of American business. The growth of futures markets in Chicago were based on the establishment of margin accounts in which a person who wanted to make a contract for future delievery or purchase had to put down a deposit at a bank such that if they failed to deliver or purchase in the future, the other part of the contract could take his deposit to offset the potential price change. Why all this, well we never trusted someone to show up, if prices where better somewhere else one could simply not show up and there were no national or local police force to 'track you down".

[60] **Wildcat banking** refers to the unusual practices of banks chartered under state law during the periods of non-federally regulated state banking between 1816 and 1863 in the United States. …According to some sources, the term came from a bank in Michigan that issued private paper currency with the image of a wildcat. After the bank failed, poorly backed bank notes became known as wildcat currency, and the banks that issued them as wildcat banks.[1] However, according to others, *wildcat* meant a rash speculator as early as 1812, and by 1838 had been extended to any risky business venture.[2] A common conception of the wildcat bank in Westerns and like stories was of a bank that left its safe somewhat ajar for depositors to see, in which the banker would display a barrel full of

Picture of George Smith (There is None – Did he really Exist?)

What was the solution? For much of the new America the answer was simple, get rid of paper money. Newly minted states such as Iowa, Wisconsin, Minnesota demanded that only gold be used as legal tenure. Death to the Devil's money that is paper and back to God's currency that is, the base gold metal he gave to us. It is not the purpose of this chapter to recount the who battle, but consistent with the history of man the story is simple, if you lived on a river and had access to silver or gold you favored hard money, if you were far away from such currency (e.g., a city like Milwaukee or Chicago) you needed more manure to grow the crops.

Here is where George Smith comes in. In many parts of the United States, people needed manure (e.g., currency to conduct business) but who to trust and if you cannot trust a Scotsman to make sure that there is enough gold to support his currency who can you trust. This was good old George with his face right up there on his dollar bill. According to Wiki:

> By 1839, he had founded an insurance company based in Wisconsin whose notes he circulated in his new unchartered bank, George Smith, and Company. These bills acted almost like currency which came to be called "George Smith's money" which by 1842 was actually redeemable in gold and silver. Two years later Smith's was the only bank left in Illinois and by 1854 75% of Chicago's currency was backed by Smith.[2] Smith accumulated a fortune in Chicago but by 1857 he was living in London where he died in late 1899.

nails, grain or flour with a thin sprinkling of cash on top, thus fooling depositors into thinking it was a successful bank.

It does not become more American than that. Crazy yes but crazy as a fox. Over the next ten years, for much of America George Smith's bank was America's bank. When this settled down, he knew enough to close the shop and return to Scotland. Great Guy, Great Story. After the war (and how anyone can call something that cost almost 500,000 men CIVIL is beyond me) other nuts came out as well as a national bank and a national currency. For those who forget that the past differs from the present, the following shows how the currency of the 1870's differs from that of today.

Coins of the 1870's

Ignatius Donnelly (A Man of Many Talents - Writer, Politician, and All Around Good Guy)

Ignatius Donnelly is in here just because one can be crazy and still be a major player. Ignatius Donnelly wrote books on the Atlantis the Antediluvian World (an update of Plato's work that suggested a land mass between Europe and the U.S.), and Shakespeare the great Cryptogram mystery (which posited that someone other than Shakespeare wrote his plays[61]) and he lived most of his life in Minnesota. He also was a believer in **Catastrophism** is the theory that the

[61] Consider it a DeVere type book 150 years before its time.

Earth has been affected in the past by sudden, short-lived, violent events (remember Noah's flood), possibly worldwide in scope that fundamentally impacted future events. The actual list of his books is as follows:

His books **(With Comments)** include:

- Atlantis: The Antediluvian World (1882), in which he attempted to establish that all known ancient civilizations were descended from its high-Neolithic culture. **Wasn't There a Movie on this**
- Ragnarok, the Age of Fire and Gravel (1883), in which he proposed that a comet hit the earth in prehistoric times and destroyed a high civilization**. (Ok, it was an earthquake and it was the Myneon civilization but now we are only quibbling over dates).**
- The Shakespeare Myth (1887) – **See today's Edward De Vere controversy**
- Essay on the Sonnets of Shakespeare:
- The Great Cryptogram: Francis Bacon's Cipher in Shakespeare's Plays (1888), in which he maintained he had discovered codes in the works of Shakespeare indicating that their true author was Francis Bacon. **He would have made a great head of the CIA**
- Caesar's Column (1890), a science fiction novel set during 1988 about a worker revolt against a global oligarchy. **Looks like a Cable TV Show Today**.
- Doctor Huguet: A Novel (1891) (Published under the pseudonym of Edmund Boisgilbert.) – **Got to Love the Last Name**
- The Golden Bottle or the Story of Ephraim Benezet of Kansas (1892)
- The Cipher in the Plays, and on the Tombstone (1899) **– I Love A Good Cipher**
-

Ignatius Donnally (A Crazy or a Visonary – You Judge)

I mention this only to show that he was certifiably crazy or certifiably ahead of his time. OK maybe his Shakespeare idea was not so crazy he just got the wrong guy and his Catastrophism idea while wrong in the specifics is increasingly being considered seriously as a means to explain abrupt changes in climate, geography as well as social and economic changes. So where does he fit into the history of money. Simply put, he helped form something called the **Greenback Party** which fielded Presidential tickets three times — in the elections of 1876, 1880, and 1884, before fading away. Well not really fading away, he was the early Happy Warrior[62]. In later years he supported a political platform that demanded abandonment of the gold standard (and later for free silver), a graduated income tax, direct election of senators, civil service reform, and an eight-hour day. Today we live in a world of no gold standard, a graduated income tax, direct election of senators, and eight hours day. Maybe he was right in other areas as well (watch out Shakespeare).

Now most people's memories are short. Soon after George Smith returned to Europe, and the U.S. settled down after the not so civil 'Civil War,' there was a renewed demand for more inflation. Why not pay back old money with newer cheaper money? By this time, the old MV=PQ was getting to be well known,[63] but it had been years since the gold rush of 1849 and M was not growing the way it should. The party's name referred to the non-gold backed paper money, commonly known as "greenbacks", issued by the North during the American Civil War and shortly afterward. The party opposed the deflationary lowering of prices paid to producers entailed by a return to a bullion-based monetary system, the policy favored by the dominant Republican Party. Continued use of unbacked currency, it was believed, would better foster business and assist farmers by raising prices and making debts easier to pay.

Initially an agrarian organization associated with the policies of the Grange, from 1878 the organization took the name Greenback Labor Party and attempted to forge a farmer-labor alliance (It is no mistake, ok maybe it is, but note the only political party known by the name

[62] A type of 1880's Hubert Humphrey.
[63] In the 1980's Alfred Marshall wrote the first "Principals of Economics" in which the principals behind the growth of nations wealth was discussed not in political terms (see Adam Smith – Theory of Political Economy) but in modern terms of mathematics and statistics.

Farmer-Labor party is found in Minnesota) by adding industrial reforms to its agenda, such as support of the eight hour day. The organization faded into oblivion in the second half of the 1880s, with its basic program reborn shortly under the aegis of the People's Party, commonly known as the "Populists."

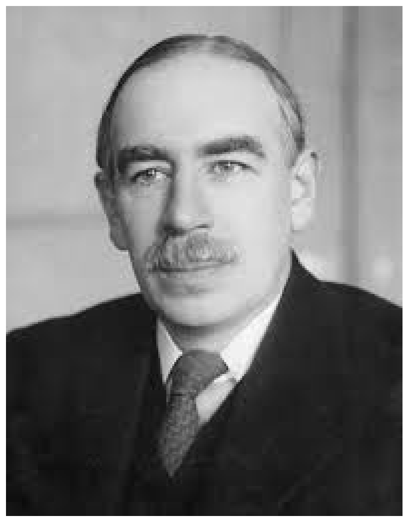
William Jennings Bryan (The Cross and Monkey Guy)

Son of Ignatius Donnelly? Not really but in spirit and he ran for President three times. So, he must be crazy. See next chapter. Just to let everyone know that while he is explored more fully in the next chapter, he does fit into this chapter, he was the lawyer in the Scopes Monkey trial in which he defended the ‘seven day version of creation’ over the evolutionary theory of Charles Darwin. Who knows maybe he was right? Time is so relative.

William Jennings Byran (Politician and Future Wizard of OZ)

John M. Keynes (banker, investor, monetary theorist)

I do not know if Keynes should be regarded as a Crazy or as indicated in the foreword of this section an ‘Immoral Man” in a moral society. Let us just say that he was a very rich man that spent considerable time telling others how they should help the poor. He also promoted an economic theory that detailed the importance of government or fiscal action in a world of monetary impotence. Thus here is a man who made his fortune in money, while decrying its use as the primary means of promoting the national good. One may also question his expressed attitude toward certain racial stereotypes as well as his bi-sexuality while being officially married. However, one should never expect consistency among men, great or small.



John M. Keynes

Things to Remember

It is often said that we learn more from our mistakes than we do learn from our successes. But even for the most idiotic of us that is hopefully a really small sample. To really learn from mistakes, we have to review a much larger sample. Unfortunately, we have a very large population to learn from. Learning from them is less in the case of failure, but in learning how they came to an idea that was not right for its time or any time. An idea makes its way through the rocks and rivers of its day only if it has some underlying benefit to the society of its time. While Europe and other parts of the world at any time were focusing on a single solution that seemed to work for them, that solution may not have been appropriate for others and other times. Much of the development of financial systems was the result of what was really 'sane' actions by crazy men or crazy actions by sane men. Often it is hard to tell the difference. What if the U.S had not moved away from a central bank form to more state based financial system and eventually local banks. How would the development of the U.S. look? What if the Central part of the U.S. had vetoed paper money? What if? What if? There is a developing area of economic theory which attempts to create a set of scenarios that would have or could have happened in other states of the world. The Hamilton's, the Smith's, the Donnelley's were simply players in this game. Perhaps they were fools? Perhaps they were not?

What You Will Be Tested On:

Philosophers Stone
George Smiths Bank
Arron Burr
Wildcat Banks
The Great Cryptogram Mystery
Cross of Gold

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Chapter 10: FOOL'S GOLD

Summary Introduction

For many the reason behind the search for gold is the most basic. Gold provides a means to obtain directly or indirectly the basic means of survival. In short, gold for much of human history has been viewed as a source of value, a medium of exchange and a unit of account. But why gold? Many of us have heard the message on television or in the paper about the availability of gold coins or financial instruments whose value is related to the price of gold. We read books or see movies in which the protagonists have as their primary goal, gold. The first Bond film was "Goldfinger." But what is the source of that value? We do not have the name of the individual who woke up one day and said, well I will take gold in exchange for a cow, a tan, a mud hut or even an indulgence. If you walked by a gold brick and failed to pick it up, many if not most people would call you a fool. But what if we would wake up one day after spending a fortune on gold just to find that no one cares? Who is the fool now?

That dilemma exists for many other decisions. How does one determine the real value of an object? For most objects, we believe something has value because we can use it to produce other objects of real value. It has real value because it increases the value of something else. The entire field of economics is built in part on the determination of the marginal value of something; that is, the distribution of scarce resources among competing wants. Now gold may be scarce but what is its place among competing wants. Sure, it may have some production value, some societal value for the vain but other than an assumed value amongst trading partners in a society what value would it have. In short gold may or may not have value, the issue is who determines that value. Is it a fact or a fiat?

Gold: Pro and Con

I just realized that with only two chapters to go, I had always assumed that the reader has a clue about basic financial concepts that have formed the foundation of this book. So, catch up time. First of all the History of Money is rooted not only in economics (the race doesn't always go to the strongest and the fastest but it is the place to put your money) and finance (return is a function of risk) but in management (how to produce it) and marketing (how to lie about how you produce it). We are going to concentrate on the economics part. For those of you who did not go to college in the brainiac section, the basic concepts of economics are:

1) Produce where marginal revenue at least equals marginal cost – In short don't sell something for less than it costs to produce.
2) The Banks Create the Money (Well they really don't, There is this thing called the money multiplier but Banks are in the center of it and they really don't create the money it is made somewhere else but this is for the advanced class so for here BCM.

That's it. Please go to the podium to collect your degree. The Ph.D. version adds one additional caveat:

3) MV=PQ where
    a. M=Money Supply
    b. V = Velocity of Money
    c. P = Price
    d. Q = Quantity

There may be some discussion as to who gets Q but the primary debate is the effect of M on P for a given Q. Now before you doze off – Mind you WARS HAVE BEEN FOUGHT OVER THIS.

For example, if one has two pieces (about 1 ounce) of gold (M) and you want to buy something (Q) from your friend. Assuming that he has only one (Q) of what you want, you will be willing to give him both pieces of gold for the item (P = 2) and each piece of gold is worth .5 Q. Let us assume that you are walking around and find two other pieces of gold and your friend still has only one Q. Well if he knows you have four pieces he may ask for all four pieces of gold and the item goes to four and a single piece of gold is worth .25Q. Now before you found the extra two pieces of gold, your friend would be really happy if he had borrowed the material needed to make Q and had to pay back his lender say two pieces of gold when he now finds out that he will get four pieces of gold. (Inflation means prices going up help one pay back old money with cheaper newer money).

Of course, you may not just go to your friend and give him the 2 pieces of gold. First you may not even know the guy that well. Instead, you take the old two pieces of gold and the two new pieces of gold and put them in a bank. The banker gives you a four crisp dollar bills (each gold coin is worth one dollar),[64] which you put in your bank account.[65] The bank however knows that you are going to keep it the gold (an asset) and your dollars (the liability) in the bank, so he they loan out one dollar to Betty who puts the dollar in her bank account (your bank has three dollars and one dollar loan) and her bank has the dollar as an asset and as a liability to Betty. Soon those two pieces of gold are supporting let us say five dollars of savings (Backed by four dollars of gold and one dollar of loans). All of a sudden you and Betty take out your money and use it to buy Q. The price of Q is now five dollars. Bill (another friend) can take these five dollars and use it to buy something else soon from someone who puts those five dollars in the bank AND THAT BANK LOANS OUT THOSE THREE of THOSE FIVE DOLLARS. This could go on forever as a type of chain letter. Soon you have EIGHT dollars out there, prices are rising. They are rising so fast that the guy who has Q decides that he can make a little more money if he makes more Q (right now he makes about 10 cents on every Q. As he produces more it is more efficient so producing five Q and charging less than eight dollars (let us say two dollar) and everyone gets two instead of you originally getting just one Q, but you get the idea. The more M the more P or Q and if V can turn quickly from you to Betty to Bill the pool of money through the banking system is increased based on the expansion through loans of the original dollar. Of

[64] In the 1930's we set the price at 37.50 dollars per ounce – so prices come and prices go.

[65] Note that it was about this time that the whole idea of checking and savings accounts began to mature in which the banks not only held your gold jewelry but your actual 'monetary wealth'. That monetary wealth could then be used as a basis for supporting loans to other organizations and using the profits from those loans to give you a small return on your deposited cash. For most of the 1800's most of the loans a bank provided were strictly related to the collateral you deposited (the jewelry) or the land you owned. The bank trusted the gold content in the jewelry and the fact that you could not run off with the land. It took years before it came to accept that gold coins or bars would be used as a basis for monetary growth.

course, if the loan is not paid back or if one returns the dollar to the bank for gold this whole thing can work in reverse

Ok I have lost you. But this is important. For centuries commerce was at a level where goldsmiths and silversmiths could keep up with the demand for metal-based currencies. However, as discussed previously after the Dark Ages and the Little Ice Age most of the coins were getting really old and people wanted new stuff and for new stuff there was a renewed demand for money. Banks such as the Medici came into existence to meet certain needs but for the most part money consisted primarily of coins and claims on those coins. Now fortunately we have found a way to create paper. People were a little dubious of its use as money, so they just went about trying to get more of the old type. As discussed the Church took gold from the people, new nation states took gold from the Church and everyone else who they could (e.g., Inquisition who went after the Jewish persuasion). When they had taken all they could they attempted to find what they could below ground (Spain) or to find ways to increase its production through increases in technology (new ways to access silver with sulphur). Despite all of these efforts most nations simply did not have enough money to meet the growing needs for commerce or to keep their lifestyle in a form they were comfortable with. They even exhausted their attempts to replicate the Churches earlier attempts of taxing their citizens for access to s life in heaven by taxing them for a life on this planet.

In short, they simply ran out of gold and other precious metals. What they needed was a way to produce money themselves and since the failure of Newton and others to make gold out of common minerals, they settled on something they could make 'paper money.' Even here (as the

French found out with the South Sea Bubble) there were limits. To the point, the more gold the more paper money it can support as long as only a limited number of people go back and ask for their original gold. Even if this happens, it is possible if one has the power to cheat and say that each piece of gold is no longer worth one dollar but is now worth five dollars. This means that the one dollar you bring to the bank reduces the gold that they have to give you (only twenty cents of gold) and in fact enables the bank to lend out a lot more dollars per ounce of gold. Remember gold or silver or anything you give the dollars for can add to the money supply (increase dollars) or you can always increase the number of dollars you give out. Now we have learned that it is never as easy as that but all else equal the more we have to buy something if the number of somethings does not increase its price does. For example:

Spain and Search for Gold

Very few individuals know this but one of those tribes (Alaric and the Visigoths) who stopped off in Rome to get some coins and then left it there since it was too heavy to carry eventually settled in Spain. Of course, they missed their gold.[66] It took about fifteen centuries but their

[66] Silver has been used for thousands of years for ornaments and utensils, trade, and as the basis for many monetary systems. Its value as a precious metal was long considered second only to gold. The word "silver" appears in Anglo-Saxon in various spellings, such as *seolfor* and *siolfor*. A similar form is seen throughout the Germanic languages (compare Old High German *silabar* and *silbir*). The chemical symbol Ag is from the Latin word for "silver", *argentum* (compare Greek ἀργυρος, *árgyros*), from the Indo-European root **arg-*, meaning "white" or "shining". Silver has been known since ancient times. Mentioned in the Book of Genesis, slag heaps found in Asia Minor and on the islands of the Aegean Sea indicate silver was being separated from lead as early as the 4th millennium BC using surface mining.[7]The stability of the Roman currency relied to a high degree on the supply of silver bullion, which Roman miners produced on a scale unparalleled before the discovery of the New World. Reaching a peak production of 200 t per year, an estimated silver stock of 10,000 t circulated in the Roman economy in the middle of the second century AD, five to ten times larger than the combined amount of silver available to medieval Europe and the Caliphate around 800 AD.[42][43] Financial officials of the Roman Empire worried about the loss of silver to pay for highly demanded silk from Sinica (China).The Chinese Empire during most of its history primarily used silver as a means of exchange. In the 19th century, the threat to the balance of payments of the United Kingdom from Chinese merchants demanding payment in silver in exchange for tea, silk, and porcelain led to the Opium War

ancestors eventually got tired of using shells and took off to find some gold. And guess where they found it. Right here in our own backyard. Some historians even maintain that it was the discovery of gold and later silver by the Pissarro and others (Desoto and Ponce De Leon[67]) that resulted in the inflationary period of the early 1600's. This inflation led to increased innovation as inflation let people pay for future goods with cheaper dollars. For the average Spanish citizen this was great because except for oranges and some sheep Spain does not really have anything to barter or trade with. So, gold meant I can finally get a few things, like cloths with pockets, a couple of chalices, a war with England (good old Spanish Armada) and even a country (Denmark and the Netherlands). The question on average person reading this question would probably figure you've got filings in the brain pan, but in fact you have asked a question that baffled Spaniards at the time and has fascinated historians since. With so much gold why was it England (a country with no gold) who became the global leader in the 17th and 18th centuries rather than Spain? Simply, Spain blew is how.

Well, a fool and his money are soon parted, and I have nothing against the Spaniards (I have already have half the Italian mafia on my heels for comments about Marco Polo and such) but it was not all their fault. A couple things to keep in mind: first, while the flood of gold into Spain in the 16th century seemed like a big haul at the time, by modern standards it was a trivial amount. According to Wiki:

because Britain had to find a way to address the imbalance in payments, and they decided to do so by selling opium produced in their colony of British India to China.[46]

[6767] Some anthropologists maintain that it was the fact that Spain finally had enough money that searching for a fountain of youth made sense (Ponce de Leon).

> Total world gold production during the 1500s is estimated to have been around 36 tons; from 1900 to 1976 it was 76,428 tons. (Which still isn't all that much, incidentally. It's claimed that all the gold that's ever been mined would fit into a cube 18 yards on a side.)

Second, you're right in guessing that a lot of the gold was stolen. Some estimates are that 10 to 15 percent of the New World gold intended for Spain never got there due to theft, piracy, or other mishap. That is why there are so many boats in Miami still looking for it.

Nonetheless, that leaves 85 to 90 percent that did make it, along with tons of silver, which began to be mined in quantity toward the end of the 16th century. Where did it go? The answer has to do with the slippery nature of money (that is one of the reasons it seems so difficult to keep our hands on it). The reasons for this are complex, but it seems clear that at least in part it was a matter of a sharply increasing amount of money (in the form of silver and gold) chasing a relatively fixed output of goods and services, bids up the price of these items. Among other this the higher prices meant Spanish goods became uncompetitive on European markets. Even the Spanish themselves began buying foreign products, resulting in a lot of cash leaving the country. In addition, inflation stifled local investment, with the grandees spending their dough on conspicuous consumables instead.

For the latter part of the 1500s and on into the 1600s Spain was a debtor nation, spending more abroad than it took in. The result was a net outflow of gold and silver. Attempts were made to restrict the export of precious metals, but without much success. In the end it all simply dribbled away. The problem was that the conquest of the New World left Spain with a lot more money, but not that much more wealth, if you follow me.[68] They didn't realize that until too late and

[68] John U. Nef, an expert on Renaissance economics, described liquation as 'even more important than the invention of the printing press' for the development of industry during this period.[9] It increased production of silver on a

suffered centuries of poverty as a consequence. You would think people would learn. Of course not, that is why they call it Fool's Gold.

William Jennings Bryan and the Cross of Gold

Well as I said don't blame just the Spanish, we Americans have done a pretty good job of screwing it up ourselves. William Jennings Bryan was an American politician who ran—and lost—three times as the Democratic candidate for President of the United States in 1896, 1900, and 1908. He also was a Representative from Nebraska, served as Secretary of State under Woodrow Wilson from 1913-15, and represented the World Christian Fundamentals Association in the 1925 Scopes Trial. One of the leaders of the Free Silver Movement in the 1890s, Bryan campaigned on this issue in the 1896 presidential election, where at the National Democratic Convention in Chicago he delivered his "Cross of Gold" speech.

massive scale. Between 1460 and 1530, the output of silver increased as much as fivefold in central Europe.[10] This had a secondary effect of lowering the costs of producing copper at a time when its demand had increased due to the needs of the brass making industry,[9] and the use of copper on ships and roofs. Lead production also received a boost, indeed the lack of lead available held the liquation process back until a large lead-bearing seam was discovered at Tarnowitz in Poland.[1]

William Jennings Byran and His Cross of Gold Speech

A Popular Man or A Populist Man

As we pointed out in the previous chapter, since the enactment of the Coinage Act of 1873, when the United States resumed the gold standard following the Civil War, Americans were bitterly divided over the nation's monetary standard. Although adopting the gold standard eased trade with other nations already on the gold standard, some Americans (remember good old Ignatius Donnelly) believed that a bi-metallic standard was necessary for the nation's economic health. In response to this political pressure, the United States passed the Bland-Allison Act in 1877 and the Sherman Silver Purchasing Act in 1890 which reintroduced silver to back U.S. currency. The economic Panic of 1893 intensified these debates as the United States entered into an economic depression.

The debate about the gold standard dominated both parties during the 1896 conventions, but only the Democrats supported a bi-metallic monetary standard in their formal platform. Having lost control of both the House and the Senate in the 1894 congressional elections, the Democratic Party was fragmented and disoriented, allowing pro-silver forces to take over their political machinery. By 1896 there were several leading pro-silver candidates for the Democratic nomination for the presidency, including William Jennings Bryan, who made his moment count. Bryan delivered the speech that would make him famous. He was able to articulate the feelings of Americans from the South and West who believed that the gold standard had harmed them (Consider them an 19th century TEA party). Bryan and others thought that under a bimetallic system, the economic malaise that afflicted farmers, miners, and industrial workers could be removed. In “defense of a cause as holy as the cause of liberty – the cause of humanity,” Bryan opened his speech. Addressing gold-supporting delegates, Bryan pointed out that the gold standard only helped a narrow class of people, specifically the financial interests of the East Coast: He finished with the call to arms “Though shall not crucify me on a cross of gold.

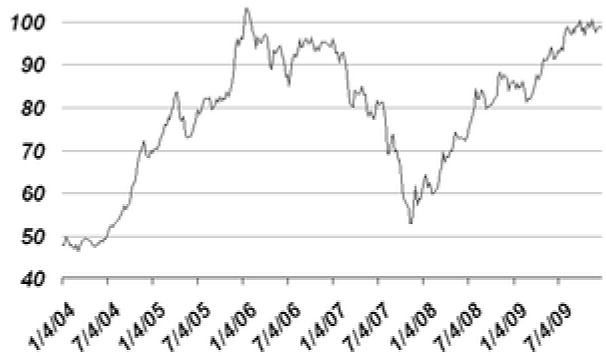
Fortunately, After McKinley’s inauguration, there were new discoveries of gold (the Alaska gold rush) that led to an increase in the money supply and the passage of the 1900 Gold Standard Act that officially returned the United States to the gold standard. However, hubris before the fall.

J.P. Morgan

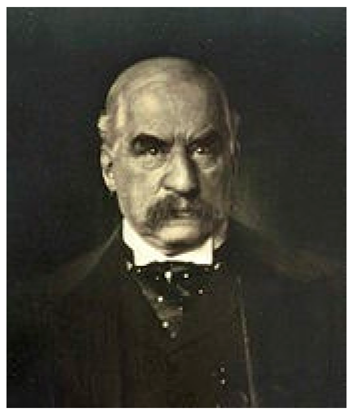
To get it right Wiki offered a summary of the The **Panic of 1907:**

> also known as the **1907 Bankers' Panic** or **Knickerbocker Crisis**[1] – was a United States financial crisis that took place when the New York Stock Exchange fell almost 50% from its peak the previous year. Panic occurred, as this was during a time of economic recession, and there were numerous runs on banks and trust companies. The 1907 panic eventually spread throughout the nation when many state and local banks and businesses entered bankruptcy. Primary causes of the run included a retraction of market liquidity by a number of New York City banks and a loss of confidence among depositors, exacerbated by unregulated side bets at bucket shops.[2] The panic was triggered by the failed attempt in October 1907 to corner the market on stock of the United Copper Company. When this bid failed, banks that had lent money to the cornering scheme suffered runs that later spread to affiliated banks and trusts, leading a week later to the downfall of the Knickerbocker Trust Company—New York City's third-largest trust. The collapse of the Knickerbocker spread fear throughout the city's trusts as regional banks withdrew reserves from New York City banks. Panic extended across the nation as vast numbers of people withdrew deposits from their regional banks.

If short if banks have to call in loans that reduces the amount of savings as individuals pay down their own dollars and the money supply decreases (some folks may even decide to bring their dollars in for the gold for which it is transferable into. If this is not done carefully as P falls more firms go out of business having to pay cheaper dollars with richer dollars. The panic might have deepened if not for the intervention of financier J. P. Morgan, who pledged large sums of his own money, and convinced other New York bankers to do the same, to shore up the banking system. At the time, the United States did not have a central bank to inject liquidity back into the market.



Dow Jones Industrial Average 1904–1910. The bottom of 53 was recorded November 15, 1907.



J.P. Morgan, The True Wizard of Oz

The frequency of crises and the severity of the 1907 panic added to concern about the outsized role of J.P. Morgan, which led to renewed impetus toward a national debate on banking reform. According to Wiki:

> A significant difference between the European and U.S. banking systems was the absence of a central bank in the United States. European states were able to extend the supply of money during periods of low cash reserves……

We spent five years discussing the pros and cons of a central bank. J. P. Morgan testified before the Pujo Committee and faced several days of questioning from Samuel Untermyer. Untermyer and Morgan's famous exchange on the fundamentally psychological nature of banking—that it is an industry built on trust—is often quoted.

> **Untermyer:** Is not commercial credit based primarily upon money or property?
> **Morgan:** No, sir. The first thing is character.
> **Untermyer:** Before money or property?
> **Morgan:** Before money or anything else. Money cannot buy it … a man I do not trust could not get money from me on all the bonds in Christendom.[74]

Morgan died months before legislation was passed that he and his ilk would be officially replaced as lender of last resort by the Federal Reserve. As a sidebar, there is significant debate whether this movement to a more national banking system was done as the bequest of the populist uprising of the period for greater government protection. In fact, a more regulated banking system favored the 'current' moneyed interests of the day by reducing the power of smaller state banks. Again, the race does not go to the biggest and the badest, but it is often the best place to put your money.

The Great Crash

Books have been written but it was just a rehash of 1907. In 1930 banks could hold not only gold but equity as assets to back up savings. For a host of reasons, rising interest rates, less trade, and the end of the 1920's boom (the boom was caused in part by the U.S. trying to keep low interest rates in the U.S. so England would not lose its silver as people took their money out of England to invest in the U.S. - since the time of Newton England had a problem keeping its silver). Soon stock prices fell, bank assets fell, people panicked and went to withdraw their dollars and gold from the banks. Soon MV=PQ came back to bite us– M fell, P fell, Q fell and even attempts to increase M by increasing the $ in an ounce of gold fail to turn the tide. Deflation was in as well as a restructuring of the economic system. Via the Glass-Steagel Act we separated banks' commercial activities from their investment activities (no more equity shares to back up commercial lending). We even set up separate savings banks to support certain types of lending (mostly housing) and savings types (longer term).

Federal Reserve notes are not redeemable in gold, silver, or any other commodity. Federal Reserve notes have not been redeemable in gold since January 30, 1934, when the Congress amended Section 16 of the Federal Reserve Act

At the end of the day, with the breakdown of market order in 1930, we tried to bring together government order with moral order; that is, regulation and gold (we officially set the price of gold at about 37 dollars an ounce in 1932). For the next 40 years, we kept trying to fiddle with the government order whenever the moral order of the gold standard seems to get in the way of government policy. The U.S. took the lead. After World War II ended, we and a few of our friends created a global monetary system in which when people needed money we would give it to them. Within the structure of the IMF, states could be given Special drawing rights. The U.S. backed up this currency and gold backed up the U.S.

However, during the period, we found as did Hamilton that once one's trust is questioned so does one's ability for the government to rise above the moral order of gold. But if the moral order of gold got in the way of government order, what do we do? This chapter may have been better titled, the Rise of Fiat money, but I did not want anyone to be confused that we were switching subjects to cover a declining Italian car company. A reader may also start to wonder if this author has it in for Italians. Certainly, over the past chapters, the Italians have been at the heart of the History of Money however, I have tried to offer other countries an equal opportunity (see Greece, India, Spain).[69] One of the only reasons to make money is to make money making money (seigniorage). It is so because I said it was so. This currency has value because I say it has value. Monetary theory worked within the world of the Washington Lie. A Washington lie is based on the simple fact that I am lying, you know that I am lying, and I know that you know that I am lying. The problem was how to make sure that each country has self-interested in keeping up the lie. If one started telling the truth then the entire structure of communication collapses.

Collapse of Gold Standard

Except for brief periods in the past few nations (China 800 BC,) had the hubris to say this is money just because I say it is so. As stated previously, for decades following the establishment of the WWII post monetary system the U.S. tried to manufacture a change from a U.S. backed financial system to one that included other players. The problem was that success had its own

[69] So, if anyone has a problem email me and I will put them in future editions if there are any.

seeds of failure. Until the 1960's, the U.S. dollar was the only alternative. In the 1960's other alternatives came into existence. While it would not be recognized until years later, the creation of market based financial products such as Merrill Lynch Certificates of Deposit were market based alternatives to bank based products. The transferability of Non-U.S. currencies likewise would provide competition for the U.S. dollar. This competition brought into focus the underlying weaknesses in current monetary processes. In the 1960's as the U.S. attempted to borrow itself out of taxing for the costs of financing the Vietnam war, it soon became apparent that the U.S. was facing the same problem of too little gold behind to many dollars. All would be OK if it one simply increases the number of dollars in each ounce of gold. In short, making each piece of gold worth more dollars (See previous discussions). But what if those dollars easily left the U.S. and soon were being sold in some other area of the world. Each dollar in the U.S. would be worth less and everything would cost more.

Soon someone (the French) decided that each dollar would soon be worth less in purchasing power because what would stop us from changing the dollar per ounce of gold in the future. Better to turn in their dollars, get the gold and when the dollar was devaluated (more dollars per unit of gold) turn it back in to get dollars. We kept making more dollars and the French (really Charles De Gaulle who was still not happy with us for calling him names back in WWII) kept asking for more gold. Soon it was obvious they had too much dollars and we had too little gold.

Charles De Gaulle Or God (At Least in His Own Mind)

One day in 1971 we woke up and found out that each dollar we had was no longer backed by gold. Each little dollar with the promise that each dollar was worth some gold would have to be turned in and we would get one back with just a promise. This is worth what you can get for it.

Picture of Silver Dollar Dollar

Now for a quick sidebar. As I said I was always interested in money. But for most of us money remains an elusive creature, evasive mystical. Most of us never really get to hold it, we view it from afar. It is for that reason if no other, that those who make money try to make it as interesting as possible. Most countries put high government officials on it, even the United States, but at least the ‘special quality’ of the United States is found in its coin. For example, the first pennies had an Indian on one side and on the back. Roosevelt dime (officially in 1947) came in part from Roosevelt for the March of Dimes in the 1930s which led to his face on the coin after WWII). In short, there is a whole story in how money is really made and who gets to choose who makes it and whose picture is on it. And while this is a great read, it has nothing to do with how “Money Macro is Made,” so while I understand why you really want to know what happened to the Mercury Dime – a dime is a dime is a dime unless it is a 1909 VDB then it is worth about $500,000.

The Next Twenty Years

Back in Chapter 8 we quoted J.P Morgan that the only thing which defines a country or a person is the ability to trust them. Since the first cow currency, money had somewhat evaded the issue of trust as the only basis for determining currency value by having the currency based on some underlying asset or at least references to an asset. Money would now be based on the trustworthiness of the underlying institutions (Banks, the Federal Reserve) as well as the faith of individual in those institutions. Unfortunately, faith over the next two years was often not rewarded. Soon after the death of the gold standard, it was hoped that removal of the restriction on money creation would permit a new America. What followed was a continuous remembrance of this past.

Banks, Banks, and Real Banks

This may shock many readers. We did not always have banks or at least not banks as we know it today. We did have things like Bob's bank if Bob was a relative who might take some of your assets, put them in a safe place (his right pocket) and then give you some money out of his left pocket. As discussed earlier, the Pyramids were really just big banks (remember the stones were forms of money) but they never really served all the functions of modern banks (they did however let individual who had the largest deposits in the banks be buried next to their capital under the mistaken belief that they could take it with them).

The Catholic Church had banks; big banks, small banks. The Catholic Church even had something called Lenten Banks where children around the world would put their ducas, or farthings or whatever during the season of Lent as a means of a providing funding so that unbaptized black babies in Africa could be saved. But those were not really banks in the modern sense of the word, but merely another form of collection basket (see earlier chapter) in which once collected it was never really yours again.

Lenten Banks (There is a slot on the top where the money is put)

Why did we not have real banks? The answer is simple, no one had any money. Well not no one, but most people. It is known that it was not until the late 1700's that 'Savings Banks' came

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into existence and then only in Europe and primarily for the very rich (they differed from the Lenten banks in that the money you put in the bank remained yours until you took it out and the church had to keep its noise and other bodily parts out of it). Even those that had money knew that it had different meanings for different people. In some countries it was gold, others silver. In the early America it was British coins (shillings, etc.), local promissory notes (discounted by quality and distance), wampum, shells. It was whatever worked. In short, we did not need gold, but we did need money, money to conduct business and if possible a common form of currency. This however did not happen overnight. It was in this process that banks proved to be an important aspect of growth. Banks both create and protect money and as important if you needed some you knew where to go. Imagine if you woke up one day with a great idea if only if you had some money. Most of us would say, “well I think I will go to a bank.” The bank was where the gold, or shillings or whatever you called it was kept and imagine again if you got out of your warm bed, walk through whatever nasty weather that happened to be outside to where the bank should be only to find that it was not there. Then what would you do, pray to God. Again, banks had to exist and moreover could not fail. In GOD WE TRUST was on the dollar but in fact it for most people it should state IN BANKS WE TRUST. If we were moving away from the moral order (individual or gold enforced) or market order (where the self-interest of the business community led to an orderly system), to a government in which we trust, that government had one major responsibility. DO NOT LED BANKS FAIL (e.g., LOOSE MY MONEY). Of course, talk is cheap and whiskey costs money (For a quick summary of the history of the U.S. banking system see Appendix to Chapter 10).

As pointed out in Chapter 8, the failure of the state and federal bank system in the early 1900 lead eventually to the creation of our own Federal Reserve Bank with the ability to manage the U.S. monetary process. The Federal Reserve bank worked with the Federal Government to meet the changes of the day to create an ever-changing financial system. In a volatile world, we looked to the government to reduce that volatility. The twenty years of stability following WWII led us to believe that we had achieved success.

While no one would admit it, the banking system of the day was on the way of the Dodo Bird. As other financial systems in the 1960's began to offer the same financial services offered by banks but with greater efficiency and rewards, it did not take long for individuals to offer the same allegiance to their banks that the U.S. did to its investors. They fled and over the next twenty years the 15000 banks slid to 7000. Not wishing to face the fact that banks were not directly competitive with most other financial institutions the U.S. gov. offered them the opportunity to invest like corporations but with little charge for insurance on those risks (One Act was called the DIDMC or the Depository Institutions Deregulation and Monetary Control Act of 1980). The failure of government order, superimposed on the failure of market order and the individual's desire for something for free led to the fact that the DIDMC failed to control anything but lead to the Savings and Loan crisis of the late 1980's. Perhaps the solution was not government regulation but transparency. Banks should not be called Savings and Loans but The Bank "where you put your money which is lent out local shopping centers who may pay rates high enough for you to keep your money at the Bank." It could have had a sub-section "and which if they fail your bank might to." Now when all of this did happen we were not supposed to be afraid since the Government had insured us that if a bank failed all of us would get the money we had in the bank back. OK but what we failed to think was that that was all the government could guarantee. It could not guarantee that the firms the bank's loans supported would continue, they could not insure one's job at that firm. Banks do more than give one a place to store their valuables. Banks had to find ways both to minimize their negative impacts on the economy and to promote their positive effects. It needed a reset.

Glass Steagall I and Glass Steagall II

As long as we were going to revamp the past, in addition to removing the gold standard why not remove the financial system constructed in the 1930 which attempted to reduce the sensitivity of the banking system to its activities in investment banking. As smaller banks disappear we acted to ensure that the larger banks would not. The solution was of course to enable them to diversify in a number of new investment areas. Banks were encouraged to develop new areas of business including asset structuring, broker deals networks, and global investment banking. What was forgotten was that what seems a diversification in good times seems to disappear in periods of financial crisis. We did not have to worry. Since gold no longer forced banks to limit their expansion, we had laws. The Basel accords of the late 1980s were expanded year after year requiring banks to hold more assets to back up their loans. Again, government regulation would take the place of the moral order demanded by gold or that failure of "market order" to provide the honesty.

Crash of 2007

The failure of government order to create a system which protected the markets from the destruction of money was shown to fail in the crash of 2007. Government order and market order each showed that they were not ready to take the place of gold or some other base metal to ensure that individuals acted in accordance with a market order in not a government order. Individuals likewise showed their inability to act in a way consistent with the benefits of individuals. Ponzi scheme number 242 in the name of Madoff was further evidence that the regulatory system failure to provide protection. But we had a solution.

Dodd Frank and the Death of Banking

A series of films in the 1980's centered on the ability to go back in time as well as into the future via a 'fluxometer" based car. Faced with the failure of market order and regulatory rules, the government was reluctant to admit its failure and it did a 'Fluxometer' back to the future. If Regulation adjustments in the 1990's (Glass Steagall II) did not work why not just double down on the opposite. What we needed was not less supervision but more. If the banks had gotten too big to let fail we had to get them small enough that they could. If the banks had not put the money in the right place, the government would. It was the last rodeo, who needs gold as a moral manager if you had a responsive government.[70] In short, the purpose of the government is to make sure no one will ever get hurt (not a kind of big brother more of a big mother) and that the bully who took your lunch money is dealt with severely. Of course, in such a world, the banks will never take on risks that could lose money but they will never take on risks that will make money. But why give money to a bank if they might lose it anyway, better to put the

[70] The fact that the recreation of a limited banking system also limited its potential positive economic impacts seemed lost on many of the "the future is in the past" Dodd Frank supporters but if one is a manager one sees the solution as 'managers' if one is a government official, the solution has to be the government. Very few people have fired themselves.

money in a cookie jar like my grandmother did or in your back pocket (or as my father said: "Dad's Bank).

Things to Remember

If there has been one constant over the 20th century is that there is very little constant. When faced with a problem we often do not ask what are the secondary effects of a solution, we only want a solution. The question is who will promise that solution. The government promises a government solution, the market a market solution, and those who do not trust either look to a more conceptual moral solution which promotes people acting within a context of their self-interest within a moral context.

What You Will Be Tested On:

Panic of 1907
Glass Steagall
DDIMCA
Crash of 2008

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Appendix to Chapter 10: History of U.S. Banking and We All Know This Is the Only Banking That Counts

Wiki offers a quick review of the story of U.S. banking (Pre Dodd Frank and C. Warner (Senator of Mass.).
During the first half of the eighteenth century, land banks infused paper currency into the economies of the American colonies, helping to relieve the shortage of money that hampered trade and industry. Aside from two short-lived exceptions, these were public banks, functioning under the auspices of colonial governments.

Land banks loaned paper money to citizens who put up collateral in the form of some sort of real estate, such as farmland or houses in town. Borrowers ran the risk of forfeiting their property in the event of default, although the land banks, as public institutions, enjoyed reputations for extending the terms for debtors in difficulty. The real estate nevertheless stood as security maintaining the value of the paper money, and foreclosure was a legitimate weapon. When foreclosure failed to produce sufficient revenue to redeem the paper currency, then governments were usually obliged to make good the paper money. The borrowers paid interest on the loans, which in most colonies went to pay governmental expenses. Often a local public board of property-owning citizens acted as a loan board, approving and disapproving loans as it saw fit. In other cases provincial officials at a higher level made these decisions. These boards or officials received an allotment of paper currency for issuance in a given locality.

In 1791, Congress chartered the First Bank of the United States to succeed the Bank of North America under Article One, Section 8. However, Congress failed to renew the charter for the Bank of the United States, which expired in 1811. Similarly, the Second Bank of the United States was chartered in 1816 and shuttered in 1836.The Second Bank of the United States opened in January 1817, six years after the First Bank of the United States lost its charter. The predominant reason that the Second Bank of the United States was chartered was that in the War of 1812, the U.S. experienced severe inflation and had difficulty in financing military operations. Subsequently, the credit and borrowing status of the United States was at its lowest level since its founding.

The charter of the Second Bank of the United States (B.U.S.) was for 20 years and therefore up for renewal in 1836. Its role as the depository of the federal government's revenues made it a political target of banks chartered by the individual states who objected/envied the B.U.S.'s relationship with the central government. Partisan politics came heavily into play in the debate over the renewal of the charter. "The classic statement by Arthur Schlesinger was that the partisan politics during the Jacksonian period was grounded in class conflict. Viewed through the lens of party elite discourse, Schlesinger saw inter-party conflict as a clash between wealthy Whigs and working class Democrats." President Andrew Jackson strongly opposed the renewal of its charter, and built his platform for the election of 1832 around doing away with the Second Bank of the United States. Jackson's political target was Nicholas Biddle, financier, politician, and president of the Bank of the United States. Apart from a general hostility to banking and the belief that specie (gold and/or silver) were the only true monies, Jackson's reasons for opposing the renewal of the charter revolved around his belief that bestowing power and responsibility upon a single bank was the cause of inflation and other perceived evils. During September 1833, President Jackson issued an executive order that ended the deposit of government funds into the Bank of the United States. After September 1833, these deposits were placed in the state chartered banks,

Prior to 1838 a bank charter could be obtained only by a specific legislative act, but in that year New York adopted the Free Banking Act, which permitted anyone to engage in banking, upon compliance with certain charter conditions. The Michigan Act (1837) allowed the automatic chartering of banks that would fulfill its requirements without special consent of the state legislature. These banks could issue bank notes against specie (gold and silver coins) and the states regulated the reserve requirements, interest rates for loans and deposits, the necessary capital ratio etc. Free banking spread rapidly to other states, and from 1840 to 1863 all banking business was done by state-chartered institutions.[3]

While the banking systems of several states were initially unstable, over time financial indicators in most states stabilized.[4] In the early years of free banking in many Western states, the banking industry degenerated into “wildcat” banking because of the laxity and abuse of state laws. Bank notes were issued against little or no security, and credit was over expanded; depressions brought waves of bank failures. In particular, the multiplicity of state bank notes caused great confusion and loss. The real value of a bank bill was often lower than its face value, and the issuing bank's financial strength generally determined the size of the discount. However, after several years of experience, with the exception of a few exogenous shocks, different states developed more functional and stable banking industries. To correct the problems of the "Free Banking" era, Congress passed the National Banking Acts of 1863 and 1864, which created the United States National Banking System and provided for a system of banks to be chartered by the federal government. The National Bank Act encouraged development of a national currency backed by bank holdings of U.S. Treasury securities. It established the Office of the Comptroller of the Currency as part of the United States Department of the Treasury, authorizing him to examine and regulate nationally-chartered banks. Congress passed the National Bank Act in an attempt to retire the greenbacks that it had issued to finance the North's effort in the American Civil War.[5] As an additional incentive for banks to submit to

> Federal supervision, in 1865 Congress began taxing any of state bank notes (also called "bills of credit" or "scrip") a standard rate of 10%, which encouraged many state banks to become national ones. This tax also gave rise to another response by state banks—the widespread adoption of the demand deposit account, also known as a checking account. By the 1880s, deposit accounts had changed the primary source of revenue for many banks. The result of these events is what is known as the "dual banking system." New banks may choose either state or national charters (a bank also can convert its charter from one to the other).

TS: Ok that was interesting but by 1912 we switched to a Fed based model and it really ran our money. But even there that is a book in itself, but rather than follow the money, just follow the faces. These are really cool men (and now women) let us just say that all of them had power and learned how to use it over time (especially that McChesny Guy who ruled the longest). From the 1920's on go read the Monetary History of the United States by M. Friedman and A. Schwartz and for current issues (shadow banking, global banking, government attempts to make sure banks can take on no risk so they will never lose your money or make any either. So we are just steps away from the Death of Banking so just close your eyes and put your money in the cookie jar like my grandmother did).

Federal Reserve Chairpersons

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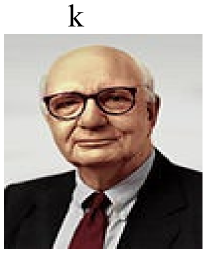

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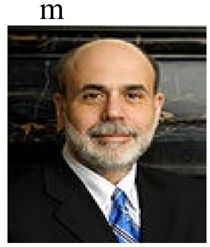

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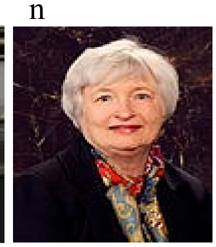


Note that the history of the American monetary system can be seen in the presentations of the various Chairpersons. For example, check out the hats on the first two Chairman, the swivel chair on f, the pipe on h, bird brains on i and what is a women doing here on n. In all seriousness most of these men, and now women, had limited tenure as Chairperson and went on to have successful careers in other areas. There are stories within each story – Write on you writers.

Chapter 11: Alternative 'Alternative History of Money'

Summary Introduction

Since the chapters in this book promote an alternative view of the history of money, it would be beyond hubris to suggest that the alternative view of the history of money expressed in the previous pages would be the only one in existence. In fact, given the number of books with history of money in the title, random chance would lead one to believe that others would have suggested various paths of impact of money on human history. Since a sample of one is enough to disprove the null that that the book you have in your hand is the only alternative presentation one need but take the time to read an article entitled "Money: An Alternative Story." The lead sentences in that article read as follows:

> To be sure, we will never "know" the origins of money. First, the origins are lost "in the mists of time"—almost certainly in pre-historic time. (Keynes, 1930, p. 13) It has long been speculated that money predates writing because the earliest examples of writing appear to be records of monetary debts—hence, we are not likely to uncover written records of money's "discovery." Further, it is not clear what we want to identify as money. Money is social in nature and it consists of complex social practices that include power and class relationships, socially constructed meaning, and abstract representations of social value. (Zelizer 1989) As Hudson (2004) rightly argues, ancient and even "primitive" society was no less complex than today's society. Economic relations were highly embedded within complex social structures that we little understand today. (Polanyi 1971) There is probably no single source for the institution of modern capitalist economies that we call "money."
>
> More importantly, trying to uncover "the" origins of money is almost certainly an impossible or at least misguided endeavor unless it is placed within the context of a theoretical framework. When we attempt to discover the origins of money, we are identifying institutionalized behaviors that appear similar to those today that we wish to identify as "money."

When I came across this article, I felt vindicated. I was not the only author who felt that those who posit a single source single path for the 'History of Money' might be wrong. In addition, the first paragraph suggested that in the absence of historical facts one must approach an issue based on a common understanding of the world in which the actors worked and how these actors would normally act to promote their own well-being. As suggested by the comments in the above quote, one concern that all of us must have about the traditional history of money approaches is that they failed to move the history of money forward through time until it reached its current condition, but instead took today's monetary world and cast it backward; a world in which money is primarily a unit of account, a medium of exchange and store of value. Those characteristic may have existed throughout time but they may not have existed in isolation of other events.

In short, the history of money may have had various rivers flowing forward at the same time. Some of those rivers may have dried up and some may be hidden to the extent that their very existence is questioned today. For example, modern technology today can map ancient paths by which trade was conducted throughout the Middle East. Today we are aware of the breadth and depth of human expansion that was only hinted at centuries ago. This chapter offers all of us the chance to review some of those paths and the individuals to trod them.

Money As A Responsibility

One of the problems in common 'History of Money' presentation, is that in fact, there was often just not very much of it, that is money, and that which people had was difficult to move around. For money to become centralized as a primary concern in human civilization one may wish to define or identify the most important characteristic of money. Throughout this book, we have suggested that the most important characteristic of money was the ability to promote the creation of ideas. However, the creation of ideas takes time and often takes more than ‘cows or coins’ than existed at any point in time. It required the third C of monetary expansion,. That C was Collateral.

In Money: The Alternative Story, the authors suggest that:

> While many economists (and historians and anthropologists) would prefer to trace the evolution of the money used as a medium of exchange, our primary interest is in the unit of account function of money. ***Our alternative history will locate the origin of money in credit and debt relations*** (bold and italics mine), with the unit of account emphasized as the numéraire in which credits and debts are measured. The store of value function could also be important, for one stores wealth in the form of others’ debts. On the other hand, the medium of exchange function and the market are de-emphasized with regard to money’s origins; indeed, credits and debits can exist without markets and without a medium of exchange. Innes (1913, 1914, 1932) suggested that the origins of credit and debt can be found in the elaborate system of tribal wergild designed to prevent blood feuds.(See also Grierson, 1977; 1979; Goodhart, 1998; and Wray, 2004) As Polanyi putit: “the debt is incurred not as a result of economic transaction, but of events like marriage, killing, coming of age, being challenged to potlatch, joining a secret society, etc.” (Polanyi, 1957 (1968), p. 198). Wergild fines were paid by transgressors directly to victims and their families, and were established and levied by public assemblies. A long list of fines for each possible transgression was developed, and a designated “rememberer” would be responsible for passing it down to the next generation. As Hudson (2004) reports, the words for debt in most languages are synonymous with sin or guilt, reflecting these early reparations for personal injury. Originally, until one paid the wergild fine, one was “liable,” or “indebted” to the victim. It is almost certain that wergild fines were gradually converted to payments made to an authority.

I was with them until the authors suggested that a single source ‘family or tribe duties’ became an almost certain basis for the evolution of money as a means to codify those concerns. How an article that started out with the realization that “no one was there” could so easily move to an “almost certain’ basis for the evolution of money as a ‘centralized means to codify debt’ surprised me[71] However, words do matter and if money (whatever its form) represented a common acceptance of the value of an item or idea, it was based on the acceptance of a duty which reflects acceptance of a relationship (in fact in the English speaking world the word duties have become part of payment added to the transaction of certain goods. Throughout history the collapse of money often led to a collapse of the social relationships between individuals. One cannot d but ask if the collapse of the German currency in the 1920s which lead to a rise in a culture which separated rather than joined individuals.

If one is to look at alternative 'alternative' views of the history of money one would think that one might wish to look at how money evolved to create a world in which society could better function without the negatives which often rose when a monetary structured failed. Jesus comment "render unto Ceasar the things that are Ceasar's and to God the Things that are God's" reflects this knowledge that money was required to promote a social and government structure.

[71] An example where articles and authors may get lost is seen in the following section from the article Money: An Alternative Story where statements of fact from other articles which were written by authors "who were never there": In primitive societies, there is no notion of private property[vi] in the sense of ownership of the means of production (agricultural land, forests, fisheries) and so no possibility of a society based on barter (in the economic sense of the term) or commercial exchange: these are market less economies. Redistribution (in the sense of a central institution that collects and allocates resources) is also nonexistent as the products of hunting and gathering are provided to everybody according to custom on the basis of needs and social status (the latter not being inherited but varying with age and gender, the eldest having a central role in the management of tribe (Simons, 1945)). In this type of society, there are no laws defined by a legal code. However, there is a well defined system of obligations, offenses, and compensations. Obligations are "prelegal obligations" (Polanyi, 1957 (1968), p. 181), defined by tradition (marriage, providing help, obtaining favors, making friends, etc.). These obligations are personal, and magic and the maintenance of social order play a central role in their existence. Their fulfillment can be qualitative (dancing, crying, loss of social status or role, loss of magical power, etc.) or quantitative (transfer of personal objects that can be viewed as a net transfer of wealth) (Ibid., p. 182).[vii] In addition, payment of compensation is not standardized but rather takes the form of in-kind payment, with type and amount of payment established socially.

In primitive societies there is, therefore, no economic or social need for accounting, even if debts are present, because they are egalitarian societies in which exchange is usually reciprocal (the purpose of exchange is not to better one's position, but rather to bring members of the society closer together—often by redistribution), accumulation of wealth is repressed[viii] or nonexistent (Schmandt-Besserat, 1992, 170), and the fulfillment of obligations is not standardized.

There were of course other individuals besides the ‘Baby Jesus’ who understood that money had a place in society. In the forward to this book we pointed out that we were limited to something less than 300 pages. Somethings or somebodies had to be left out, but not wishing anyone or anything to be left out, the purpose of this chapter is to introduce the reader, however briefly, to some of those individuals who while vital to the history of money have somehow been left out of the conversation.

The question remains, how best to introduce you to these individuals since obviously if so little has been heard of them there is little, if any, of information as to their very existence. We could rank them by their importance, but if they were all that important they probably deserve a place in the previous or following chapters and who wants to read about things which never made it to the front shelves of the history of money anyway. So, in fact, this chapter is a homage in part to all of those who were just one idea away from immortality or who for some other reason never wanted their name or person to be passed down to posterity. We as a people have the responsibility to make their story public.

This chapter takes on the responsibility of the unspoken truth, however, in so doing we have a great responsibility for once spoken, the secret if any, is, as they would say, out of the bag. The first secret is that for the most part, we have presented money in this book as a means to promote transactions between individuals. A kind of ‘I will give you two of those for three of these, kind of world,’ where money was a store of value, a unit of account and medium of exchange. But what world would we have today if someone had come up with a more subtle basis for money. Money, where its primary function is not as a cow, not as a brick, not as a farthing (whatever that is) but simply a form of demand or a sign of someone's personal obligation to another. In short, a world where "He who pays the Piper plays the tune" a world in which someone or something (government, religious organization) offers something today for the rights to a future obligation where money was just the term used to encompass this somewhat complex set of rules and responsibilities.

Alternative Individuals

The question is often asked who came up with this whole new money world, this whole loan origination, trading of the loan, and loan as a collateral for further loans. In fact, it was Zug's younger brother, Zug the Younger who was the first to suggest to Zug that rather than trading one cow for two wheels and/or one mud hut why not simply go to Gus and promise to give him something in the future for a mud hut today; that is, a promise to pay in which the concept of future payment would form the basis for the development of society. The fact that Zug or Guz could never come up with what that payment form would be, was the one bottle short of the six pack problem, but Zug the Younger did. You see Zug the Younger was a musician. Through trial and error Zug came to realize that music not only brought people together it could be used to separate them from their earliest forms of money and was paid not up front but at the end of his performance. If one stayed and listened to the entire performance there was an implied contract for payment.

It was Zug the Younger that introduced music and song into early religious gatherings and who used the contributions as a basis for setting up money lending in churches as the 'first banks.' Banks in churches had a dual role. First if one made a promise for future payment in the sight of

God or in many religions, multiple gods, it was more likely that one felt the religious duty to pay them back. Second, since some of the churches began to take portions of the banking profits to cover the cost of administration, the banking service provided within these institutions offered a continuous means to fund led them. The importance of churches in the development of money is depicted in the episode where Christ drove the money changers out of the temple in Jerusalem." The power of money is seen in the very fact that the "Son of God himself failed in his effort to separate the two.[72]

How do we know all this? From what we know from earliest cave drawing the first banks where often pictures of a man (Zug the Younger) with a flute with pictures of other objects as well as other men. This simply reflected the demand for Zug's Banking Services (ZUG's BS). While his services were etched in stone why not his name? In fact, they were. It is just that the Z and G were inadvertently wash away leaving the U and the BS as the primary letters (UBS).

[72] In other societies banking was similarly conducted in temples. For example, in Greek temples, bankers were known as*trapezitai*, a name derived from the tables where they sat.

The First Bank (UBS)

The importance of monetary ideas such as banking and loan creation as the basis for the “ideas’ which revolutionized society can more plainly be seen in those areas of the world where it was absent. One could but think of how North America would look like, if its Indian ancestors had developed money not only as a medium of exchange but as a longer term contract form which promoted ideas such as land ownership, debt repayment, interest, and personal ownership. Most indian tribes went year to year, from hunting season to hunting season, land was a communal resource. In a world of multi-season loans, an indian tribe could claim ownership, set up self contained fishing rights, pens in which untamed animals could be tamed, a world in which agricultural goods could be stored and used for future payment. In this world, when our Puritan ancestors came to Plymouth rock, they would have found a world in which seashells might have been used for day-to-day exchange, but they also would have found a series of Plymouth Bay Credit operations. The Indians would have had a hatchet in one hand and contract in another. When our own European ancestors ask to trade with the Indians, they were speaking of money as a medium of exchange, but in a world of money as a contractual form when our English ancestors would ask the Indians for anything our Indian would of course said HOW? How would have meant "a contract of longer-term obligation with strict payment requirements."

Unfortunately, for the Indians, money existed in its primary form as a medium of exchange and not in its extended loan form. For the rest of the world Zug the Younger had created a financial system in which governmental or religious authorities soon developed not only loan contracts but also places to guarantee deposits which could be used for future money lending activity. Banking continued to develop throughout the centuries. Unfortunately, until the development of additional concepts such as modern accounting and mathematics it was limited in its expansion

By the end of the 17th century, advances in the two requirements for the growth of monetary theory (the simple (accounting)[73] and the complex (mathematics) had developed to the extent that banking techniques and practices in Amsterdam and London helped spread the concepts and ideas elsewhere in Europe.[74] The development of accounting principles permitted the

[73] Luca Pacioli (1445 - 1517) in his *Summa* published in 1494, where he is credited with inventing double entry book-keeping.

[74] Modern banking practice, including fractional reserve banking and the issue of banknotes emerged in the 17th century. At the time, wealthy merchants began to store their gold with the goldsmiths of London, who possessed private vaults and charged a fee for their service. In exchange for each deposit of precious metal, the goldsmiths issued receipts certifying the quantity and purity of the metal they held as a bailee; these receipts could not be assigned, only the original depositor could collect the stored goods.
Gradually the goldsmiths began to lend the money out on behalf of the depositor, which led to the development of modern banking practices; promissory notes (which evolved into banknotes) were issued for money deposited as a loan to the goldsmith.[177] These practices created a new kind of "money" that was actually debt, that is, goldsmiths' debt rather than silver or gold coin, a commodity that had been regulated and controlled by the monarchy. This development required the acceptance in trade of the goldsmiths' promissory notes, payable on demand. Acceptance in turn required a general belief that coin would be available; and a fractional reserve normally served this purpose. Acceptance also required that the holders of debt be able legally to enforce an unconditional right to payment; it required that the notes (as well as drafts) be negotiable instruments. The concept of negotiability had emerged in fits and starts in European money markets, but it was well developed by the 17th century. Nevertheless, an act of Parliament was required in the early 18th century (1704) to overrule court decisions holding that the gold smiths notes, despite the "customs of merchants", were not negotiable.[178][178]
The first bank to begin the permanent issue of banknotes was the Bank of England in 1695.[179] Initially hand-written and issued on deposit or as a loan, they promised to pay the bearer the value of the note on demand. By 1745,

development of ownership rights and the concept of debt and repayment based on required interest payments. Mathematics permitted the means of determining how those payments were made and if they were not how the failure of those payments (negative cash flows) could be measured. It is important to point out that for centuries, churches and other religious institutions had found it simple to control the process by which to finance themselves. They found that controlling the interest payment for on loans permitted them to control the process of what loans could be made and how business was financed.[75] The First Council of Nicaea, in 325, forbade clergy from engaging in usury[5] which was defined as lending on interest above 1 percent per month (12.7% APR). Later ecumenical councils applied this regulation to the laity. Catholic Church opposition to interest hardened in the era of scholastics, when even defending it was considered a heresy. St. Thomas Aquinas, the leading theologian of the Catholic Church, argued that the charging of interest is wrong because it amounts to "double charging", charging for both the thing and the use of the thing. Similarly interest has often been looked down upon in Islamic civilization, with most scholars agreeing that the Qur'an explicitly forbids charging interest. Similarly, since the Christian church often restricted the use of interest. However, since they had ultimate power they never lost on a loan. One way the church and others restricted the idea of nonpayment or loss was to restrict the concept of negative numbers.

standardized printed notes ranging from £20 to £1,000 were being printed. Fully printed notes that didn't require the name of the payee and the cashier's signature first appeared in 1855. [180]The rise of Protestantism freed many European Christians from Rome's dictates against usury. In the 18th century, services offered by banks increased. Clearing facilities, security investments, cheques and overdraft protections were introduced. Cheques were invented in the 1600s in England and banks settled payments by direct courier to the issuing bank. Around 1770, they began meeting in a central location, and by the 1800s a dedicated space was established, known as a bankers' clearing house. The London clearing house used a method where each bank paid cash to and then was paid cash by an inspector at the end of each day. The first overdraft facility was set up in 1728 by the Royal Bank of Scotland.[181]

[75] S. Homer pointed out that the Hammerabi code called for an interest rate of 20% on loans based on silver (see chapter 2 for the discussion on H

In short, in a world of no interest and no nonpayment, there was no reason to develop ideas around the mathematics of finance including the creation of negative numbers. Many of those who tried died trying. The forces of the Church and Society combined to restrict their use. Although the first set of rules for dealing with negative numbers was stated in the 7th, it is surprising that in 1758 the British mathematician Francis Maseres was claiming that negative numbers

"... darken the very whole doctrines of the equations and make dark of the things which are in their nature excessively obvious and simple" .

Maseres took the view that negative numbers did not exist. However, other mathematicians around the same time had decided that negative numbers could be used as long as they had been eliminated during the calculations where they appeared. It was not until the 19th century when British mathematicians like De Morgan, Peacock, and others, began to investigate the 'laws of arithmetic' in terms of logical definitions that the problem of negative numbers was finally sorted out.

Other individuals:

There were of course numerous individuals involved in the development of the tools required to advance banking and monetary theory.

Alexandrian mathematician Diophantus (200 - c.284 CE) wrote his*Arithmetica* , a collection of problems where he developed a series of symbols to represent the 'unknown' in a problem, and powers of numbers. He dealt with what we now call linear and quadratic equations. In one problem Diophantus wrote the equivalent of 4 = 4x + 20 which would give a negative result, and he called this result 'absurd'. In the 9th century in six standard forms for linear or quadratic

equations and produced solutions using algebraic methods and geometrical diagrams. In his algebraic methods he acknowledged that he derived ideas from the work of Brahmagupta and therefore was happy with the notion of negative numbers. However, his geometrical models (based on the work of Greek mathematicians) persuaded him that negative results were meaningless (how can you have a negative square?).
Abul -Wafa (940-998 CE) used negative numbers to represent a debt in his work on 'what is necessary from the science of arithmetic for scribes and businessmen'?. This seems to be the only place where negative numbers have been found in medieval Arabic mathematics. Abul-Wafa gives a general rule and gives a special case where subtraction of 5 from 3 gives a "debt" of 2. He then multiples this by 10 to obtain a "debt" of 20, which when added to a 'fortune' of 35 gives 15.

Al - Samawal (1130 - 1180) had produced an algebra where he stated that:

- if we subtract a positive number from an 'empty power', the same negative number remains
- if we subtract the negative number from an 'empty power', the same positive number remains,
- the product of a negative number by a positive number is negative, and by a negative number is positive.

John Wallis (1616 - 1703) is credited with giving some meaning to negative numbers by inventing the number line, and in the early 18th century a controversy ensued between Leibniz, Johan Bernoulli, Euler and d'Alembert about whether log($-x$) was the same as Log(x).

The above individuals where central to the development of negative numbers and imaginaries which were required for the further development of money not in its traditional role as a medium of exchange but as a basis for multi-period loans and debt repayment. There is some question as to why these individuals have remained hidden. One explanation is that they were simply not of this world.

Aliens and Alternative History of Money

One of the reasons, the history of money is so controversial is that since we have no definitive proof of what happened and who did what to whom when we all have the chance to come up with our own set of accepted truths; money as a means of exchange, money as a unit of account, money as…. As important unlike many modern beliefs (Christianity, Muslim…) we have difficultly tracing it back to any single one individual and though we have, in this book, shed a little light on the origins of money and its impact of human development there remains one topic that we have failed to give proper weight and that is the potential impact of Aliens and the history of money. Aliens have had direct impacts on the history of money from the early periods of the Catholic Church to today's modern financial system.


Early 'Alien" Church Leaders

Federal Reserve Governor Being Escorted to Area 51

The typical attempts by writers to posit the impact of alien cultures on human development are mostly limited to rock carvings and/or monuments constructed through techniques seeming beyond the ability of humans at the time. For many the cultural and technical jumps made by mankind cannot be explained without some time of divine or external non-worldly intervention. OK some can. The wheel would have been of little use in the ice age, so its creation soon after solid ground became more common is consistent with one's expectations. Even the gradual increase in the use of fire and other earth-based factors (minerals, animals) as a means to advance humankind took place at a speed which seems consistent with a plodding bunch of Neanderthals or Cro-magnums.

It certainly seems out of place that for a people that took over 6000 years from the end of the last ice age to create a consistent and usable form of written communication (and they only among a few of the current lot) to suddenly around 2000 BC start building large pyramids, ships, and move rapidly from stone, to iron, to bronze and to other metal based forms of creation. Ok, even in this case it may be conceivable that the decades between advancements may be attributable to humankind. In fact, it would seem reasonable that given the real benefit and demand for such advancements that they should have come soon if humans had any real sense of imagination or intelligence. So how can one deduce the formation of ancient mathematical forms centered around the management of or the creation of money? Take a brief look at the concept of interest and the mathematics involved in determining who owed what to whom and the impact of inflation on the calculation of those payments. Notice the similarities between early rock inscriptions left by aliens and current finance and monetary models:

Basic interest rate pricing model for an asset

$$i_n = i_r + p_e + rp + lp$$

Assuming perfect information, $\mathbf{p_e}$ is the same for all participants in the market, and this is identical to:

$$i_n = i_n^* + rp + lp$$

where

$\mathbf{i_n}$ is the nominal interest rate on a given investment
$\mathbf{i_r}$ is the risk-free return to capital
$\mathbf{i^*_n}$ = the nominal interest rate on a short-term risk-free liquid bond (such as U.S. Treasury Bills).
rp = a risk premium reflecting the length of the investment and the likelihood the borrower will default
lp = liquidity premium (reflecting the perceived difficulty of converting the asset into money and thus into goods).

Who created these concepts? Certainly not the humans of the BC (before coins) society. The only reasonable answer is aliens who came to earth hoping to do a little business. In fact, the earliest known coins show examples of early alien interaction.

Since many of them had no plans to come back until eons in the future, they were required to introduce some time of mathematics to determine the expected future payment for some of their initial investments. One of the reasons, the early religions were against the concept of interest and its impact on monetary based interactions was that some of them were aware of what the potential payment would be in the future on anything other than a zero rate of interest.

Alien Spaceship in Ancient Coin

The sightings of Aliens over the past centuries can merely be put down to various alien races checking up on their original investment. Many alien species have left some of their shipmates on earth to oversee their investments. One must only ask what are the men on the left hiding under their hats.

The exception that proves the rule

As for other examples of Aliens constant oversight of their initial investments one need but note that the individual who are taken aboard their ships were merely descendants of the individuals who first made the loans (kind of a galactic debtors' prison). In fact, considerable effort should be made to determine the true cost of the initial loans and our ability to repay them. It is a little-known fact, that one of the most common etchings in caves around the world are merely 'Upids' which can be scanned to determine the original loan or ownership rights of the related subject (often a large plot of land and/or water rights drawn in the cave next to the Upid).

Upids as Early Indicators of Alien Ownership Rights

It is not the purpose of this Chapter to instill fear into the souls of current readers. But one must wonder, if we, as a world are billions and billions of dollars in debt, who are we in debt to? The answer is simple: ALIENS; and when they find out that we do not have the money to pay them they are going to be pissed-off   BIG TIME……..

Things You Should Remember

Many alternative individuals, even perhaps aliens, were part of the history of money. Today their involvement has been lost in time. It is our responsibility to at least offer a honest nod to them for their contributions where it be in the development of banking (Zug the Younger), of Checking accounts (religious organizations), of interest and monetary theory (Aliens). For todays' citizens of the globe we should focus now on how to move the discussion of money forward, not only in how it is created, who creates it, and who takes care of it but what happens if one day someone comes back in town to demand payment for a loan made decades and decades in the past.

This article only shows that we stand on the shoulders of others who came before us. We have some responsibility to at least sit down with a pencil and piece of paper and to try to know the very basics of monetary literacy (what is a loan, what is interest, what is a negative number) and just as importantly, where they came from. Remember: THEY ARE WATCHING.

What You Will Be Tested On

John Wallis
Negative Numbers
Risk Rate Permia

Selected Books

Sidney Homer and Richard Sylla. The History of Interest Rates(Wiley, 4th ed. 2005)

Eric Tymoigne and L. Randall Wray, Money the Alternative Story CEEPS, 2005.

Chapter 12: The Future of Money

Summary Introduction

So where are we going? For many, the history of the past should not worry us. It is just that, the past. In a successful movie, one of the major characters in answering a question as to how the vehicle that is expected to get them into the future does not have wheels and how could it go on roads just replied "Roads, in the future who needs Roads." However, if it is difficult to say anything about the past, it is really difficult to say anything definite about the future, if for no other reason that just as we were not there in the past and we are not there yet in the future (that is why people call the current a "Present").

That does not stop us from commenting on how we got here (in fact, this whole book has centered on just how money has helped us get here). The difference between the past and the future is that while some may question our interpretation of the facts of the past, it is difficult for anyone to come down factually to one side or the other as to what will happen in the future. It is for that reason that we concentrate on the current. In this area we can still disagree but at least we will be around to witness the impact of our decisions. That is why this is the last chapter. It is the chapter before the future. If we were already in the future then as a History of Money we would have to have another chapter between what is now and what is then.

Still, it is fun to think of the current and where it might be taking us. Perhaps in fact we had it all wrong. Perhaps it was never about where money was taking us but where we were taking the money. At this point we are going to emphasize a little debated factor in our understanding of money. We have historically used Money to understand the value of PQ (MV=PQ) in this section we are going to concentrate on V or the speed at which money moves and how we ensure that it does. If I am wrong, come back to me in ten years and if this book is successful I will add another chapter. You can criticize me then as to the quality of these insights.

Money, the Medium, and the Message

For much of this book we have concentrated on the form and function of money. We often discussed the value of money in promoting progress and since progress generally comes from new ideas, we also discussed Money as one of the most valuable of those ideas. But if money really has value, you would think our ancestors would have spent more time making more of it or finding ways to move it from one spot to another or at the very least trying to determine who has it and what it is worth.

In earlier chapters we discussed the importance of various means of transportation or manufacturing technology in the history of money. Small changes in information about MV or Q had major impacts on P or the value of money. For centuries from the Camel paths of Asia to the ships across the seas of the Mediterranean, to the early semaphores of Rome[76], to the pigeons

[76] It is a little known fact, that the early semi graphs using light signals form peaks across Europe by the early Phoenicians were based on their development of the alphabet. For example, a twenty six letter alphabet was really a series of 0 and 1'a. For example 0 (light on) was an A, 1 (light off) was a B, 01 (light on) (Light off) was a C. The only reason we did not need an alphabet before the Phoenicians was the fact that since nothing much had happened the simple use of pictographs was sufficient (e.g., Bill (picture) has (Hands up) a Cow (picture) – Hands down – Bill is milking Cow etc.). Just thought you might want to know that the 01 basis of computer technology today was also in common use 3000 years ago. The system was also used to keep track of monetary deposits across Europe. One of the reasons that the Middle East eventually failed to build up a financial system is that it was simply too flat to use

of the Rothschild's, onward to the telegraphs and wirelesses of the late 1800s transportation technology had value in part because it enabled individuals to make more money. Similarly, major changes in technology whether it be ways to increase silver or gold production out of the same amount metal (true alchemy), to find new ways for banks to change the available supply of currency or changes

In recent years we have joined the informational technology and manufacturing technology to push forward how we view and use money in our modern environment. Today money has even become part of the politically correct culture. Money no longer reflects what we were (see picture of five cent piece of the early 1900's) but want we want to believe we were (see picture of a young squaw (women) on the front of today's $1 coin). Either that woman has had a nose job, or she is related to the Vikings of the 14th century who settled in the Indian mid-west.

Our True History of Money

semaphores systems to quickly transmit information about money and its value globally. (the Chinese used kites but wind was so fickled and generally from the west that they gave up and built a wall – expost a dumb idea.)

Political Correctness on Coin Issuance

Similarly, there are attempts to "democratize" all forms of money so that no one is embarrassed by their use of an ATM or Credit Cards (note we no longer have food stamp cards but cards that can access money machines). Our goal is to create an App that covers the globe in a matter of seconds even if we cannot. Today we have App's that offer us all means of access to goods and the means (Money) to access those goods. The issue remains what have we lost in that process. No longer do we know the teller at the local bank, no longer are we friends with the loan officer, No longer can we protect our personal information from the very people who help create it. Today we live in a world of:

Financial System by FIAT

If we are going to run a monetary system by government order we should take the time to see how it has worked overtime. The fact that the financial system has changed on a continuous basis ought to give us pause as to the ability of government to set up an "Ordered" system that could be trusted instead of a system that is based solely on FIAT. The word Fiat initially meant "the middle finger of your hand, stuff it because I say so." In modern parlance we have updated it to say that it came originally from Pope Leo III who declared by Fiat (Finalism instrumentalism authoritarianism Tempo) when he declared that if he called it a "Fact in matters of faith and morals or banking" it is a fact and if you did not like it you can and will go straight to hell. This was quite a nifty idea to keep those under you in line and it is surprising that so few politicians or religious leaders had not thought of it previously.

Ok the most likely did but they did not want to be laughed at outside the office. So, when President Richard Nixon declared that the era of base metal or even shell backed money was dead and that the U.S. dollar bill was money because he said so, every knew that he thought himself the Primary Emissary of God and equal to any Pope in the land. The problem was that tricky Dickey was not the only American to think that they were God. For years, many other individuals were creating pictures of dead presidents, soap detergents, tires you name it and calling it money or even better than money since the government would never snag it, bag it, or tag it. While most Americans had come to accept that money could be grouped into various categories based on its use and availability (e.g., liquidity); that is:

M1: Cash in your billfold or coins in your pocket

M2: An Account at your local bank that you could access through an immediate claim on it where it by check or debit card.

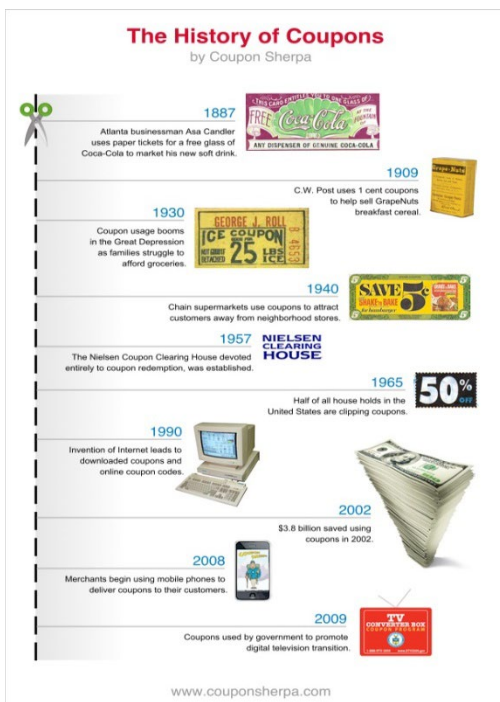
M3: An account at your local bank that was yours, but the bank would not let you get at it for several days if they said so.

M4: An account at your local bank that was yours, but the bank would not let you get at it for months unless they said so.

M5: (A British Secret Service Agency that put a claim on the Term since they had hoped to become a bank when everyone came to realize that the British had no Secretes that anyone cared about.)

M6: Anything that was yours that someone would give you money on, but you kept ownership of it until you read the fine print. At various stages these were called Reverse mortgages when referred to when someone gave you some money for your house, said you could keep it and then came and took it because you failed to keep the front walk shoveled. In other parts of the nation these were the outgrowth of Pawn shops, the only difference was that someone gave you money for something that was yours and they kept it at their house until you forgot to shovel your walk. As a sidebar, this entire industry also created a side demand for magnifying glasses which were required to read the fine print associated with any of these legal documents.

M7: All of the above were recognized forms of money or potential money, but the real outgrowth of the 'It's money because I said so" was the rise of the 'American coupon'. If anything was money and if people needed it so badly, why not just deliver it to their homes each and every day but with a small minor restriction that it could only be used for a limited number of services for a limited period of time (the magnifying glass so important in the development of M6 was also found to be of importance in the growth of M&A). On the side of every box of cereal, in every magazine, in every newspaper, in circulars dropped off in your mailbox, in your door, slapped on the front windshield of your car, as free money (or discounts as they were called). This proof of value could be exchanged for a reduction in the purchase price of numerous forms of goods. Basically, it levered up every dollar you owned. If you thought you needed $100 to buy groceries over the next week, with enough coupons you only needed $50 for the same number of groceries and the Other $50 could be used to let’s say go to the movies. As important you did not even have to use the coupons yourself, you could pass them off to other people who would give you actual cash for ‘Your Promises of discounts.” In time you did not even have to wait for this proof of value to be delivered to you. Entire corporations set up their own “Groupon” banks ‘called websites’ in which you could go and get this ‘substitute money’ for free to purchase not only their goods but goods from around the world.



Coupons As Money

It would be dishonest to point out to you that all of this did not come without a cost. For firms to stay in business they had to raise their actual price above the true market price so that after an individual took his or her discount, the firm would always receive the required market price. This led to a rapid inflation as firms had to keep increasing the number of coupons it offered to have people shop at their stores and then having to increase the prices of the goods at their stores to offset the cost of these coupons. There were a few firms that saw the insanity of all of this and attempted to start removing special coupon days from their marketing campaigns and lower prices consistent with the real price of the goods. However, by this time most Americans had become addicted to this new form of money, that the attempt by firms led by J.C. Penny (of the penny saved is a penny earned family – sorry I had to use it since I founded it for free in my front door) almost led to the collapse of the entire franchise.

There was additional value to this new M7. First of all, not everyone used the coupons. Many of them had to be cut out of magazine and for those with limited dexterity this was difficult. You often had to carry them to point of purchase, this took time and effort and for many the fact that you had to cut them out in the first place and then announced to all those around you that you needed or wanted to use them was too much of a personal defeated. Even others did not use them since it indicated that you were willing to subsidize those that did a time of homeland charity.

There was the problem of what to do with all of the 'Pseudo Money' as it began rapidly to replace Tricky Dickey money. Fortunately, the government started to collect all of these coupons for tax purposes and deposit them in the now empty nuclear missile silos in Nebraska, South and North Dakota and Montana. These silos made excellent compost pits and the "Pseudo Money' eventually became manure. The government promoted the program that money had to be spread around a bit if you wanted something to grow.

Financial System by Plastic Money

In a movie of the 1960's the Graduate, the main actor was advised to go into plastic. In short, the future was plastic. I have no doubt that if he had he would be rich today but not due to plastic in the traditional sense, but those first who have majored in plastic money have made a mint.

Dustin Hoffman AS Everyman

I wish to warn our readers that the centuries it took to evolve from stone to copper to paper money has been rapidly condensed in the current age. First of all, despite all their efforts, plastic money, is not as good looking as paper money or for that fact metal money. I presume that some idea man will find a way to make plastic money more exciting that holding the Queen on a 5 lb. notes. Regardless of the issue of whose picture (other than your own) that you want on the front of the plastic similar to the George Smith day. Recent events have raised the question as to the moral character of plastic money or at least of those who are trying to access it. In short modern Chiselers they have been shown to Target Plastic at Target Stores. As a believer in the efficient market of ideas, if the market order has found a way to bypass moral order and if the government order has found no way to protect themselves from the modern chiseler (known as the hacker) what is the future of plastic money.

In time, however, the green movement began a major campaign against the use of plastic money accounts the "Pseudo Promise Money" better known as the PPM. They calculated the amount of trees and magnifying glasses required to promote PPM and went on a PPM Boycott. While not known to the general public, this boycott was promoted by the computer industry which wanted to promote its own form of nonmetal and/or shell based currency this form came to be known as the Bit-coin based in part (I suggest) on the number of computer Byte's that were required track its ownership among the populace.

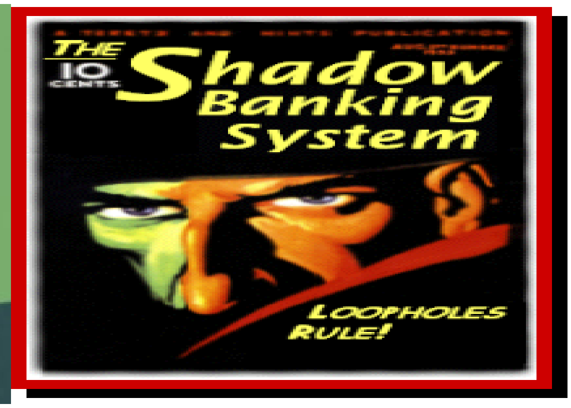
Financial System by Computer – Shadow Banking

Automatic money whether it be on the web or whether it be the Fed offering automatic money. The concern of course is that if as in the past, there is no gold, no respect for law, no trust what is to keep the trust in the promise on the back of a computer website. As we write this, there is increased discussion on the need for Regulation of Bitcoin. Governments are suspicious of market order-based creations. If one rules, one needs to rule the rules. Who can trust the future of money to moral or market order? Unfortunately, in a world of rules only the ruler's rule. Attempts have been made to provide money and banking services outside of the normal regulatory service channels. Often these services are provided under a tree somewhere or in a building with an awning protecting the client from the sun. This service is known as Shadow Banking.

Shadow Banking in the Woods **Modern Shawdow Bank (With Awning) in China**

Shadow institutions typically do not have banking licenses and don't take deposits like a depository bank and therefore are not subject to the same regulations. Complex legal entities comprising the system include hedge funds, structured investment vehicles (SIV), special purpose entity conduits (SPE), money market funds, repurchase agreement (repo) markets and other non-bank financial institutions.[12] Many shadow banking entities are sponsored by banks or are affiliated with banks through their subsidiaries or parent bank holding companies. The inclusion of money market funds in the definition of shadow banking has been questioned in view of their relatively simple structure and the highly regulated and unleveraged nature of these entities, which are considered safer, more liquid, and more transparent than banks.

Shadow banking institutions are typically intermediaries between investors and borrowers. For example, an institutional investor like a pension fund may be willing to lend money, while a corporation may be searching for funds to borrow. The shadow banking institution will channel funds from the investor(s) to the corporation, profiting either from fees or from the difference in interest rates between what it pays the investor(s) and what it receives from the borrower.

The Shadow Knows

Pseudo Gold

In fact, no one really holds real money these days. Knock offs are everywhere. Today we have just cheaper forms of the real thing. Why no gold. We know where all the gold is and if there are any more great deposits why spend all that time and effort just digging it up and putting it back in the ground. Whenever anyone finds gold just go to the “PGR” or the Pseudo Gold Repository and get a certificate stating that you are the owner of that particular stash of gold. If there was additional need for money as per the late 1800’s one could add additional PSR or Pseudo Silver Certificates. There is no need to waste our time merely digging it up and putting it under. Other real good based certificates could follow or one merely increases the Pseudo Price of each Certificate**.**

Money? Where We Are Going We Do Not Need Money

In fact, I have no faith in any of the above as the currency of the future. I would say however that if one could go forward and then return, he could come back with a sober realization. Simply put there will not be any money. Oh, there will be cows, seashells even paper, it is just money is required to meet a series of needs since we won't have any. Those who have seen the movie, the Time Machine, know that for the most part men lie about in togas and watch nubile young ladies flow down river in fear of drowning but no one does anything since no one ever does anything. Now from this movie how does one know that there is no money? Well as I said above we have everything we need but more importantly, as discussed previously notice that none of the togas have any pockets. No pockets, no coins, why no coins no change. If one looks in greater detail one also notices that there are no ATM's.[77] Why, there is no need for paper money. We have achieved a society in which there is no garbage, no mess, not even any junk mail with all of its M8 (for those who have not read the last chapter that is no coupons).

Now this ideal society does not stand on its own. While I was watching the movie, my mind immediately asked, OK but now who makes the togas, who weaves the wool, who picks the pits of the plum or nectarines they are eating. Everyone looks good, who cuts their hair. I started to

[77] This is not the same thing as no banks (note the double negative). With the increase in computer based commerce who needs banks and as importance who needs malls. The future of society needs a place for the population to interact socially as well as to provide a means to obtain medical care as we all age. I suggest that the number of malls will fall to 5000. This is approximately the same number as banks as well as doctors' office under Obamacare. It cannot be a coincidence. The answer is to make each mall a bank and a doctor's office and a dating service. Given the cost of medical care proximity to a bank is only right and just.

question my previous assumption. Perhaps a future society could exist with money but without pockets. A society which the necessity for money depended not only on where you were but who you were. The question who were these people and if they existed what kind of money did they have and who kept track of it?[78]

Future ATM

Future IRS Agent

The answer was soon made clear. An alarm range and all the good looking men and women who were lying about all rose at once and when to a single 'Big ATM' machine which opened up on queue and the assembled multitude rose their hands up in salute to the "INCA ATM' where from

[78] Since the computerized government society is the goal of any government order it makes sense that every American will have a chip imbedded in the forehead which will be scanned going forward to add or subtract all future expenses and keep track of all monetary transactions. This chip could also keep track of all of our medical history and how many 32-ounce sodas you have consumed.

what I could tell, their daily purchases and sales or whatever else they had consumed were deducted from some sort of chip impeded in their upper right arm.

Déjà vu: The Return of Cash

Before a government evolves to the level that it no longer needs money it may be better for all of us to go back to pieces of paper where only one person knows what is in one's pocket. Change is often forced upon us by regulatory changes, technological change, or market changes. Sometimes all three. The unfortunate aspect of technology is that it lessens our own ability to manage the process of money creation. We may evolve into a society in which we no longer want the government on our phone, on our mind or in our mail or pocketbook. In such a world, when one's monetary value can be closely monitored by the government perhaps we may decide simply that the value of money may have a greater value in paper form. Think about it. No longer was 2-4% trimmed off the top of any transaction. No longer waiting for the message from your credit card company that someone has accessed your most personal information. No longer arguing with various government or corporate bodies on what was sent and where it was sent. One could continue. But for some this game may result in a return to where we started. I am not sure if this will happen but without it look for clothes with no pockets and people with no purses. It may not be a signal, but it could be a sign.

Things to Remember

If we cannot determine what money is, perhaps we should concentrate on what money is not. If we cannot tell you what it is after over 150 pages of ramblings and perhaps three hours of your time flying from New York to Chicago perhaps the most this book can do is to tell you what perhaps it is not:

- It is not a religion (or at least it should not be). If one tries to make it so, perhaps both Descartes and Pope Leo was right. **If you think money is religion, it is straight to hell for you.**

- It is not solely a government decree. There is simply no way government can create a system to work in all possible futures of the world. Governments may do well at reacting they do a poor job at pro-acting. **Watch out for anything run by FIAT.**

- Money is a function both of society and society needs. If you are good at silk use silk. If you are good at stone carving, use stone. If you have special shells use shells. Ok but here is a given for all societies: **Do Not Trust Anyone Without Pockets.**

- Rock breaks Scissors, Paper Covers Rock, Scissors Cuts Paper: Rock Breaks Scissors (A limited supply of few good solid rocks (gold) are worth more than an increased supply of money (scissors is the tool we use to mine more gold or to cut too many pieces of paper backed by that gold). But Paper covers Rock (All else equal good paper beats gold per example big navies (England) with paper money beats small navies (Spain) with gold, but Scissors cuts Paper. Scissors can destroy paper since if the paper money supply gets too big the paper becomes useless: **The history of money can be explained by Rock (gold), Paper (Government backed reference money) and Scissors (too much money cut into too many pieces).**

- Money's Final Truth: Ok we have centered this book on the proposition that final truths are not necessarily found in report "fact" but arise out of people's basic needs. Money serves many needs. If it did not exist we would have to find a way to make it, and thanks to Zug and Gus (or any of their contemporaries) we did. Here is the truth. At times we all need to take some time off, to go to a Zug's tanning salon, to gamble at a Gus's casino, have dinner at Morris' Beer and Battered Fried Fish: Money is not the fruit of the tree of knowledge but it is man's way of finding a way to have a good time. **Money*Idea = Progress (or at least a good time until the money runs out).**

This book has questioned the ability of writers to offer one a factual/true analysis of historical events. This is especially true in the history of money if for no other reason than we want it so badly that we want someone to tell us where it came from in the hope we can go get some. So, is there a true truth to be taken from this book? Probably not. But if there is one, it is the wisdom from my Grandfather:

Just Follow the Money Wherever It Blows, Then You Will Know Where The Money Goes.

But Where It Comes From – Nobody Knows.

What You Will Be Tested On:

Dodd Frank
M6
Plastic Money
Byte or Bit Coins
Iphone Money
Global Currency

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Chapter 13: Cool Things About Money Today

Or

**1) Why You Should Care or
You Might Not Get Any Of It and Live a Boring Pathetic Life Where No One (Not Even Your Mother) Will Care About Who You Are or What You Do So You Might As Well Throw Yourself In Front of A Bus Right This Instant or 2) Get a Bus Ticket to Colorado and Have Someone Else Pay for Your Insipid Life Style as You Continue to Live Like a Fifteen Year Old the Rest of Your Life On the Backs of All of Those Ingrates Who Never Talked to You When You Were a Kid But Who Later Went Out and Actually Made a Living.**

Summary Introduction

OK since you have already spent significant time reading the previous chapters, you may wonder why we have added a chapter on additional material. Any reader may correctly ask, if it is so important why did you not cover it in the previous eleven chapters and if it is not important why are you wasting my time now. Why because this stuff is cool and in the words of Joseph Campbell of Myth and Man, each of us have to “Follow our Bliss” and for many that “Bliss” is not in the historical understand of money but its place in the here and now and how you can make more of it (and not necessarily how it is made).

For many much of the history of money is rooted in the dry historical facts that have been used to describe the journey and have been passed in the dry numbers of accountant and economic historians rather than in the writings, the art, the songs of the common man. As far back as Zug and Gus, Morris was busy telling the story of money on the cave walls around Bagdad. The lack of sharp tools often led Morris and his contemporaries to artistic renderings of man and his money and for those artists whose skills were more in the musical variety, songs of the day which praised the skills of successful sheepherder and casino entrepreneur. Throughout the following centuries, artists and musicians continued to tell the story of the history of money and of man's place in it for no other fact that most people could not read. We must remember that for most of human history reading was simply not that big a thing if for no other reason that you had to be really big and strong to carry a stone tablet book around and writing with stone chisels was time-consuming and expensive.

We are fortunate today that in the past centuries, technology encouraged a dramatic change in how money and its history could be transmitted to us. The printing press along with the lowering cost of paper, the rise of the entertainment industry in the late 1800's, as well as the increase in wealth among a greater part of the population created a greater demand for and means of telling the story and that is what we concentrate on in this chapter; that is, how the cool people; that is the artists, the authors, the musicians took the story of money and twisted and turned it into their own story.

So, in regard to the History of Money here are some of the additional things and way that the cool people had to say about it. Lastly, it is also important to learn some of the cool things about money even if it is not discussed by the cool people. We have added a couple of current topics in money including the role of women in the history of money (She who rules the checkbook rules the world) and the impact of changing educational and technology formats on our understanding of money's place in the cosmos (but who put them in charge).

Remember Money Is Cool and You are Cool If You Have Money

Music and Money

We have started out this chapter on Money and Coolness since we already know that money is cool and we know that musicians are cool, therefore it makes logical sense that musicians like money. The problem, if there exists one, is that making money is hard and making music is relatively easy; that is why more kids in high school own a guitar than a brokerage account. The other reason music and money are so intertwined is that money can be the source of happiness it was also the source of pain. Similarly, music has been used to convey our deepest pains and our highest dreams, therefore it only makes sense that the two should find a way to blend together (see summary abstract at start of book on C. Lauper vs. T Gray).

Money has found itself into the entire fabric of our musical tradition. As discussed earlier much of the culture of our forefathers was church based and during much of the Middle Ages was based on something we call today 'Gregorian Chant'. This form of music was pushed by the Church if for no other reason that it did not require a large expensive orchestra and the monks that sang it took the vow of poverty. And since the Church made its money not off of the music but the indulgences it sold most of the songs of the day were about heaven and hell and to the extent that money was discussed it focused on how it destined one for the latter.

This conflict between money (the old rich man must get down on his knees to crawl though the eye of the needle to get to heaven) existed until we were able to move the dial enough that a rich man was regarded as blessed by God and indicative of his goodness rather than a train ticket to hell. In short, after the events of Chapter 4, the printing press, a bunch of bubbles and a few worldwide wars money was no longer the regarded as a negative and the musicians of the day were no longer celibate monks living in small cells. By the 1700s they were the rock stars of their day, the Haydens, the Bachs, the Beethovens and the Brahms. They were supported by rich people who wanted rich songs. Soon anybody who was anybody was into music, Opera, minstrel shows, and tin pan alley, jazz of the thirties, musical theater of the 50, folk songs of the 60's and rap of the 80's and 90. All driven by a music industry that used money as its linguae franca.

One does not want to overdo it, but money soon became synonymous with society. A which rendering of songs which expressed cultures obsession with money indicates that for most individual music was how they came to see money and its impact on their lives. A rundown of current song titles focusing on money is indicative of our current obsession.

All that Money Wants – Psychedelic Furs
Did It For The Money – Tesla *
Easy Money – Billy Joel
Everyday I Think Of Money – Stereophonics
Follow The Money – The Proclaimers
Free Money – Patti Smith
Get Money Spend Money No Money – Ice Cube
Get This Money – Jay-Z
Gold Diggers Song (We're In The Money) – Bing Crosby
Got My Money On You – Alvin Stardust
Hold On To Your Money – Howlin' Wolf
I Got Money Now – Pink
If You've Got the Money, I've Got the Time – Willie Nelson
If You've Got The Money Honey – Percy Sledge
It's Yer Money I'm After, Baby – The Wonder Stuff
Keep Your Eye On The Money – Motley Crue *
Lay Your Money Down – Bread
Life Is A Lemon And I Want My Money Back – Meat Loaf *
Love Your Money – Daisy Chainsaw *
Made Of Money – Adam Ant
Man With Money – The Who *
Mo' Money, Mo' Problems – Notorious B.I.G.
Money's Too Tight To Mention – Simply Red
Money, Money – UFO *
Money, Money, Money – ABBA
Money, That's What I Want – Barrett Strong (Various Others)
Money – Pink Floyd
Money and Fame – Scorpions *
Money Back Guarantee – Sheena Easton
Money Changes Everything – Cyndi Lauper
Money For Nothing – Dire Straits *
Money Honey - Elvis Presley (Various Others)
Money Honey – Little Richard
Money Honey – Lady GaGa
Money Makes The World Go Round – Technotronic
Money Song / Save Me – Coco
Money Talks – AC/DC *
Money – Girls Aloud

Money – Space
No Money Down – Chuck Berry
Opportunities, Let's Make Lots Of Money – Pet Shop Boys
She Wants Money – Ratt *
She Works Hard for the Money ~ Donna Summer
Take the Money and Run – Steve Miller Band
What's The Colour Of Money – Hollywood Beyond
What Do You Do For Money Honey – AC/DC *
You Never Give Me Your Money – The Beatles
You Stole My Money Honey – Stereophonics

Early Money Record

Rap says it all

1. **I'm tryin to make a dollar out of fifteen cents. It's hard to be legit and still pay tha rent."** 2Pac rapped this quote about money in his song "Keep Ya Head Up."
2. **"I ain't coming out for less than a 100 thou."** This particular quote is Minaj saying that she will not do a verse, or play a show for less than one hundred thousand dollars.
3. **"I don't know what, they want from me, it's like the more money we come across the more problems we see."** This quote is the chorus to the Mase, Puff Daddy, and Notorious B.I.G. song "Mo Money Mo Problems." The rap song is from the 1997 album "Life After Death."

4. **"Cash Rules Everything Around Me. C.R.E.A.M. Get the money. Dollar, dollar bill y'all."** This quote about money is from the song "C.R.E.A.M." by Wu-Tang Clan

As discussed earlier, one of the reasons money and music remain a major focus of today's culture is that most kids today can picture themselves as Rap musicians rather than financiers. In fact over the past century making music has become much easier while making money is a lot harder. Think of it, Beethoven's 9th symphony is 391 pages long, whereas the typical music composition today is 6 pages with much of the music repeated. [79]

A quick review of two of the major 'hits' of the 1800s versus the late 20th century shows how the time and effort put into music has shifted. Before the mass popularization of music, the success of a particular piece was based, at least in part, on its appreciation by a smaller one might say more 'musically refined' audience. In the early 1800s, music was the "game of the day'. Baseball had at least 50 years before its institutionalization, golf was still in its infancy, soccer had yet to establish itself as a global sport based on a set of common rules[80]. In short, music was funded by

[79] In contrast, finance has become more complicated over the past two hundred years. Around 1800, finance was conducted under a Buttonwood tree in NYC by 20th century it was focused on computers around the globe dominated by Monte Carlo simulation, stress tests, and multiple asset classes.

[80] The history of modern-day soccer was established in 1863 when eleven representatives from London clubs and schools met at the Freemason's Tavern to set up common fundamental rules to control the matches amongst themselves. The Football Association strictly banned any kind of handling of the ball. FIFA was established in the year 1904 and by early 1930s, different leagues were operating from various countries. It is important to note that the restriction on the use of hands impacted the growth of music in Europe versus the US to this day, since most Europeans are skilled in the use of their feet but have no idea what to do with their hands (piano, guitar …)

a limited set of individuals who took the game seriously and who expected more than 16 stanzas of music with repeated phrases from four or five somewhat talented individuals.

The Evolution of Music (From Sublime to the Simple)

As discussed money and its role in music has forced modern day musicians to focus on a different approach to music and its production. For the Beatles – All You Need is Love – required three not that very good musicians and a Drummer. In contrast, for Beethoven the symphony is scored for the following orchestra. These are by far the largest forces needed for any Beethoven symphony; at the premiere, Beethoven augmented them further by assigning two players to each wind part. The symphony is scored for the following orchestra. These are by far the largest forces needed for any Beethoven symphony; at the premiere, Beethoven augmented them further by assigning two players to each wind part.[19]

Woodwinds	**Brass**	**Voices** (fourth movement only)
Piccolo (fourth movement only)	2 Horns (1 and 2) in D and B-flat	Soprano solo
2 Flutes	2 Horns (3 and 4) in B-flat (bass), B-flat and E-flat	Alto solo
2 Oboes	2 Trumpets in D and B-flat	Tenor solo
2 Clarinets in A, B-flat and C	3 Trombones (alto, tenor, and bass; second and fourth movements only)	Baritone solo
2 Bassoons	**Percussion**	SATB Choir (Tenor briefly divides)
Contrabassoon (fourth movement only)	Timpani	**Strings**
	Bass drum (fourth movement only)	Violins I, II
	Triangle (fourth movement only)	Violas
	Cymbals (fourth movement only)	Cellos
		Double basse

One may wish to argue about the relative quality reduction from the impact of money (and profit) on the creation of music but the return to effort can also be seen in the quality of the lyrics. For those who wish to debate if lyrics give some relative weight to current composers, one need but compare the words in Beethoven's ninth Symphony, from Ode to Joy and its focus on "Love" and its importance in our relationship to the Almighty and each other to that of the Beatles more current focus on "Love." Perhaps one should but regard the Beatles version as a stripped down "Ode to Joy" with all the unwanted passages removed. Again, our focus on money has had a change on the music industry, some may regard the following as a sample that it was not for the better.

Words in Ode to Joy

Sample Phrases

Joyful, joyful, we adore Thee, God of glory, Lord of love;
Hearts unfold like flowers before Thee, opening to the sun above.
Melt the clouds of sin and sadness; drive the dark of doubt away;
Giver of immortal gladness, fill us with the light of day!

……..

Thou our Father, Christ our Brother, all who live in love are Thine;
Teach us how to love each other, lift us to the joy divine.
Mortals, join the happy chorus, which the morning stars began;
Father love is reigning o'er us, brother love binds man to man.
Ever singing, march we onward, victors in the midst of strife,
Joyful music leads us Sunward in the triumph song of life.

Love is All you Need – Beatles

Sample Verses

All you need is love.
All you need is love.
All you need is love, love.
Love is all you need.

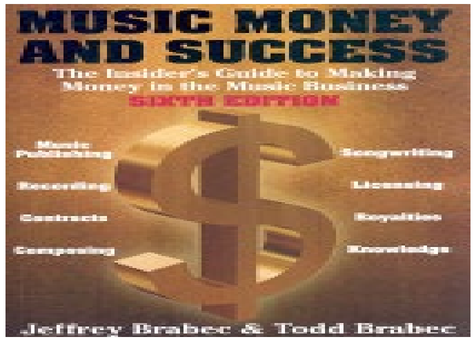
All you need is love.
All you need is love.
All you need is love, love.
Love is all you need.

The Message of Love 18th Century versus 20th Century

Yet, most kids believe that music is the road to money rather than money being the road to music. And in this they are right. While to compare today's popular musicians with those of the past is almost comical, they do have one thing in common with today's successful musicians as they were the rock stars of the day. (See Beethoven Below)

Ludwig 'Rock Star" Beethoven

And I haven't even discussed the heartthrobs of the day, Chopin and Liszt (there are stories of young girls throwing their bloomers at them after a concert). Of course, the question remains how to make money in music. One can make a lot of money from a single performance or a little money on each of a lot of performances. In fact, there is more money in the development and promotion of music than music itself. Books and entire firms have been centered on helping individual music entrepreneurs make it in the music industry. Most musicians have come to appreciate that in the music business as it was in the farm store of the last century one makes more money selling the process to make music as it was selling the shovels to dig the grown than to do the actual work itself.



Music and Money

It would be unfair of me not to point out that for many music and money are in direct opposition. Music frees the soul while for many money enchains it. There are numerous musical references to money as destroying the very soul in man. Of course, such analogies have been made in other venues also. This book cannot and will not come down as on the side of music or money, only that to do either well takes time and time is money, that, and the fact that most noted musicians of our day have understood the importance of understanding money and the history of money.

Beatles When Asked About the Importance of Understanding the History Of Money

Theater/Movies and Money

Just as musicians are cool, it is well known in our society that actors are cool too. However, while music may express feelings about money it often is too limited to express the fuller story around by which money affects our lives or at least how we affect it. Even more importantly, as discussed in the previous section, if many youths today can see themselves as musicians rather than bankers, even more can see themselves as actors. Think of it, in business one has to write the libretto, set the scene, do the acting and repeat it every day with very little help. An actor has someone else do the writing, someone else set the stage, someone else direct the action and if in a movie, one gets the chance to redo it time after time until they get it right. How much talent does one really need for that? Acting looks like a great gig. It is such a great gig that most of us know it for the 'fakery' it is, that is, two hours of escape from what is to what we wish it could be. For most Americans theatre remained a means by which we viewed money in the other America. Its truth was another story. The Nick and Nora Charles Mysteries of the 1930s depicted wealth the way we wanted to live it. We knew Life was hard enough but why spend hours having to be reminded of it. How many of us can close our eyes and see Dorothy skipping down the yellow (Gold) brick road off to see the Wizard (the head of the Federal Reserve) who would find a way to pay the ticket for her way home.

Of course, as times got better, and we felt a little guilty about our success, money and movies became increasingly concern about the corrosive element of money in society (Mind you not about money in movies that was good) but what better way than to convince people to give it to them than to show the negative side of its creation.

Here are but a few of the most recent films

Wall Street
Wall Street is an iconic movie that has been a fan favorite for over 25 years. You can learn a lot from this old school classic. Who can forget Gordon Gekko's classic quote about greed? Regardless of what Gordon Gekko thinks, greed is not good. Greed will get you in a ton of trouble in the investing world. Many investors have lost their shirts by chasing high returns no matter what the cost.

Glengarry Glen Ross
Con men are everywhere. Glengarry Glen Ross is about real estate con artists that will do anything possible to rip their customer off. In this underrated classic, Al Pacino, Ed Harris, and Jack Lemmon use fake prizes and awards to con hapless investors out of their life savings. Be wary of swindlers. Thieves are always willing to steal, plunder, and rob in order to save their own necks. They usually prey after the elderly and those people in a dire financial situation.

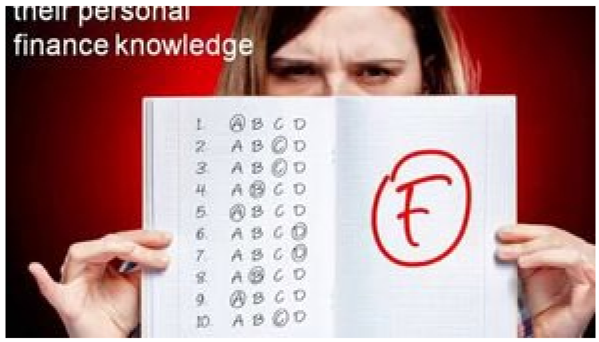
Of course, each of the above had little relationship to the real world of finance for that one had to go to less successful films.

Rollover: Will the Arab's keep investing in U.S. Treasuries or Not?

Margin Call: How Bond salesmen really work.

Here is the truth, I generally see more people walking out of these films writing down notes on how to make money rather than what to avoid. The anti-money films would be a little more believable if they were not being made by large corporations looking for tax benefits from poor people and paying their players millions and millions of dollars per year. But as we must remember; in Business consistency is the Hobgoblins of small minds. And the famous quote: It is better to look good than to feel good.

The very fact that these popular movies have not proven a suitable way for most theater goers is that many schools have attempted to use similar video film approaches to educate Americans on finance. Test scores for Americans on their understanding of money despite film after film on money indicates one of two things. 1) Either the material in the movies was all wrong or 2) Nobody was listening anyway. Unfortunately, we must look to other sources of information on money.



Americans' Understanding of Money

The Novel and Money

Well, if musicians and actors are cool (or hot which is kind of a really cool cool), and if money is cool why are so many musicians and actors so poor? We have tried in this book to point out that two cools equal a hot. Perhaps, both music and movies are great entertainment but poor education. Perhaps what one needs is a heavy tome/ We sometimes fail to remember that the very first written (or in this case chiseled) words was a stone tablet to contract to buy and deliver a set of goods back in Babylonian times (where do you think heavy tome) came from. From then on, money and the search for it or how it impacts human existence became the game that words are made of. The First English story, the Canterbury tales focus on money and its role in society:

From cliff notes

The Canterbury Tales are set in a time of economic transition for medieval society, money and wealth play a very big role here, particularly in the portraits of the pilgrims. We see the things money can buy in the descriptions of the clothes people are wearing, the horses they're on, and the gadgets they've got. And we learn about the ways people can make money in portraits of characters like the Merchant, the Tradesmen, or the Wife of Bath. We also hear a lot about the way characters can steal or cheat their way to money, as the Reeve or Pardoner do. In many of the portraits, we witness the way that skill with money-handling can lead to power, deserved or otherwise, and the way lack of concern for money (the Clerk) can be just as troubling as excessive greed (almost all the other characters). Most often, when the *Tales* talk about money, it's to question the ethics of a particular character's relationship to it, particularly in the case of the religious characters who have taken vows of poverty.

Throughout the centuries, man's place in society and the role of money in determining that place has remained at the center of fact and fiction. From the Horatio Alger's series focus on how individuals could rise above their state to make money, Charles Dickens series of novels focused on the financial ills of the period in a series of novels of length based primarily on the fact that he was paid by the word.

Into the early 1900's America's concerns on how money was made became the focus of the literati. The muckrakers early 1900' viewed money as the base of all that muck. They were soon followed by the polar opposite, in the 1920's the Great Gatsby favors those who rose above the muck, a type of Horatio Alger of the new economy. The failure of that economy of course reversed the focus in the 1930's back to the problems that money drove society to. The Grapes of Wrath was really a diatribe against the evils that money created.

Thomas Schneeweis: Books

1. L’argent

Published in 1891, Emile Zola’s Money deals with financial speculation – its highs and its lows. Inspired by the collapse of the French financial house, l’Union Generale, the main character Aristide Saccard raises money to set up a bank, supposedly to back projects in the Middle East but principally to make money for himself. Saccard ramps his stock on the Paris stock exchange, even buying newspapers to sing its praises and all goes well – until the bubble bursts. Thrilling.

2. The Way We Live Now

Augustus Melmotte, the mysterious financier at the centre of Anthony Trollope’s masterpiece, is one of the great characters of 19th Century fiction. A Victorian Madoff, he lures well-to-do Londoners into a get-rich-quick scheme to build a railway from California to Mexico. None of these backers ask how or when the railroad is going to make a profit. This magnificent 1875 novel is about so much more than money – the hypocrises of class, anti-Semitism – but greed and financial speculation are at its core.

3. Money: A Suicide Note

Martin Amis’s savage satire features the greedy, debauched John Self who spends money on everything he shouldn’t – booze, drugs, pornography, junk food – as he tries to make his first feature film. Dark, funny, and downright dirty.

4. The Pit

This 1903 novel by Frank Norris about commodities trading in Chicago centres on Curtis Jadwin who attempts to corner the wheat market by bidding up the price of grain. He ends up losing his fortune but love triumphs in the end.

5. Madame Bovary

Illicit sex and romance (poor Emma Bovary doesn’t receive much love) may be at the heart of Gustave Flaubert’s masterpiece, first published as a book in 1857. However, debt is the heroine’s fatal flaw. Emma’s desire to live the high life (to escape the tedium of a humdrum time in the provinces) leads her hopelessly into the black – eventually leading to …. (musn’t give the end away). Stirring stuff.

6. How Much Land Does a Man Need?

Leo Tolstoy's brilliant short story features Pahom, a peasant, who begins the tale boasting that if he owned lots of land he would not fear anything, even the Devil himself. Unfortunately, for him, the Devil is sitting behind his stove and decides to teach him a lesson. Pahom acquires some land but soon finds that what he owns is never enough. By encouraging his greed the Devil takes his revenge.

7. The Financier

From an early age, Frank Algernon Cowperwood, the anti-hero of Theodore Dreiser's 1912 novel, is interested in only one thing – making money (although he is also quite hooked on power and women). Full of double-dealing and betrayal, The Financier is a scathing critique of the American dream.

8. Martin Chuzzlewit

Money issues make an appearance in many of Charles Dickens' novels, but Martin Chuzzlewit makes the list because of the Ponzi-style insurance scam – the Anglo-Bengalee Disinterested Loan & Life Assurance Co – which is critical to its plot. Several of the main characters get embroiled in the scam which collapses leaving many of them ruined. A rich feast.

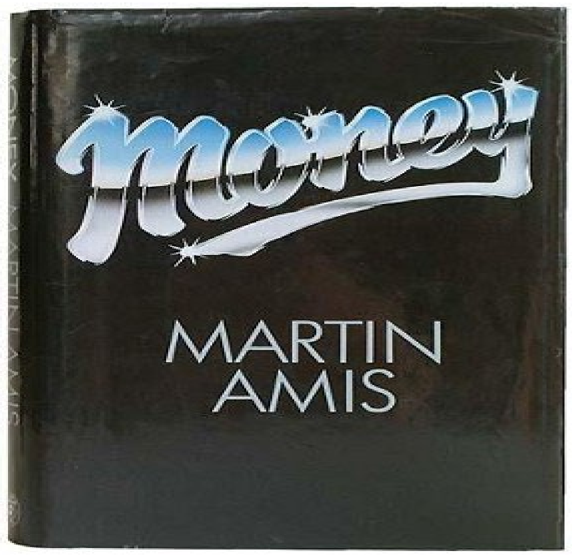
9. The Bottle Imp

Robert Louis Stevenson's short story offers a neat twist on the conventional get-rich-quick tale. It focuses on a strange bottle containing an imp who will grant whoever owns the bottle whatever they wish for. The catch – the bottle has to be sold for less than the owner paid for it. Anyone left owning the bottle when they die will be damned to eternity. As the story progresses the price of the bottle falls until it almost reaches zero, but there is always someone willing to take the risk of buying it.

10.The Count of Monte Cristo

Alexandre Dumas' magnificent mid-19th Century page-turner traces Edmond Dantes' plot to take revenge against the scoundrels who got him thrown into prison for being a traitor. By a circuitous route he eventually appears in Paris as the fabulously wealthy Count of Monte Cristo, a title that he bought on his travels. The Count then manipulates the government bond market to destroy a large part of his enemies' fortune. Bad luck on the stock market does the rest

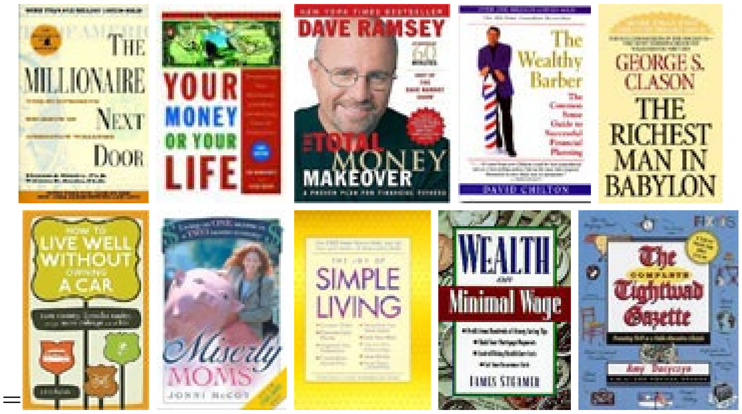
Ok, in truth I doubt if anyone reading this has read any of the above. We live in an age of “once there were Books.” At the very least we read the Sunday NYT Book review section where a summary of the book provides all we need to know for our weekly ‘book club meeting’ which are really “where to find a date who is literate’ episodes.



Keep is Simple Stupid or For the Stupid Keep it Simple

In fact, few of us take the time to read anything unless it has direct information as to these books advice about saving, investing, and getting out of debt. These ‘How To” books don’t go into much detail about any one subject, but they provide motivation to get started. Of course, if one understood the concept of market efficiency the amount they charge for the book is exactly equal to the value you can expect to get from it. The fundamental question is ‘If so many books” why so few people with money.

Thomas Schneeweis: Books



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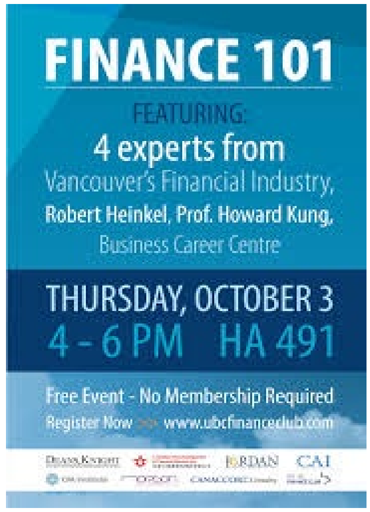
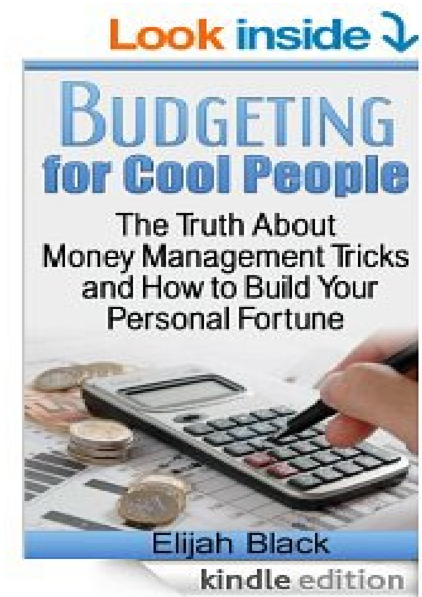
Hope Springs: Books on How to Make Money



Courses on How to Make Money

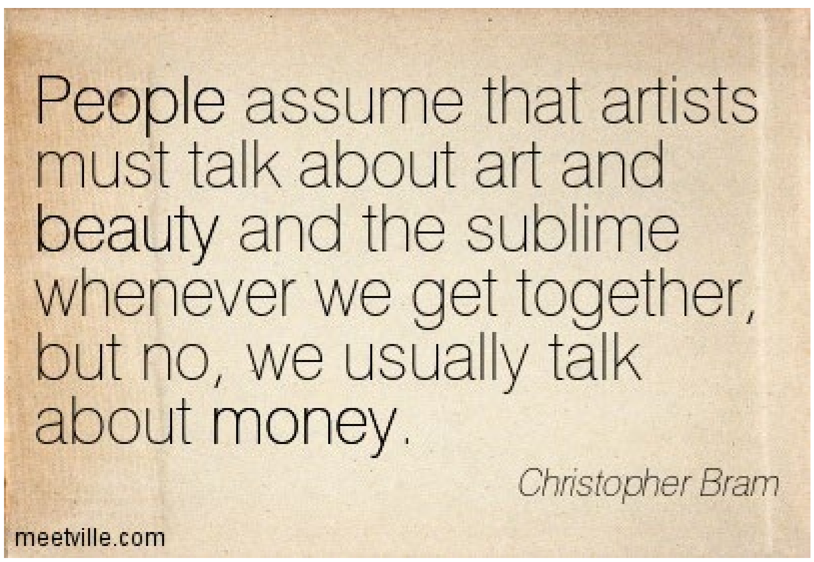


Obviously, Cool People Have Personal Fortunes and Not Cool People Don't

If anything is to be learned from the above, is that there is probably more money in books on money than in reading the books themselves, but they do look impressive on the bookshelf.

Art and Money

Well, if musicians, actors, and authors are some of the most poorly paid amongst Americans, why do all of them compose, act, or write so much about money. One would hope that they would show evidence of some level of success before venturing into the area. Similarly, money has remained an obsession of artists who for the most part who don't have any or for whom money remains a distant dream. The desperation can often be seen in the way they depict money or which money itself has depicted itself. (For reference see: David Standish. The Art of money: The History and Design of Paper Currency from Around the World)



The Artful Truth

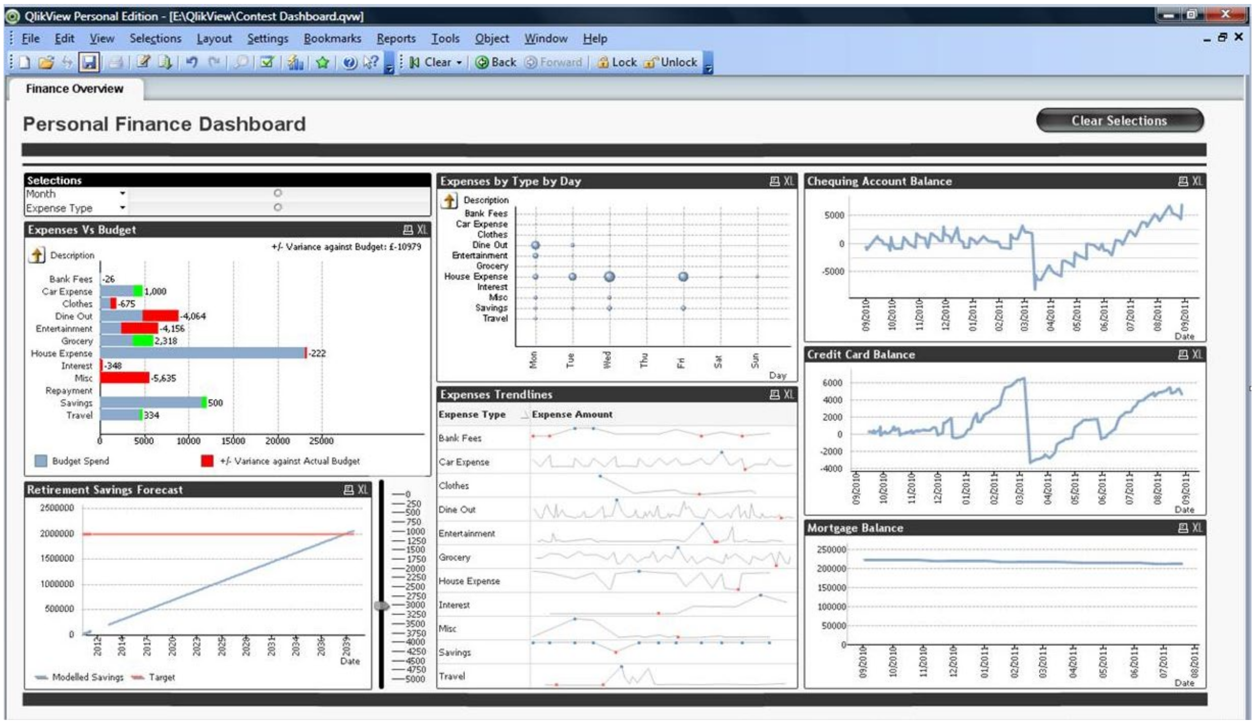
As discussed in previous chapters, money itself was art. Roman coins succeeded where Greek coins failed because of no other reason than Romans were better looking. The early U.S. dollars was at least smart enough to put a good looking girl on its first dollar coin even if they had to add a little cleavage on the remake several years later.

Note Use of Spanish Coinage Reference Pre-Union

Per Earlier History – Note Use of Better Looking Women in later coinage

Mother Liberty and Martha Washington - Catch The Moment

From the Serious to the Sublime:



Visual Money in the 21st Century

Interesting Tidbits on Money: From Google

- **When was paper money first printed in the U.S.?** The U.S. Department of the Treasury first issued paper U.S. currency in 1862 to make up for the shortage of coins and to finance the Civil War. There was a shortage of coins because people had started hoarding them; the uncertainty caused by the war had made the value of items fluctuate drastically. Because coins were made of gold and silver their value didn't change much, so people wanted to hang onto them rather than buy items that might lose their value.
- **What denominations of bills were first printed?** The first paper notes were printed in denominations of 1 cent, 5 cents, 25 cents, and 50 cents.
- **How long does money last?** That depends on the denomination of the note. A $1 bill lasts 18 months; $5 bill, two years; $10 bill, three years; $20 bill, four years; and $50 and

$100 bills, nine years. Bills that get worn out from everyday use are taken out of circulation and replaced.

- **How much does $1 million weigh?** That would depend on the denomination of the bills you use. Since there are 490 notes in a pound, if you used $1 bills it would weigh 2,040.8 pounds, but if you used $100 bills it would weigh only 20.4 pounds.

Women and Money

No book would be complete without a review of the gender impacts of money. Men may have made the money in the past, but it was the women who held the purse strings so. So why have they not received the interest their male counterparts have. There is the famous conversation between the judge and the hedge of the boy's home in Charles Dickens "Oliver Twist" when the judge threatened the Male head of the boy's orphanage for not obeying the law. The man replied that he was simply obeying his wife; when the judge reminded him that what does he fear more, the law or his wife, his response was, "The law does not know my wife."

In short we do not know the power behind the throne. Women have been at the center of many of the major impacts of world events. The Oracles of Delphi, Elizabeth the Great, the wife of Martin Luther, the unnamed women (see Betsy Ross) who entertained the head of the British bastion at Trenton so that when Washington cross the Delaware the town was his. Certainly women have been there are the turning points of monetary history. (The End Of Capitalism (As We Knew It): A Feminist Critique of Political Economy [Paperback] J.K. Gibson-Graham (Author) Joyce W. Warren Publication Year: 2005 The Gender of Money By DIANE CADY

Politics and Money

One can think of a few moments that fundamentally indicate a change in cultural attitude. In the mid-17th century, the last dissertation at the Sorbonne was submitted in Latin (e.g., end of the middle ages) another in the 1900's when Professor of Political economy (Adam Smith's Title) become more often called Professor of Economics (Alfred Marshall 1890). In short, prior to 1900 there was no separation between money and politics; in fact, money was in the service of politics. Adam Smith "The Wealth of Nations" was just that, not the Wealth of Adam Smith. Two hundred years later, Milton Friedman and the Chicago School as well as Frederick Hayek and the Austrian school promoted the "Greed is Good" School of Economics. Between the two the fight still continues.

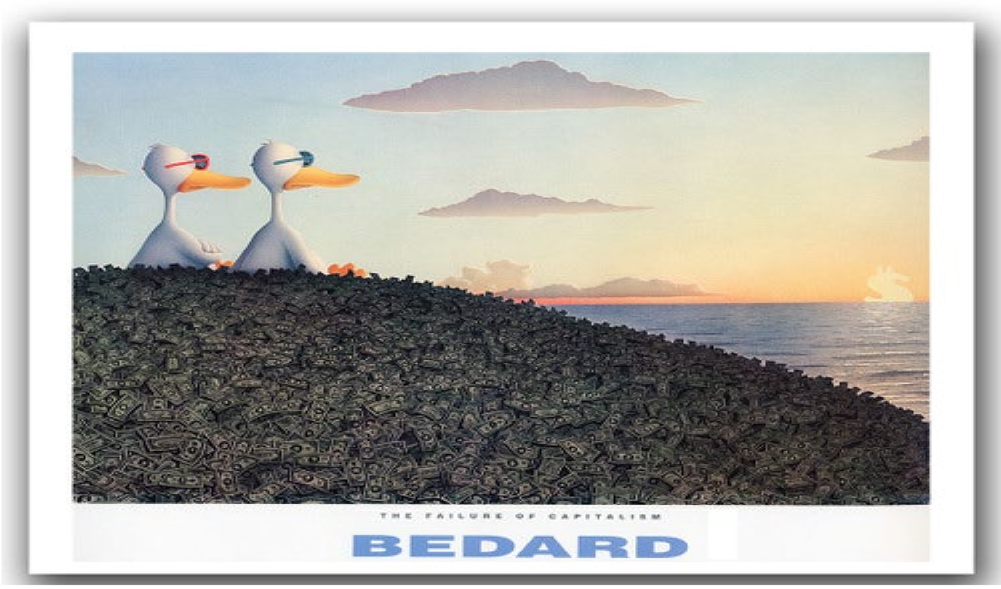
Can money and its influence on economics and personal wealth or achievement be separated from its impact on the political goals? Is economics only about maximizing wealth and then the government about distributing it, or are the two so intertwined that governments would rather distribute before earning it while business would rather earn it and then fight over the distribution. The history of money is in fact centered on just that fight; government order, market order and moral order. If we can just get two out of the three right, we stand a chance.

Things to Remember

Skip the book and go to Youtube search on Monty Python

1) **The Money song**
2) **Merchant Banker**
3) **Prices On Planet Algon**
4) **How to Irritate people – Banks**

In short there is no limit to the number of people who want to make money off of your desire to not so much to know anything about money but your desire somehow to make it. We are not here to make a judgment on that case, but if anything can be shown through time is that we are driven to what interests us. If one does not find something cool about what one does, one often does not do it or at least one may be concerned that one may not be regarded as cool if one does not do cool things. The purpose of this book's final story is to remind you that money is cool; not necessarily in the making of it but knowing about how it is made, who made it and why it was made. Keep Cool "my money hungry friends" and Enjoy The Ride



Enjoy the Ride

Appendix A: External Reviews on Alternative History of Money

From upper left to bottom right: Stephen Colbert, Barack Obama, Ophray Winfry, The Fonz, Jesus Christ, and the Big Lebowski

Appendix B: Other Books on the History of Money (But Who Cares)

If one has the "chutzpah" to write an "Alternative History of Money" one should at the very least spend a little time discussing how it differs from more traditional books on money, its origins, and its place in the progress of mankind. We also provide our own little grading system as to the value of each of these "oft used" alternatives to our alternative.

But note if you are not interested in the rest of the world and only care about the U.S. you can skip all of these and read:

The History of Money by M. Friedman and A. Schwartz.

Buy it put it on your bookshelf, put a light on it, get someone to sign MFs name on it and you are golden.

Others are not as good but no one will notice books.

1. <u>The Origins of Value: The Financial Innovations that Created Modern Capital Markets</u> by William N. Goetzmann and K. Geert Rouwenhorst, 2012.

TS: It may be a book about the origins of value but not the origin of money. If you can tell a book by its cover this is a beautiful book. The insides however as a simple and dry as the cover is exotic. It is kind of a find eight of your best friends (and really smart friends) and have them write something about something they never write or get right about. Short snippets about interesting things. The problem is most of history especially the history of money is about uninteresting things and people so sometimes it is a good idea to have a bunch of smart people write small sections before they get really board. It is the type of book that you read here and there (mostly here because it is a really heavy book and it is there to impress your friends more than yourself). Give it to your son to impress his friends and get a really smart girl.

Other Editorial Reviews of the Origin of Money: Review

"A lively history of finance.... The book is gorgeous. You can see the crimson illumination on the Ligatio pecuniae and read the fine print on a futures contract from the Dutch West India Co. Each chapter is a minihistory written by stars like Niall Ferguson and Robert Shiller, who explain in rich prose the connections between Chinese pawnshops, Greek moneylenders and, ultimately, the cash in your pocket."--Jyoti Thottam, Time Magazine

"Possibly the first book designed expressly for Wall Street coffee tables."--The Economist

"A nice addition to any investor's coffee table. Large and lavishly illustrated, it's a collection of essays by leading scholars on everything from the invention of interest in ancient Samaria to bonds in early America."--Barron's

"A fascinating and insightful guide to the evolution of our modern financial system, set in its broad historical context so that the reader always sees the big picture." --Matthew Bishop, Business Editor, The Economist, and author of Essential Economics

2. The History of Money Paperback by Jack Weatherford, 1998.

TS: I don't care if the book is any good or not, sometimes you have a book on your shelf so you can talk about the author more than the book and to remind yourself that others have a more interesting life than you do so as my father would say, "get out of that chair and get cracking". So Jack Weatherford is a retired professor of anthropology from Macalester College in Minnesota (My home state). He is best known for his 2004 book, *Genghis Khan and the Making of the Modern World*. In 2006, he was awarded the Order of the Polar Star, Mongolia's highest national honor for foreigners. He spends part of his time as s a resident of Ulaanbaatar. Traditional view of the history of money by a very non-traditional man. If one has to start somewhere why not here?

From Library Journal

Anthropologist Weatherford (Savages and Civilization, LJ 12/93) has written an interesting and informative book about money, a subject often treated in a dry-as-dust technical manner. Money, according to Weatherford, has experienced three revolutions: the first, with the invention of metallic coins (gold, silver) 3000 years ago; the second, the development of paper money (now the most prevalent form of money) in Renaissance Italy; and today, on the cusp of the 21st century, the rise of electronic money (the all-purpose electronic cash card), which, he believes, will radically change the international economy. Along the way, Weatherford traces the rise of banking systems and other financial institutions and shows how national governments are playing a dominant role in managing the money supply. There is much peripheral but fascinating material in this anecdotal account. Well recommended for all readers. Review by Harry Frumerman, formerly with Hunter Coll., New York (TS: I have no idea who this guy is).

3. A History of Money: From Ancient Times to the Present Day [Paperback] Glyn Davies, 2002.

TS: Money is always a little of this and a little of that. This book is a little of this and a little of that. Don't expect much and you will get a lot. Expect a lot and you will get a little. But the author is now dead so don't expect a second edition. Even more importantly, you can always make up a story on his stories without fear of contradiction by the author himself.

Other Review:

This is a straight-forward, readable account, written with the minimum of jargon, of the central importance of money in the ordinary business of the life of different peoples throughout the ages from ancient times to the present day. A solid, detailed study bordering on the tedious December 22, 2007
By Olivier Clementin

4. Money: A History by Catherine Eagleton, Jonathan Williams, and Joe Cribb (Sep 14, 2007
5.0 out of 5 stars Panoramic world history of money, lavishly illustrated October 27, 2011

TS: Lavishly illustrated (I am sorry I did not write this). Panoramic, - put it on your table and impress the neighbors. Especially good for those whose visual abilities remain but whose mental processes are limited.

Other Reviews:

By E. Jaksetic

The authors, curators at the British Museum, present a broad review of the history of money that explores the creation, use, and evolution of money from the beginnings of recorded history to the present. While doing so, the authors provide interesting and thoughtful observations about the economic, political, social, religious, and moral aspects of money and its uses around the world throughout history. The book is abundantly illustrated with numerous images of coins and paper money, maps, and artwork that supplement the text very well.

This book is an excellent reference work that is well written and easy to follow. It can be used as a starting point for further research, with an annotated Further Reading section and a guide to money museums around the world. Apart from its utility as a reference work and research resource, the book can be read on its own by any reader interested in taking a look at the history of money. This would be a useful reference book in any community, high school, or college library.
The book was reissued in 2007, on the tenth anniversary of its original publication

5. Debt: The First 5,000 Years Paperback by David Graeber, 2012.

TS: If I could have written any book, I would have written this one. A roller coaster of a read. But let us be honest, no one cares about the first 5000 years (3000 BC (before coins) to 2000 AD (After Dominos).

Other Reviews:

Who cares they are all jealous they did not write this book anyway.

6. The Ascent of Money: A Financial History of the World Paperback by Niall Ferguson, 2012.

TS: Not just about money but about everything else. An attempt to put what he knows into a context of what others may read. A personal view but what writer doesn't do that. Nothing wrong with being liked. Now being right. That is a different matter. I can only wonder however, where he finds the time between radio and television gigs.

Other Reviews:

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From Booklist

British historian Ferguson follows Empire (2003), his provocative take on British history, and his equally provocative take on the American "empire" in Colossus (2004), with a not so much provocative as fresh look at the history of money and its ramifications on how modern life has evolved, since to him "money is the root of most progress." One of his basic premises cannot be argued with: most people in the English-speaking world are woefully ignorant of things financial. To that end, Ferguson, in his desire to educate the general public, presents the history of money within these contexts: the rise of money and the history of credit, and the histories of the bond market, the stock market, insurance, the real-estate market, and international finance. There is an ease to his prose that leaves this complicated subject interesting to and approachable by any general reader. For the history and social-science side of the public library business collection. --Brad Hooper --This text refers to the Hardcover edition.

Appendix C: Global History of Money Conference, Venice, 2014 – La Argent Hotel

April 20
Conference Opening:

Refreshments: Sponsored by Bank of Italy
5:30 PM – The Medici Room

Dinner: Sponsored by The Guttenberg Foundation
7:00 PM

April 21

8:30 AM – General Session
Money: Whose Got It and Whose Going to Get it – Bill 'The Money Man' Clinton

9:30AM – Session I
Byte or Bit Coins – The Sound of Money: Special Musical Presentation by Jay-Z

10:30AM – Session 2
Government, Moral or Market Order: Skype Presentation by B. Madoff

11:30 break: The Isaac Newton Award for Alchemy: Ben Bernanke

12:00AM – Session 3
Gold the Ultimate Solution – James Paulson

1:00 Lunch – Speaker
Currencies – How to Win – George Soros

2:00 PM Session 4
Money in the Future – The Money Psychic (Cramer or other CNBC Representative)

3:00 PM Session 5
MV=PQ and other Market Fallacies – Special Speaker: Mike Lewis

4:00 Breakout Sessions

Room A: Whither the Euro – A Twenty-Four Hour Odyssey – (Post Iliad)
Room B: The Color of Money – Is Money Color Blind?
Room C: Banks: Back to the Future – Where's the Cash?

5:00 PM Closing Remarks – Followed by A Rush to the Door

Appendix D: Aha Entomology

English[edit]

Alternative forms[edit]

- a-ha

Pronunciation[edit]

|

Rhymes: -ɑː

Interjection[edit]

Aha

1. An exclamation of understanding, realization, invention, or recognition.

   ***Aha**! That will work.*

Derived terms[edit]

- Aha moment

Translations[edit]

[show ▼]exclamation of understanding, realization, invention, or recognition

- Chinese:

  Mandarin: 嗯 (zh) (ǹg), 啊 (zh) (à)

- Dutch: Aha (nl)
- Esperanto: Aha
- Finnish: Ahaa (fi)
- French: Aha (fr)
- German: Aha (de)
- Greek: αχά (achá)
- Hungarian: Aha (hu)

See also[edit]

- ah
- ha
- eureka

Anagrams[edit]

- aah

Ewe[edit]

Pronunciation[edit]

- IPA(key): /æhæ/
-

|

Noun[edit]

Aha (*plural* **Ahawo**)

1. alcohol

German[edit]

Pronunciation[edit]

- IPA(key): /ʔaˈha/

Interjection[edit]

Aha

1. Aha

Gothic[edit]

Romanization[edit]

Aha

1. *Romanization of* 𐌰𐌷𐌰

Hawaiian[edit]

Etymology[edit]

From Proto-Nuclear Polynesian **afa*, from Proto-Oceanic **apa*, from Proto-Eastern Malayo-Polynesian **apa*, from Proto-Central-Eastern Malayo-Polynesian **apa*, from Proto-Malayo-Polynesian **apa*.

Pronoun[edit]

Aha

1. what (interrogative pronoun)

Maori[edit]

Etymology[edit]

From Proto-Nuclear Polynesian **afa*, from Proto-Oceanic **apa*, from Proto-Eastern Malayo-Polynesian **apa*, from Proto-Central-Eastern Malayo-Polynesian **apa*, from Proto-Malayo-Polynesian **apa*.

Pronoun[edit]

Aha

1. what (interrogative pronoun)

Old Saxon[edit]

Etymology[edit]

From Proto-Germanic **ahwō* (“waters, river”), from Proto-Indo-European **$h_2ek^weh_2$* (“water”). Akin to Old Frisian *ā*, *ē*, Old English *ēa*, Old High German *Aha*, *awa*, Gothic *𐌰𐍈𐌰* (*ahwa*) "river, waters". Also related to Icelandic *á*, Old Saxon **ōi* "island".

Noun[edit]

Aha *f*

1. water
2. running water, river, stream

Declension[edit]

[show ▼]Declension of *Aha* (strong a-stem)

	Singular	**Plural**
nominative	Aha	Aha
accusative	Aha	Aha
genitive	ahō	Ahanō
dative	ahu	ahum

Polish[edit]

Pronunciation[edit]

- IPA(key): [ʔaˈxa]

Interjection[edit]

Aha

1. Aha

Rapa Nui[edit]

Etymology[edit]

From Proto-Nuclear Polynesian **afa*, from Proto-Oceanic **apa*, from Proto-Eastern Malayo-Polynesian **apa*, from Proto-Central-Eastern Malayo-Polynesian **apa*, from Proto-Malayo-Polynesian **apa*.

Pronoun[edit]

Aha

1. what (interrogative pronoun)
2. which

Tahitian[edit]

Etymology[edit]

From Proto-Nuclear Polynesian **afa*, from Proto-Oceanic **apa*, from Proto-Eastern Malayo-Polynesian **apa*, from Proto-Central-Eastern Malayo-Polynesian **apa*, from Proto-Malayo-Polynesian **apa*.

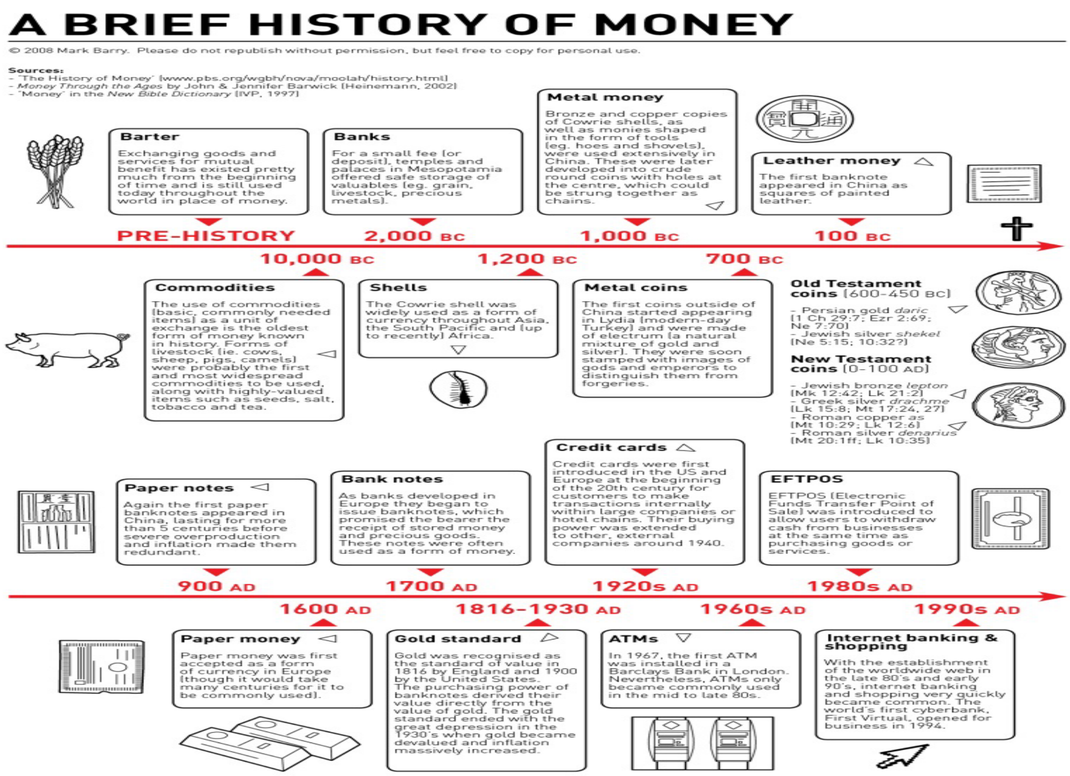
Pronoun[edit]

Aha

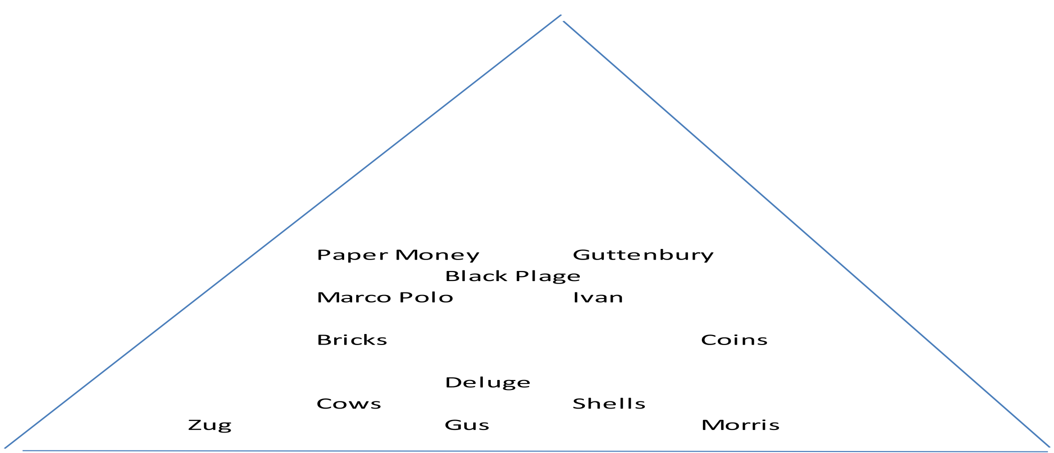
1. what (interrogative pronoun)

Appendix E: The History of Money - Traditional and Alternative

Traditional View



Alternative View Of Money



Appendix F: Who is Who in History of Money (Match Last Names of Decedents and/or Close Associations)

A

b

c

D

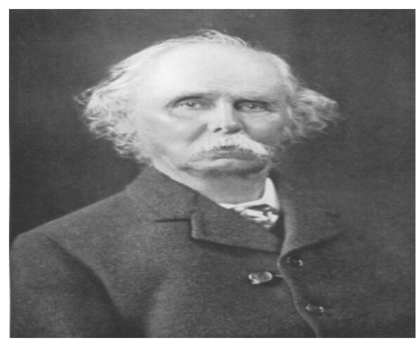
e

f

G

h

i



J

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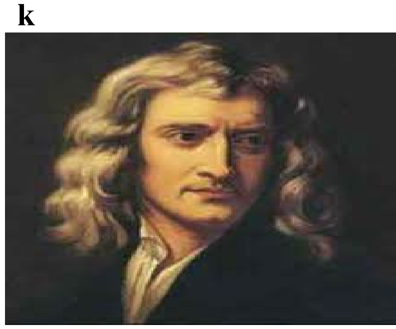

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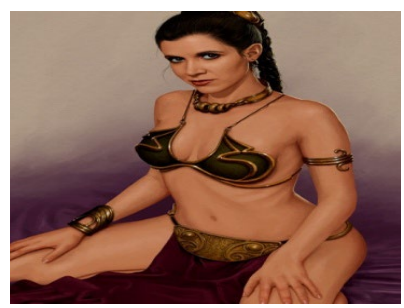


Names:

1) Marshall - Letters:

2) Madonna - Letters:

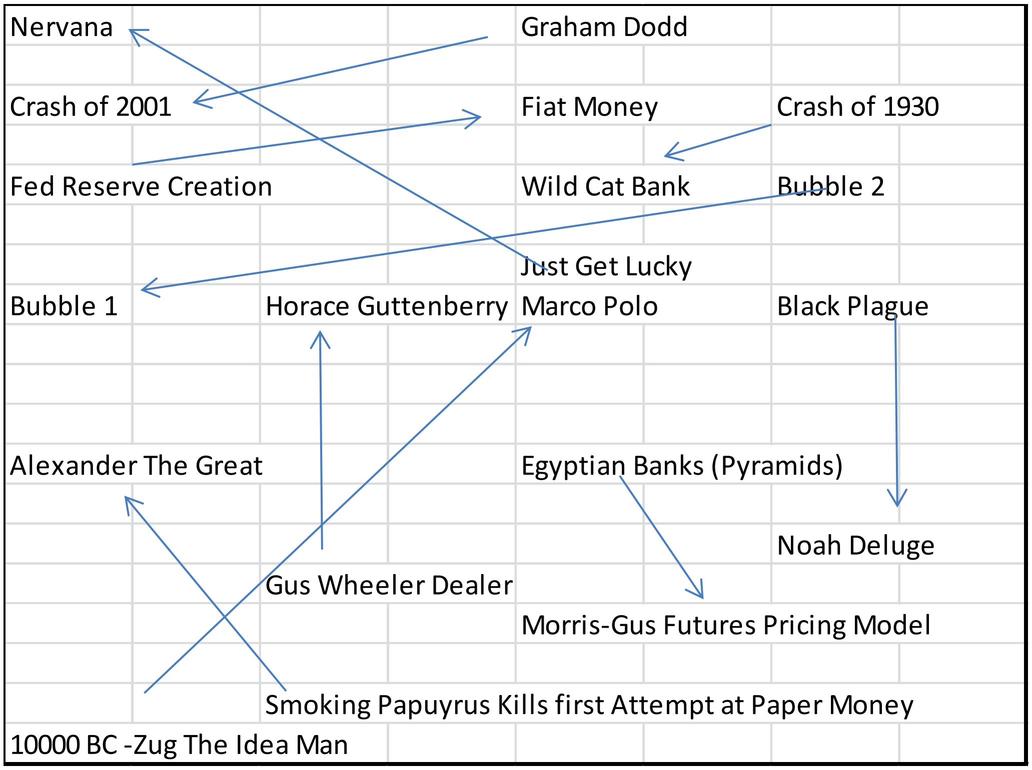
3) Fisher - Letters:

4) Newton - Letters:

5) Polo - Letters:

6) Hayek - Letters:

Appendix G: The Alternative History of Money – The Game



History of Money Chutes and Ladders Game: Requires two dice and an appreciation for the randomness imbedded in any pursuit.

Appendix H: The Exam and Certificate of Completion

Exam: 100 Points

Question 1: In MV=PQ, if M goes up and V stays constant what happens to P for a fixed Q

a) **Nothing since Governments set P**
b) **Depend on How we Define P**
c) **You Eat Less Meat**
d) **It all Depends**
e) **If You Don't Have Any - Who Cares**

What Ever Your Answer Print the Following pages Certificate of Completion (Disclaimer: Just Like your College Degree this is not a Certificate of Knowledge. If you got the guts to print this off regardless if you read any of this you are already on your way to the fundamental point of this book. Individuals act out of necessity or out of perceived necessity. The development of money is simply the outgrowth of that human self-interest in conjunction with the "Aha, I Have An Idea" that is possible at the moment. Whatever happened however, the History of Money is the history of human activity and inspiration. It makes a great story so go out there and make your own (money and history).

Certificate of Completion: Money and Its Place In History

$

Sign your Name Here:____

Attest: Sign Name of Anyone You Want Here: ________________________________

Thomas Schneeweis

Honorary Head of The History of Money 'Wish It Were True Society"

Disclaimer: Content is No Guarantee of Certainty.

It should not be assumed that any of the material referred to herein is past on any knowledge of absolute fact. In fact, we have placed errors within the text just to make sure that you are paying attention and not simply accepting everything that is said as verbatim truth.

Reading this book and making any personal decisions based on it or citing this book in any future arguments as to the importance of money in the course of normal decision making involves a substantial degree of risk. A reader making such assertions could lose friends and certainly make enemies. Any statements made regarding the importance of any of the actions of various individuals named (fact or fictional) in no respect constitute any representation or warranty that such statements were actually made.

The information contained in this book is for entertainment value only and if one is lucky a renewed appreciation for how events are conveyed to us (e.g., The 'Well Known' Washington Lie (e.g., We have no intention of "Fill in the Blank"); that is, They are lying, we know they are lying, and they know that we know that they are lying, so the only real risk to any statement is if one actually tells the truth which is viewed as a lie because that is what we do but in fact inadvertently was the truth.

<u>Glossary</u>

Zug Cowman: Creator of the *'Zug Monetary Theory of Exchange'*

Gus Wheeler-Dealer: One of the first "idea" men but mostly in his dreams. Established first casino and later joined forces with Zug Cowman to create world wide set of tanning and casino's. Also part of the Morris-Wheeler Futures Pricing Model

William Morris (aka: Morris the Chiseler): Part of the Morris-Gus Model of Forward Pricing and creator of the William Morris Agency in 1500. Also restaurant owner who promoted the creation of paper indulgences in the 1500's.

Marco Polo: Early Casino owner in Venice and whose son came up with double entry bookkeeping

Martin Luther: Co-Creator of Paper Indulgences

JR Guttenbury: real name of Johann Guttenbury – Creator of Swedish flatbread and printing machine which lead to increase in the use of Paper Money.

Isaac Newton: Alchemist of the 1700's and by the way promoted a new 'theory of gravity' and everything else.

Alexander Hamilton: Started U.S. Bank before it was shut down before it was started again before it was shut down (shot by Aaron Burr who was a better shot).

George Smith: The first Scotsman who made a lot of money here by setting up his own bank (could there be a better way – make money off of other people's money) and then when back to London to enjoy it.

Ignatius Donnelly: A crazy Minnesotan as if there is any other kind.

William Jennings Byran. Proof that one can be right in one area (increase in money supply can impact prices) and totally wrong in another (world started in 4004 BC).

Mellon: A really rich guy

Glass Steagall: A glass ceiling for banks and then we removed it in Glass Steagall II.

More to Come

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