Chapter XVII

Thus far we have reviewed this tragic period in economic history from the perspective of the fundamentalist, the technician and now we will look at it from the economic side of the street. Each view has its own distinct merits and by and large perhaps the answers lie within the combination of all three. The political explanations are not worthy of exploring since a Democrat or a Republican would just as soon tear the nation apart with outright lies about each other to gain the power of their adversaries. Therefore, whatever the Democrats had to say about the blame for the world depression resting upon the shoulders of Hoover was not void of personal motive and certainly had little resemblance to the true facts.

But up to now, both the technical perspective and that of the fundamentalist has been largely biased toward the domestic aspects of the events. Regardless of what political factions would have us believe, we must broaden our mind's eye to view the world from a more global perspective. This is not the norm in analytical thinking but I believe it will help to settle many issues which otherwise go unanswered.

Economics itself is a social study which is prone to great biases according to philosophical ideas. Economics has often been the manipulative tool of politics as it tends to twist events and logic to suit a particular idealized goal. Politics and economics are two words which have been married from nearly the dawn of civilization, yet at the same time they are so incompatible that they should have been divorced right after their first date. Nonetheless, this conflicting political-economic interrelationship is something which we must understand and come to terms with. It is this very biased conflict in politics which draws conclusions from economics to support an idealized political goal. In reality, the Berlin Wall was erected with political bricks held together by Marxian-Philosophical mortar. The conflicting economic systems of capitalism, socialism and communism are all the children of economic supposition.

Politics has been a parasite living off economics and exhorting what often appears to be logical conclusions. But logic itself can be a deceiving thing. For example, if you asked a man who was 105 years old how long he expected to live, he could reply that it is known fact that very few people die beyond the ripe old age of 100. Granted this statistic is true and to some degree you could claim that the odds of dying before the age of 100 are greater than after 100. But this is where logic is confronted with reality. Unfortunately or fortunately, whatever may be the case, man is not immortal, only immoral. The same trick one may play with these statistics has been the name of the game when political economics comes into play.

One might argue that the economic contraction during the Depression was caused by the reluctance on the part of capital to invest. Therefore, the recovery was hampered by the rich who hoarded their wealth. However, the "but" in this case was the prosperity which preceded the Great Depression. Had capital not been free to struggle for new means of profit, then the innovations such as the automobile would never have been made affordable for the average citizen. Logical one-sided arguments are easy to draw from any such situation. But the standard of living under communism and even under socialism is far lower than under a free capitalistic system. Those who claim that this is propaganda devised by capitalists should take a trip to Berlin and walk through "Check-Point-Charlie." Stories of food lines and seven year waiting lists for cars or reports of having to obtain governmental permission before moving are real, not fiction. I had to see it for myself as well in order to believe what often appeared to be exaggeration. As with anything, the reality of events must eventually come face to face with theory. And this is also true of socialism, communism or capitalism.

There have been many famous economists who have added their two-cents to the kitty since the first book on the subject was written by a Greek chap named Xenophon way back in the middle of the fourth century B.C.

The word economics is Greek in origin, compounded from "oikos" (household) and the complex root, "nem-" (to regulate, administer, organize). Xenophon's book, "Oikonomikos," was the guide for the gentleman landowner beginning with a chapter on the proper use of wealth. Xenophon then leads into a chapter on the virtues and leadership qualities which a landowner must maintain. Some of the other chapters go into the proper training and management of one's slaves and it even dives headfirst into a modern controversial topic, the proper training of a wife. In many respects, Xenophon's book combines the proper management of one's wealth with the moral ethics suited for one's status, something that modern man has forgotten in his quest for wealth.

Xenophon's book was largely copied or at least served as the model for a 1742 publication titled: "Short Introduction to Moral Philosophy" written by Francis Hutcheson, Professor of Philosophy at the University of Glasgow. It was Hutcheson who was the teacher of Adam Smith. It is with Smith that most consider the field of modern economics to have its origin. But in reality, Hutcheson's book follows that of Xenophon nearly chapter by chapter.

Ever since the days of Xenophon, economics has been sorting out who struck John in what has seemed to be an endless battle suitable for a Greek tragedy itself. The arguments over such things as even the validity of interest rates stems back as far as Aristotle who in 322 B.C. considered money as purely a medium of exchange while interest was simply unacceptable. In the middle of the 13th century, Saint Thomas Aquinas dealt with the field of economics in his monumental 20 volume work, "Summa Theologica," in which he believed that interest should only be taken if it was earned, while unearned interest was tantamount to the sin of usury which meant that it was wrong to extract interest from someone who was in desperate financial condition. But more importantly, Thomas tackled an issue which to this very day haunts modern economics.

Saint Thomas Aquinas discussed his concern with the concept of the justice in the distribution of income. He stressed the need for a just wage and just price. Although he saw in the economic system the inequities within the distribution of income, he concluded that despite such inequities, it was immoral to attempt to alter the distribution of income in any way. Indeed, many have argued this very point, including Marx, but from the other side of the coin. Yet to disrupt the inequities within the distribution of income, one must violate the personal freedoms of another. Therefore, by trying to strike at what some may believe is an injustice, they themselves create another injustice - the violation of personal rights and freedom. Saint Thomas Aquinas was canonized in the year 1323.

In 1755, "Essai Sur la Nature du Commerce en General" was published by Richard Contillon, an Irish international banker. Although Cantillon's writings are largely forgotten today, he was nonetheless one of the very first writers to challenge a concept which had dominated the political economy of Europe up until this time. This concept of how things should work was known as the mercantilist's perception of what actually formed a nation's wealth. It was the merchants who argued, from their own biased viewpoint, that a nation's wealth lay solely within the amount of gold or money it possessed. Therefore, it was justified to block imports and bar free trade, thus affording a domestic monopoly so that the nation might avoid a trade deficit which resulted in a drain upon its national wealth - gold.

Cantillon's argument was that money was merely a measure of wealth and that wealth itself was really derived from production. It was with Cantillon that we begin to see the concept of something beyond purely gold or paper money constituting a nation's wealth. Even though Aristotle viewed money as merely a medium of exchange, this simple concept had been lost for a great number of years. Indeed, chronic trade deficits had drained the treasuries of many great empires between the days of Xenophon and those of Cantillon. It was the great Virgil who wrote in 19 B.C., "Accursed thirst for gold! what dost thou not compel mortals to do?"

Although the forums of many ancient societies had long recognized the evils of wealth, they had explored the issues of what was wealth in the glorious days of Athens. But those great thoughts seemed to lay somewhat silent. The stone freizes could not speak of the downfall of Mycenae, of Athens nor of the once great city of Thebes. The 17th through 20th centuries would find economics still regurgitating the same age-old debates striving to define what actually composed a nation's wealth.

Francois Quesnay (1694-1774) was a French economist who was actually a physician to Louis XV in 1752. But in 1758 he published his "Tableau Economique" which made him the father of what became known as the "Physiocrats" of the day. Quesnay's work divides society into three groups: agricultural workers, proprietors, and the "sterile manufacturing sector." The Physiocrats believed that NATURE was the source of all wealth and therefore agricultural workers provided society's means of receiving the surplus, or "produit net" given forth by nature herself.

Quesnay's work set about attempting to show how this "produit net" was distributed among the various classes within society and in reality this was one of the earliest attempts at looking at the inter-workings of the "domestic" economy as a whole. Quesnay's doctrine, therefore, concluded that society should be governed by a natural order inherent in itself. Land and its unmanufactured products, Quesnay preached, were the only true wealth and the precious metals were actually a false standard of wealth. Thus he concluded that the proper source of state revenue should be the direct taxation of land. But he also maintained the right to free trade, person, opinion and property. Thus it becomes understandable why some of the first paper money issues of France were not backed by gold, but by land.

Perhaps you can begin to see why arguing over what even constituted wealth could alter the concept of how society should be managed. Concluding that a nation's wealth was purely the amount of gold it held led to the protectionist philosophy of the merchants who thereby sought to block competition to enhance their own domestic monopolies, of course, in the good name of the country. Concluding that land was the true source of wealth gave rise to the excuse to tax the landowners and also tended to justify war for the sake of acquiring land.

It was at this junction in history when Adam Smith, the "father of modern economics," entered. The thoughts of this Scottish political economist and philosopher changed the course of thinking in a dramatic way. In his classic work, "The Wealth of Nations," published in 1776, Smith advocated a simple system centering around political liberty. Within this bold idea, each man should be free to "pursue his own interest and bring his capital and industry into competition with any other man or group of men." Smith essentially turned his back upon the concept of mercantilism which dominated his day. Smith proposed that the true wealth of a nation resided within its **LABOUR** and not with the amount of gold it held nor was wealth strictly confined to agriculture. "Labour...is the real measure of the exchangeable value of all commodities." Smith recognized that the value of a commodity was not always based strictly upon supply and demand but also it remained dependent upon the amount of labour it to ok to produce it. "The whole produce of labour does not always belong to the laborer. He must in most cases share it with the owner of the stock which employs him."

Adam Smith did lay out a design in which he believed that a nation's capital should be brought to bear first upon developing agriculture, secondly upon manufacture and only thirdly upon foreign commerce. It was Smith who influenced the enlightenment era and truly dissected the economy from taxation right down to supply and demand. His greatest single contribution in my opinion is his concept of the invisible hand. It was here that Smith explained that by each individual pursuing his own desires to improve his personal financial condition, he contributed to the advancement of society as a whole in an orderly fashion incapable of duplication by any law or decree. Each and every one of us in our quest to better our own position helps to advance the economy as a whole. Herein lie the seeds of freedom. It was the innovation of Henry Ford who raised the standard of living for us all today. It was the gamble of Rockefeller that gave birth to the oil industry. It was the dream of Willy Durant that spawned General Motors and it was the faith of Andrew Mellon that created the aluminum industry. Smith was right. Each in his own pursuit may perhaps benefit disproportionately on an individual basis, but collectively society benefits much more from the freedom of the entrepreneur.

Too often most people are jealous of the wealth accumulated by such an individual. But Smith's observations stand. These individuals have given society thousands of jobs and the income derived by the working class as a whole far exceeds the income of the individual. Yet it is the jealousy which causes men to compare things on an individual basis, but the labourer has merely contributed his own production to society whereas the entrepreneur has created thousands of jobs within society. The two cannot be compared on an individual wealth basis without taking into consideration the individual contribution of each toward the expansion and growth of society as a whole.

Although most modern economists credit this theory of the "invisible hand" to Adam Smith, the same observation had been made nearly 2,000 years before. In 336 B.C., Aristotle explained: "That which is common to the greatest number has the least care bestowed upon it. Every one thinks chiefly of his own, hardly at all of the common interest; and only when he is himself concerned as an individual." Epictetus in 138 A.D. also observed this self interest of the individual benefiting society as a whole. "In general Zeus has so created the nature of the rational animal, that he can attain nothing good for himself, unless he contributes some service to the community. So it turns out that to do everything for his own sake is not unsocial."

Adam Smith had in part been influenced by another distinguished Scottish philosopher, David Hume, who had published his work, "Political Discourses," in 1752. David Hume's best contribution was an essay entitled "Of Money." In this bold essay, Hume also attacked the mercantilism of his day and its fears concerning free trade. Hume pointed out that money movements actually responded to a rise or fall in prices, which prevent permanent surpluses or deficits. Hume actually anticipated the quantity theory of money and in plain language, the concept that a rise in the supply of money is followed by a rise in prices or inflation. "It seems a maxim almost self-evident that the price of everything depends on the proportion between commodities and money. In all due respect, if anyone should be given the credit for supply and demand theory as well as theory of inflation, perhaps that distinction truly belongs to David Hume.

The thinking process in economics was further shaped by David Ricardo who published many works but whose most important was the "Principles of Political Economy and Taxation." Among Ricardo's most important theories was that of Comparative Advantage. It was here that one can see that nations would be better off if they specialized in producing goods where they held a comparative advantage instead of blocking trade or subsidizing an uncompetitive domestic industry which merely supports artificially high prices within their own nation. In essence, Ricardo touched upon a very key issue which today is still far from being clearly understood. Many a nation raises trade barriers to protect an uncompetitive domestic industry. Quite often, this urge to protect an industry results in a higher price paid by its own consuming populace. Thus a nation would spend its resources in a better area if it promoted an industry where it held a comparative advantage.

It is most probable that it was actually Ricardo's thoughts upon labour which highly influenced Marx years later. It is not to be understood that the natural price of labour, estimated even in food and necessities, is absolutely fixed and constant. It varies at different times in the same country, and very materially differs in different countries. It essentially depends on the habits and customs of the people. There is little doubt that one might interpret at least in part from Ricardo's words that the value of labour could be changed under this explanation or observation. It may have been this thought itself which sparked the mind of Karl Marx.

In many ways, economics was still trying to define exactly what was the wealth of nation. Was it gold, land, agriculture, manufacture or labour? The distribution of wealth within society also remained violently controversial topic which was merely exploited further by Karl Marx during the mid-1800s.

As the father of communism, Marx was a German philosopher and economist who obtained his doctorate in 1841 from the University of Jena. Karl Marx lived a very nomadic life style wandering around Europe and finally settling down in London in 1849. His Communist Manifesto was written in 1848 with his friend Frederick Engels. Marx's famous "Das Kapital" was published finally in 1867. Much of his later pamphlets and two additional volumes were published between 1885 and 1899 posthumously by Engels. It was through this extensive work that Marx attacked capitalism for the exploitation of the working class. In essence, his view was that the value of labour was the wealth of a nation to a large extent and it was the suppression and exploitation of the working class which led to revolution and the ultimate socialistic state.

Marx viewed the world through a class struggle between the rich and the poor. "You are horrified at our intending to do away with private property. But in your existing society private property is already done away with for nine-tenths of the population; its existence for the few is solely due to its non-existence in the hands of those nine-tenths!" Marx himself said that you could sum up his theory of Communism in one sentence: "Abolish all private property."

In part it was the British system of long leasing property for 100 years in which the ownership merely remained within the hands of a noble family for generations. Thus the pearly white townhouses of Victoria and Kensington never changed hands, merely tenants. Thus property was withheld from the working class who had nothing to leave their heirs whereas the tangible wealth of the noble families passed down from generation to generation.

In part it was also Marx's logical pursuit of value and price which persuaded him toward his communistic theory. "We arrive, therefore, at this conclusion. A commodity has a value, because it is a crystallization of social labour. The greatness of its value, or its relative value, depends upon the greater or less amount of that social substance contained in it; that is to say, on the relative mass of labour necessary for its production. The relative values of commodities are, therefore, determined by the respective quantities or amounts of labour, worked up, realized, fixed in them." (Value, Price and Profit published 1899)

Marx's statement here is logical and in reality his observation is the same as that of Adam Smith: "Labour...is the real measure of the exchangeable value of all commodities." It is true that the majority of the price of a commodity is actually the cost of labour it took to produce it. Seed itself is cheap but it is the cost of the labour of the farmer which by and large determines the minimum value of wheat. Marx, however, allowed himself to get caught up in trying to define what was the real value of something which he saw as labour. But he forgot the human nature side of competition and the importance of ideas and the entrepreneur who plays a large role in Smith's "invisible hand." Without the pursuit of self-interest, new innovations come slowly. Marx's solutions were drastic and motivated by a materialistic jealousy and bias toward interpreting history itself. He viewed that it was the entrepreneur who exploited the labour classes to gain his wealth. He tried to compare the wealth of that individual to an individual labourer. He neglected to see that it was the entrepreneur who created the jobs for labour and that the income derived by everyone he employed vastly exceeded the income of the individual entrepreneur. Marx attempted to disrupt the distribution of income which in itself became an injustice upon social freedom. For it was Cicero who commented in 65 B.C.: "If we all seized the property of our neighbors and grabbed from one another what we could make use of, the bonds of human society would necessarily crumble."

You can see that up until the beginning of the 20th century, economists were still fighting over the very same issues. The antitrust laws enacted within the United States in part struck at this concept of the distribution of income. The graduated income which evolved after World War I was also a child of some of the same thoughts that enraged Marx himself. The Great Depression would only further this notion of fairness within the distribution of income and the blame that would be laid upon the doorstep of the stock market would merely serve as the excuse and the tool to reshape a new political economy in the decades that would follow.

Off the beaten path came the cyclical long-term wave theory which was pioneered by Nicolai Kondratieff, a Russian economist who spent his time in researching price fluctuations within a basket of commodities. It was Kondratieff who identified long-term cyclical waves in price activity ranging from 50 to 60 year periods. These waves he identified were 1780-1840, the Industrial Revolution, and 1840-1890. Although Kondratieff essentially believed that these long waves were something of a rhythmic pattern inherent within the capitalistic system, he also maintained that communism would not eliminate them either. As a result, he was sent off to Siberia in 1930 and never heard from ever again. Not much credence has been given to cycle theory in economics. Yet today we are only beginning to flirt with the notion that perhaps man’s emotions are driven to the rhythmic beat of gravitational forces just as the moon thrashes the oceans from one side to the other like clockwork each day. But this new and strange thinking process of looking at the economy from a rhythmic pattern played a role in influencing a later economist, Joseph Schumpeter.

But it was at this junction in economic evolution when John Maynard Keynes made his entrance into this Greek tragedy of financial intrigue. John Maynard Keynes shocked the world in 1923 and again in 1936. Keynes took the position that government intervention could smooth out these choppy waves of up and down movements within the economy. It would be Keynes who would now shape the destiny of our modern society as his ideas fell upon eager ears in government. For here at last they had someone who in a sense advocated more power and responsibility to the hands of government officials who became the new race of economic demigods of the 20th century.

In later years, economics would be further expanded by the theories emanating from Milton Friedman, John Kenneth Galbraith, Alban Philips, Paul Samuelson and Joseph Schumpeter. Friedman would attack government in some ways advocating a free market economy, and he was perhaps the greatest spokesman for the monetarist theory which asserted that the business cycle was largely dictated by the supply of money and interest rates.

Joseph Schumpeter took a distinctly different approach. He believed that trade cycles and growth were sparked by great waves of innovation. He also argued that the abnormal profit was the just reward for the entrepreneur's innovation which in turn provided new industries and jobs. It was Schumpeter who explained the rhythmic economic waves of Kondratieff in a fundamental sense. As some new innovation was created, it spread throughout the economy allowing greater expansion. Thus the railroad expanded the United States both socially and economically. But lacking a new startling innovation, the prosperity contracts when the economy reaches an overexpanded state. Thus the innovation of the automobile indeed helped to expand the economy during the 1920s but as competition heightened and the market became saturated, it was the auto stocks which first signaled that the trend was over when they peaked during the first quarter of 1929. The secondary industries which had expanded on the coattails of the auto industry continued higher into late summer and collapsed from exhaustion. This would be the essential interpretation based upon Schumpeter's theory of innovation.

We can see that when dealing with a severe depression, economic theory itself had been long divided. Each of these men, including Marx, caught a glimpse of a piece of the puzzle but somehow missed the entire scope of the beast. Each observation was correct. Sweat shops did exist at one point in time, which caused an enraged Marx to advocate total confiscation of private wealth. But that was not the entire problem and confiscation was not the entire answer nor was it the logical human conclusion. The theory of Keynes who advocated government intervention was not the answer either. For politicians argue for months before they can ever agree and then the actions are often too late because they themselves fail to understand the true underlying events.

The economy is a very complex structure. Dissecting it and trying to figure out who was responsible for knocking the painter off his ladder is not easy. Each observation and theory which we have just briefly looked at was formed largely within the context of an assumed isolated domestic economy.

It was Sir Thomas Gresham, the financial advisor to Queen Elizabeth I of England back in 1566-1568, who remains famous for his observation of capital movements. Gresham's Law is short and to the point - Bad money drives out good. This observation was very profound. Whenever a sovereign nation chose to increase its money supply causing inflation, prior to the invention of paper money it had to do so by flooding the money supply with copper or silver coins. Whenever this transpired, the population naturally began to hoard the more scarce form of money - gold. We saw this ourselves during the mid-1960s when silver coins were being replaced with the copper-nickel clad coins. Even though silver had not yet risen in value enough to make smelting the coins profitable, the perception that they would be more valuable than the clad replacements at some point in the future gave rise to their immediate hoarding. Thus, the bad (clad) drove out the good (silver).

However, with the invention of paper money this application of Gresham's Law changed dramatically. During the pre-paper currency system, capital movements were restricted on a domestic basis. Capital did not leave a nation unless it was under siege by an enemy. Instead, capital would rush into gold when it perceived that silver coins were flooding the money supply. But in the paper currency system, capital still flowed into gold as we read during the last days of the Great Depression. Particularly after Roosevelt essentially made it illegal for Americans to own gold in an effort to prevent Gresham's Law from disrupting the economy, the capital flows became much more intensified on an international basis. Even prior to 1934, capital rushed from one currency to another as it perceived danger of default on the part of one nation and then another. This basically created the Monetary Crisis of 1931.

Even though the economy of the 1920s was perhaps not as finely tuned to international events on a split second basis as it is today, news still traveled faster than it had before World War I. Capital flowed freely for the most part until exchange controls were instituted during the Monetary Crisis of 1931 by many European nations to stop the outflow of capital according to Gresham's Law, which now applied to devaluations on an international level as well. But by and large, the economic models and thinking of the day were not advanced enough to understand the full impact of this new age of world communication. When money was merely gold coin, hoarding was the normal action taken during periods of a lack in public confidence. But under a paper system even where notes were supposed to be redeemable into gold upon demand. people quickly learned that such promises were easily broken. Therefore, capital would flow from one currency to another riding the fears of confidence. Gresham's Law had become international law.

All things considered, each of the theories which we have just examined was in its own way correct. Those who argued that gold was the only true form of wealth were not wrong in so far as gold was the medium of exchange and that it was the instrument by which wealth could be transferred from one person to another. Those who argued that a commodity's value lay in the amount of labour involved in its production were also correct. Those who saw land as the true value of wealth were also correct in their own way as were those who argued that a nation's wealth lay in its productive capability or in the size of its labour force. The problem that each theory faced was not unique. Each dealt with only a small piece of the entire puzzle but none of these theories could stand the test of time alone.

You must realize that prior to World War II, the distribution of employment around the world was distinctly different from that of today. This is illustrated by the following table:

DISTRIBUTION OF EMPLOYMENT
1900 & 1980

	US		Britain		Japan	
	1900	1980	1900	1980	1900	1980
Agriculture	41%	3%	13%	2%	70%	10%
Manufacture	20%	20%	33%	27%	12%	36%
Services	17%	44%	36%	48%	18%	54%
Other	22%	33%	18%	23%	---	---

Source: Economic Statistics

We can see by the above table that at the turn of this century, 41% of the civil work force in the United States was employed within the agricultural sector. Today that sector accounts for only 3%. Obviously, during the 17th and 18th centuries, one could easily be led to believe that a nation's wealth resided within its land and agricultural capabilities. We can also understand why the stock market was so closely in tune with the price movements within commodity prices themselves. It is also obvious that a drastic decline in commodity prices impacted the economy as a whole far more during the Great Depression than it would today. It is also obvious why the cyclical waves discovered by Kondratieff based upon a basket of commodities closely followed the ups and downs in economic movement itself.

But things have changed between then and now. Little talk of commodity prices impacting stock movement as a whole is ever discussed. Yet there are those who still try to employ Kondratieff's wave, proclaiming that the end is near and that another great depression will befall us soon. In all these statements we are taking apples and comparing their price movements to that of oil to come up with conclusions that merely meet logical sounding arguments on the surface but lack the definitive knowledge of events and conditions long since past.

Because the nature of the economy has evolved, changing drastically from what it once was at the dawn of this century, it is only right that we should reconsider economic theory in light of these changes and more. The issues of what is wealth have still not been decided. The Monetary Crisis of 1931 found people acting as if gold were their only concept of wealth. Can we in theory dream up something and proclaim that yes it is total production which constitutes a nation's wealth, yet in practical circumstances we find that the masses still adopt the old mercantilist's concept of wealth by immediately hoarding Gresham's good money gold?

Theory must survive the test of reality, not merely the academic philosophical discussions of a Sunday afternoon on cam pus. In reality, a nation's wealth is everything combined. It changes form and evolves with time, ideas, and technology. Labour is merely a commodity. It is not the extent of a nation's wealth. At times the greater the labour force the less it is worth and the more it drains upon the resources of a nation as a whole. For if labour were the wealth of a nation, then China should be among the richest and Saudi Arabia the poorest. The theory that labour composes a nation's wealth does not stand the test of reality.

The true wealth of a nation lies within its ability to bring to bear its efficient capacity to produce. This was born out by Germany which twice rose from poverty into a formidable industrial nation within less than 10 years. It was the attitude of its people that inspired its efficient productive forces. It was not the amount of gold that she held but her human drive to achieve.

But wealth is still something more. It takes the form of many things, but by and large there are three forms of wealth and it is the intermovement between these three elements which must be understood. The major dividing line between the various forms of wealth can be defined as productive and nonproductive. The first is some form of tangible wealth which produces by itself an income. Cultivated land which is harvested is one example of wealth brought to bear on an income producing basis. A piece of real estate which is rented out is in a real sense income producing. An example of non-income producing wealth would be a residential home. It is consuming wealth, not producing wealth even though it may serve a purpose and appreciate over time.

The third form of wealth is the medium of exchange. This is merely a measure of wealth yet one which is very necessary. It allows capital to flow from one form of wealth, real estate, into bonds or stocks. It is the translation dictionary between the various different languages in the financial world.

Great periods of prosperity are always accompanied by speculation. It is speculation in the tangible forms of wealth which we call inflation. At times this inflation may be largely in the price movements of commodities. At other times it was centered within the confines of land speculation as was the case in the Panic of 1837. In the Panic of 1907 it was the speculative fever which focused upon the innovation within the railroads, and during the Roaring 20s this speculation was centered within the U.S. stock market.

In all cases, the tangible forms of wealth, both productive and nonproductive, increase in price rapidly as investors and speculators are driven to accumulate what they can. The medium of exchange buys less and less as time goes on. Those who try to claim that the stock market did well because inflation as measured through commodities was low fail to realize that stocks themselves are merely another tangible asset which went through its own inflationary cycle.

But we must also come to understand that the world was on a paper money system backed by gold. But, many foreign nations fluctuated back and forth between a gold standard and a paper standard. Wealth moved from nation to nation following the same laws of Gresham but now in an international arena. This meant that capital no longer drifted within a single nation but within the entire international economy. It was not merely the domestic speculation in U.S. stocks that drove the Dow Jones Industrials upward by nearly 800% during the 1920s, but the international capital flows that sought a safe port for investment, which was clearly the United States.

The theories that we have looked at were all basically observations which were made under domestic situations. Inflation had been defined as an increase in money supply, which meant that if a nation did exceptionally well in international trade, more gold flowed into its economy. Hume's observations were correct that prices then also rose in response to that increase in the supply of money. This theory was not wrong, but it took on a new meaning during the 1920s. Capital had flowed into the United States but this did not produce inflation in terms of commodities. The reason why is that capital was still in the hands of many foreign citizens who bought U.S. investment but did not affect the consumer goods or services. The inflation, therefore, took place in the equity markets due to the influx of foreign capital.

All these various theories had to be changed and altered to take into consideration a new force of international capital flows. Therefore, a rise in the quantity of money in one nation no longer meant that it was inflationary in the old sense. It now became reflective of a growing international network of investment and at times frightened capital which fled from one nation to another.

The economies of the world flow in a logical and orderly fashion dictated by and large through the whimsical elements of human emotion. Often logic seems to lead down a dark and narrow alley and it can be quite deceiving. But if you follow logic's path religiously, it eventually emerges into a new realm of understanding.

The one thing you must take into consideration is the fact that all these theories which we have reviewed were conceived during a period when the world was on a one currency based system - gold. Today we no longer have that one world currency system and as a result things cannot be compared between then and now so easily. With the emergence of many diverse issues of international paper money, the concepts and theories changed from a domestic isolated economy to a new world economy.

In reality, all these various theories are correct, including those of the mercantilist. The wealth of a nation in all respects is the total combined forces of all productive levels. However, the medium of exchange is very important as well. At times during inflationary periods, land, commodities and stocks all rise in value to the best of different timetables. But when these sectors of capital investment are overextended due to speculative forces, they tend to outpace the growth rate within the medium of exchange. As a result, when a crack in confidence begins as it did in 1929, prices of these tangible forms of capital investment crash rapidly. This takes place because they far exceed in total value the outstanding money supply (medium of exchange). The relationship between the increase in the quantity of the medium of exchange is not in direct proportion to that of the tangible assets which include everything from stocks to real estate. It is a leveraged relationship between the two sectors and, therefore, during contraction the reverse leverage effect can be quite devastating.

It is because there is far less quantity of the medium of exchange available in proportion to the total outstanding stocks, bonds, real estate, collectibles, etc., that the value of these things in total contract at a rapid pace, attempting to once again achieve a sense of balance or equilibrium. Therefore, in all reality, the arguments which we have just gone through as to what constitutes the wealth of a nation are in total a mere exercise in futile thought. This is because in part each theory is correct while not one is totally encompassing the situation alone.

During expansionary periods, capital investment is drawn to industry for profit because this is where the action is, so to speak. Therefore, if one were to look at the economy as a whole at that particular moment, one would be forced to conclude that it was industry that accounted for a nation's wealth. During periods of famine, food becomes the all-important commodity within the economy as a whole and therefore it would be logical that one could conclude that the wealth of a nation at that particular time was indeed the total agricultural ability of a nation. During the oil crisis of the 1970s it was suddenly found that the total productive ability of a nation was undermined by its consumption of oil because the trading partners who produced the oil were not consumers of their manufactured goods in equal proportion. Therefore, oil suddenly became the most powerful form of wealth transfer.

Perhaps you can see that it was not the many varied arguments as to what was wealth itself, but the mere fact that each idea was correct for its time. Indeed the Monetary Crisis of 1931 proved that above all, even the old concept that gold was the only form of true wealth also surfaced as evidenced by the massive worldwide panic and hoarding. All the fancy theories that claim that it was not gold but total productive capability of a nation which encompassed a nation's wealth did not stand the test of reality when the world could care less about stocks and bonds but instead cared about the quantity of gold.

Each concept of what is wealth is in itself correct under certain circumstances. As my mother always tried to tell me as a child, there is a time and place for everything. Those words are also very true about economic thought itself in the realm of everyday reality. Therefore, during periods of contractions, cash, or the medium of exchange as the mercantilists saw it, becomes the most desirable asset to hold. Tangible assets appreciate considerably during inflationary periods and suddenly far exceed in total market value the total available cash within society. It becomes only natural that this equilibrium is suddenly driven in the opposite direction to the point where the two optimistically seek a par level.

Capital and wealth are in many respects guided by laws similar to those of the divine laws of nature. They will flow from one nation to another by an invisible hand which is as powerful as that within nature itself. Capital will flow from one nation to another for many varied reasons. First, it may be affected by taxation in modern times such as today. Second, capital can be driven by fears of a geopolitical nature - war primarily. Third, capital is also driven for economic reasons of stability and security. If the threat of Russia invading Europe becomes a viable potential, then you must realize that capital will flee Europe to the next safe port, which most likely would be the United States. These are some of the reasons for the movement within the stock market during the events which transpired during the 1950s and 1960s.

But there are many other things which also move according to this invisible hand which now transcends all borders. Imagine for a moment that you are nothing more than a pawn within the financial game of chess. But a pawn, who may be of the lowest rank on the board, also holds the power to place a king in check when joined by other pawns when the opposing force is reckless in its strategy.

We are all basically like a pawn. Our labour is nothing more than a commodity which we sell to the highest bidder for the most part while there are perhaps a wise few who endeavor to place enjoyment and fulfillment above monetary value. If I were a grower of wheat and I decide that my labour is somehow more valuable than yours, then the wheat which I cultivate will be more expensive than that which you grow. But the buyer to whom I sell my produce suddenly realizes that perhaps I have priced my produce 50% higher than yours. Eventually, that buyer will wake up and elect to buy from you rather than me.

Within the international economy all things have a tangible value. It may become confusing at times when everyone tends to judge their values in a medium of exchange bearing different names and unit structures, but for the most part wheat is wheat no matter what country you may live in.

In the 1980s we can see how American industry has been besieged by imports. Manufacturers have tried to stay competitive and in the course of events, they have shifted much of their factory work to less costly labour nations. The American worker cannot compete with the worker in China, Korea, Japan, or the Philippines. In this way, manufacture has flowed like water seeking the lowest level of labour costs in a battle to remain competitive.

The international economy in a strange way has also been quite similar to baseball. Each team is at least given the opportunity to come up to bat. Over the centuries, it has been the natural order of virtually every society for its labour ranks to continually increase the price they set upon their toll. In 63 B.C. the famous Senator of Rome, Marcus Tullinus Cicero, stood before the Senate of Rome and said:

"The budget should be balanced, the Treasury should be refilled, public debt should be reduced, the arrogance of officialdom should be tempered and controlled, and the assistance to foreign lands should be curtailed lest Rome become bankrupt!"

These words are almost applicable to the events of today just as they easily might be applied to the events of the Great Depression. Their importance is far-reaching if taken apart and reviewed carefully. Indeed the Roman Empire did crumble from within before the final blows were struck by the encroaching peoples who surrounded it. Rome fell victim to a social struggle in which its population began to feel that its labour was too valuable. Trade deficits mounted as labour in outlying provinces produced goods and services at prices which were far more attractive.

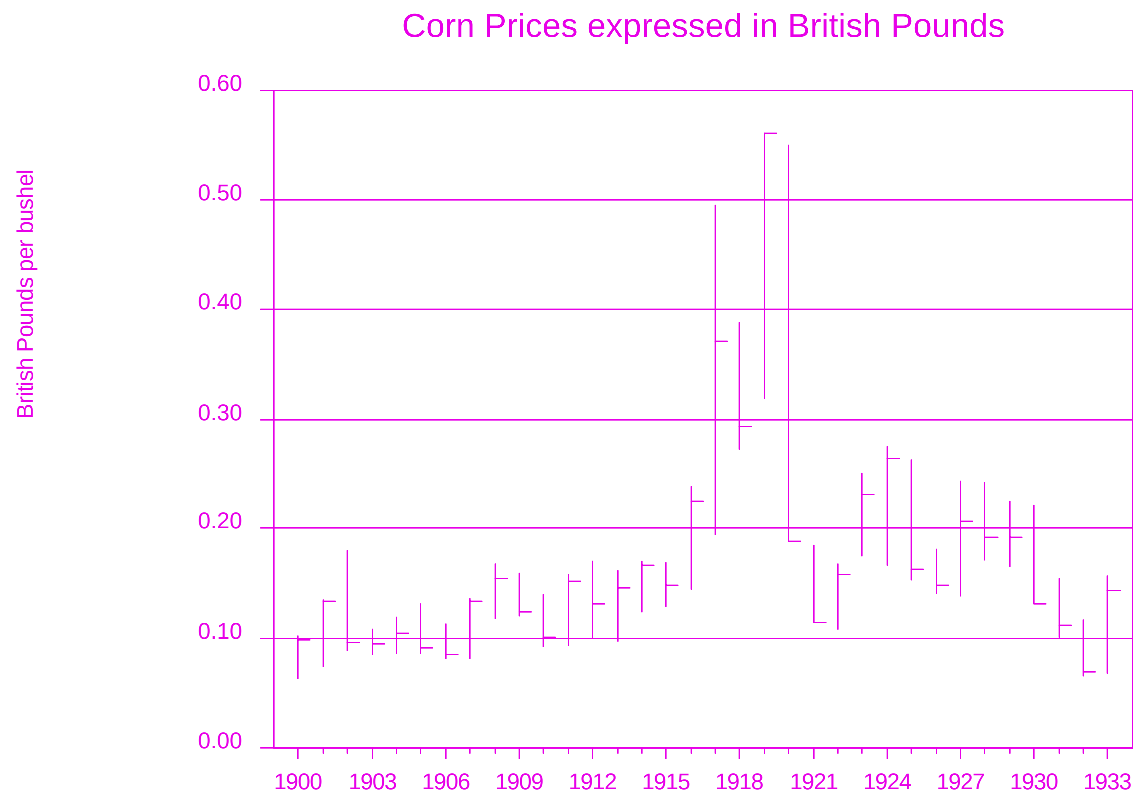
Within every great society since the dawn of civilization, this tendency for labour to rise in price as prosperity befalls its economy has been present without exception. When the United States was in its infancy, it too was the source of cheap labour for Europe. But as Europe lost its competitiveness due to rising wages, America flourished. As prosperity came to the shores of the new world, eventually American labour rose in value and now our unions complain of cheap labour in the Far East.

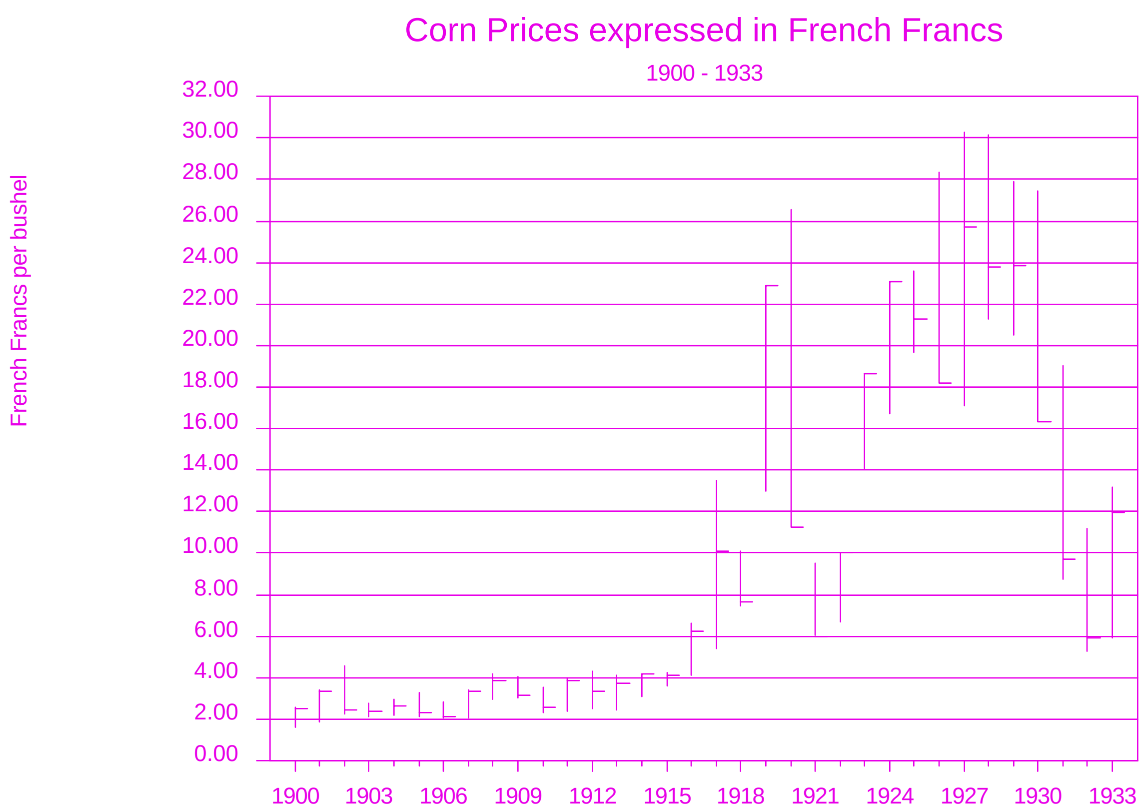
This is merely one of the natural orders in which wealth is transferred from one society to another. Sumptuary laws and great tariff walls cannot prevent this natural gravitation and transfer of wealth. Each society fights hard to hold on to its prosperity, but never has any society been successful in retaining it.

Everything from labour to commodity prices has this certain mystical international value. It is hard to measure such things without creating a complex basket of world currencies in this day and age. Back then, the pivot point was gold and everyone pegged a fixed amount of their currencies against a fixed amount of gold.

For periods of time, imbalances take place. Tariffs can be effective for a short duration of even a few decades, but they have never staved off the problem eternally. Ironically, tariffs attempt to preserve a domestic industry by allowing it to charge more for its produce than what it can be purchased for on the international market. Protectionism, therefore, has been popular among the labour and manufacturing segments of most nations throughout history. In one sense, it holds a kinship with the concepts of the mercantilists of the 17th and 18th centuries. This very issue is but one which has forged many a revolution including that of the United States against Britain. It has taken many various forms such as the King demanding that the American Colonies pay for their goods in gold while the British were allowed to pay the Colonists in overvalued copper.

Yet the U.S. government also instituted the Sherman Anti-Trust Act of 1914 under the guise that a monopoly could set a price for its produce above its true value. Competition was deemed to be healthy and the consumer's right to be able to buy at the cheapest possible price was the objective of this law. Strangely enough, protectionism and anti-trustism are opposing forces bent on exactly opposite goals. The break up of AT&T did not benefit the consumer one bit.


Corn Prices expressed in British Pounds
British Pounds per bushel
0.60
0.50
0.40
0.30
0.20
0.10
0.00
1900
1903
1906
1909
1912
1915
1918
1921
1924
1927
1930
1933


Corn Prices expressed in French Francs
1900 - 1933
French Francs per bushel
32.00
30.00
28.00
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
1900
1903
1906
1909
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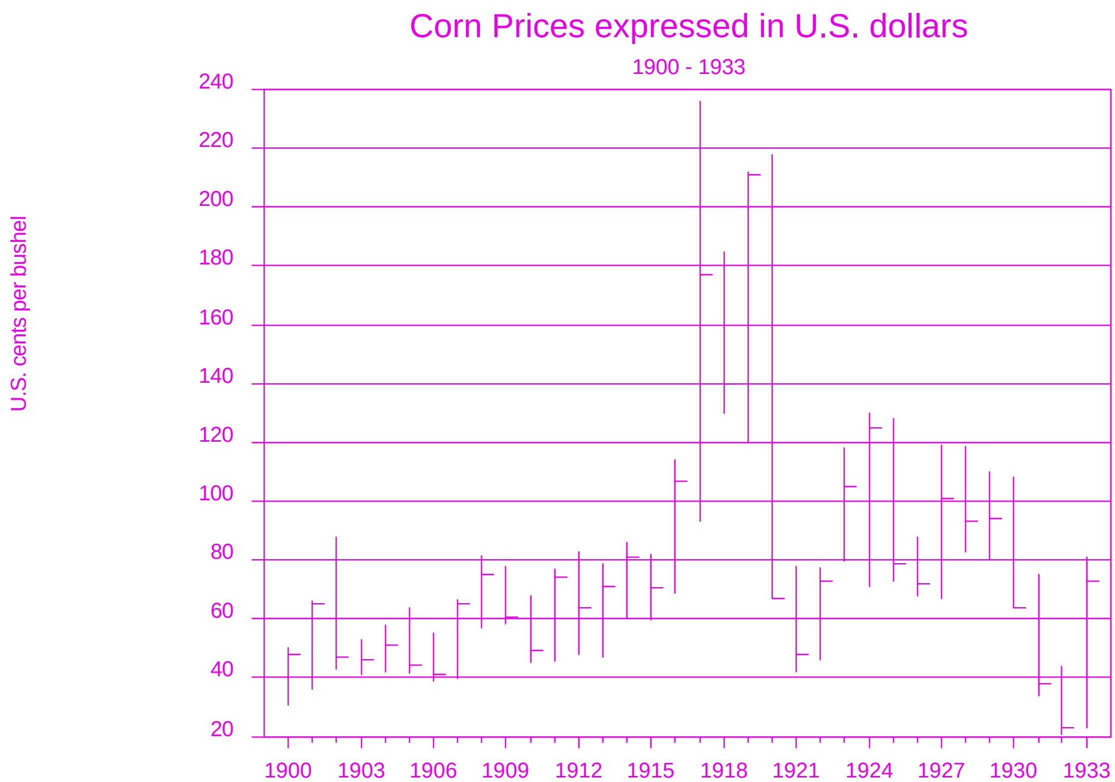
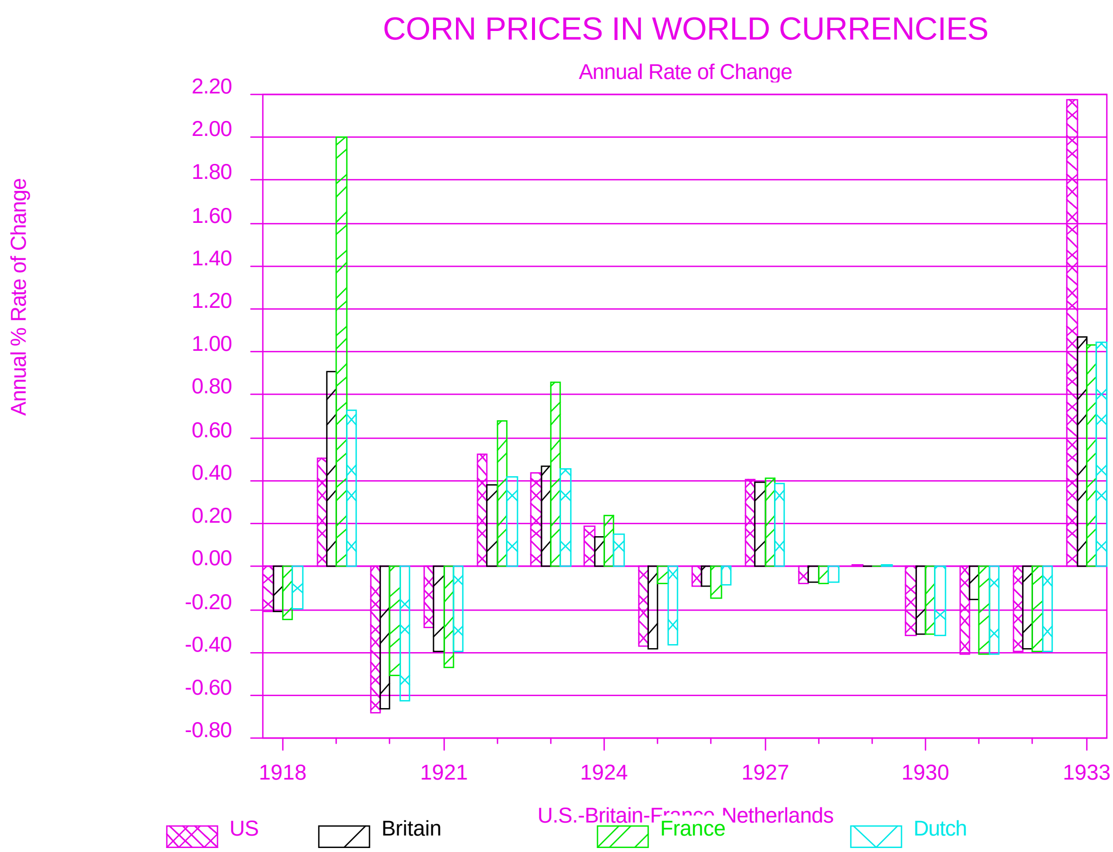
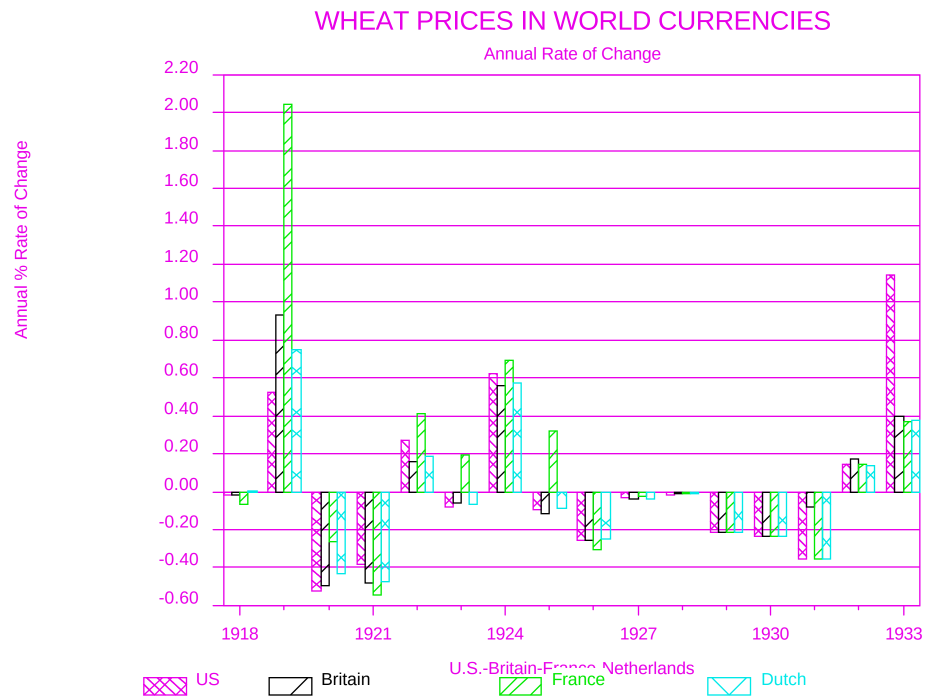
1915
1918
1921
1924
1927
1930
1933


Corn Prices expressed in U.S. dollars
1900 - 1933
U.S. cents per bushel
240
220
200
180
160
140
120
100
80
60
40
20
1900
1903
1906
1909
1912
1915
1918
1921
1924
1927
1930
1933


CORN PRICES IN WORLD CURRENCIES
Annual Rate of Change
Annual % Rate of Change
2.20
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
-0.20
-0.40
-0.60
-0.80
1918
1921
1924
1927
1930
1933
U.S.-Britain-France-Netherlands
US
Britain
France
Dutch

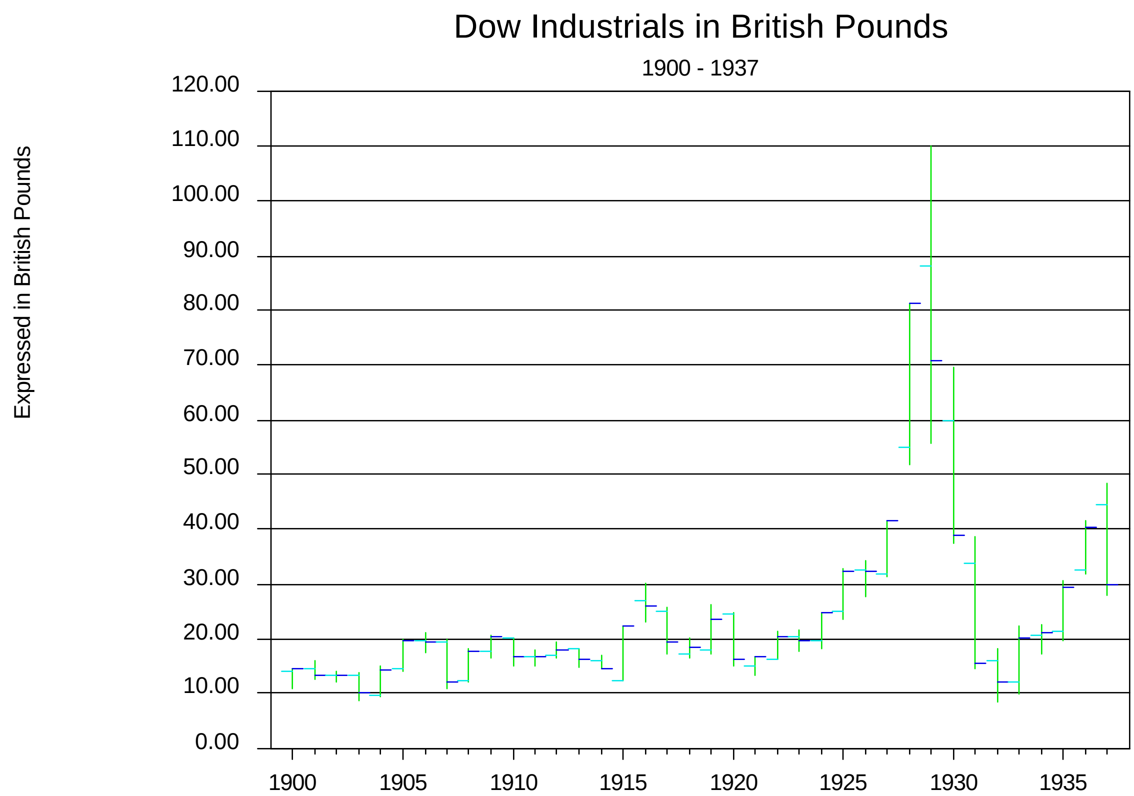


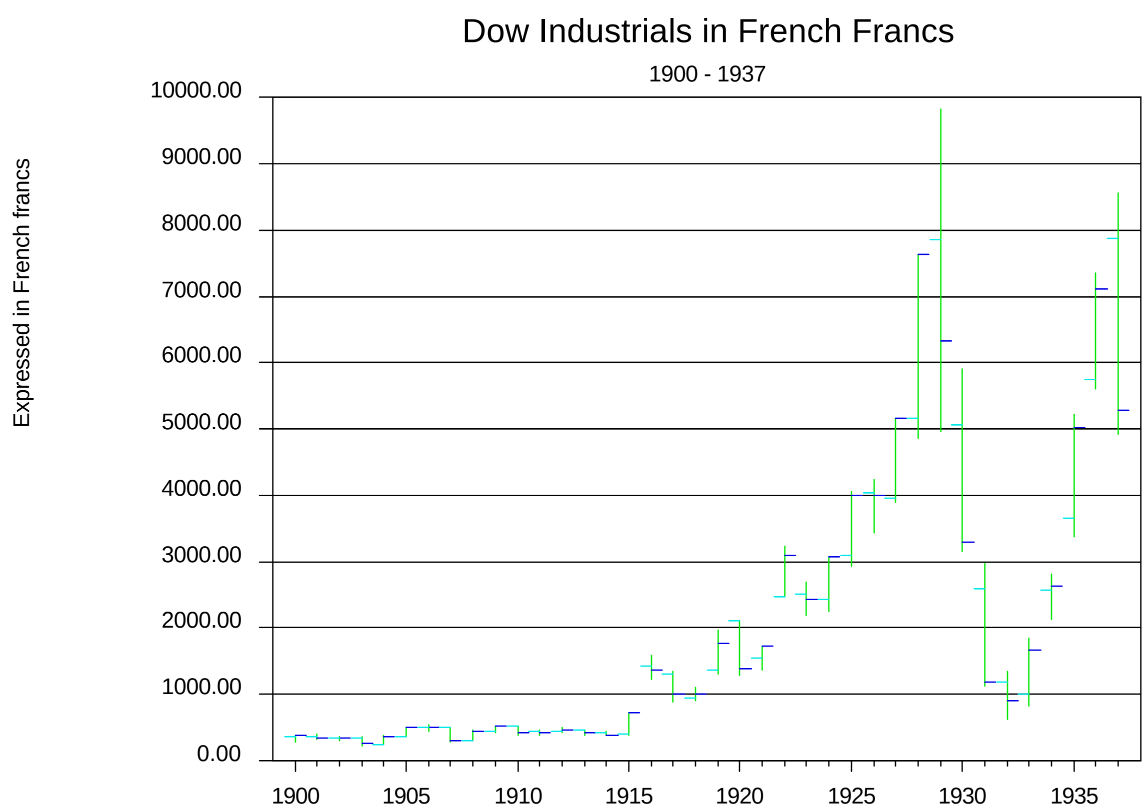
Yet in the original context, that was the objective of the Anti-Trust Act.

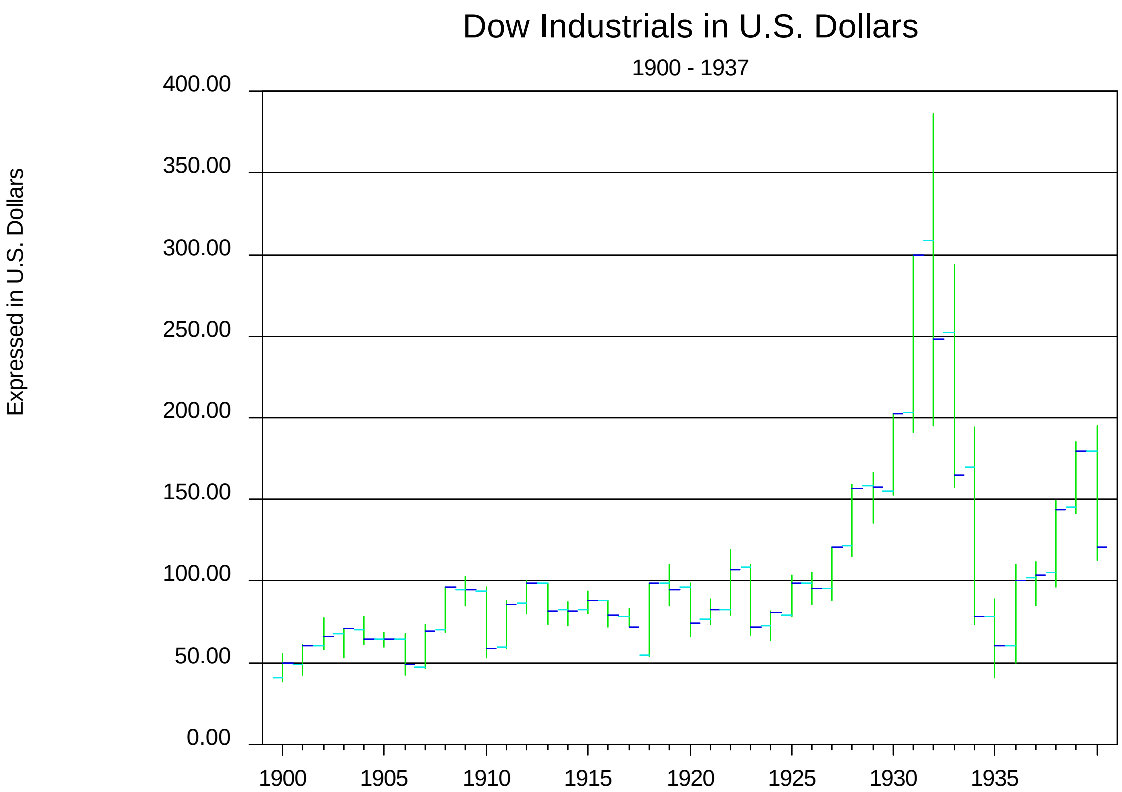
Societies throughout recorded history have battled against this age old problem. Thus far the United States was able to improve its standard of living above those in other lands not through the benefits of protectionism nor through anti-trustism, but instead through expanding technology. As innovation continues, then new concepts and new jobs form. As they form, the value for the labour required is somewhat higher as skills advance. Only through continued innovation can labour hope to improve its standard of living and retain it. If no new technology enters, then raising the cost of labour may raise the standard of living temporarily, but eventually someone else will do the job for less. This is when a society begins to decay.

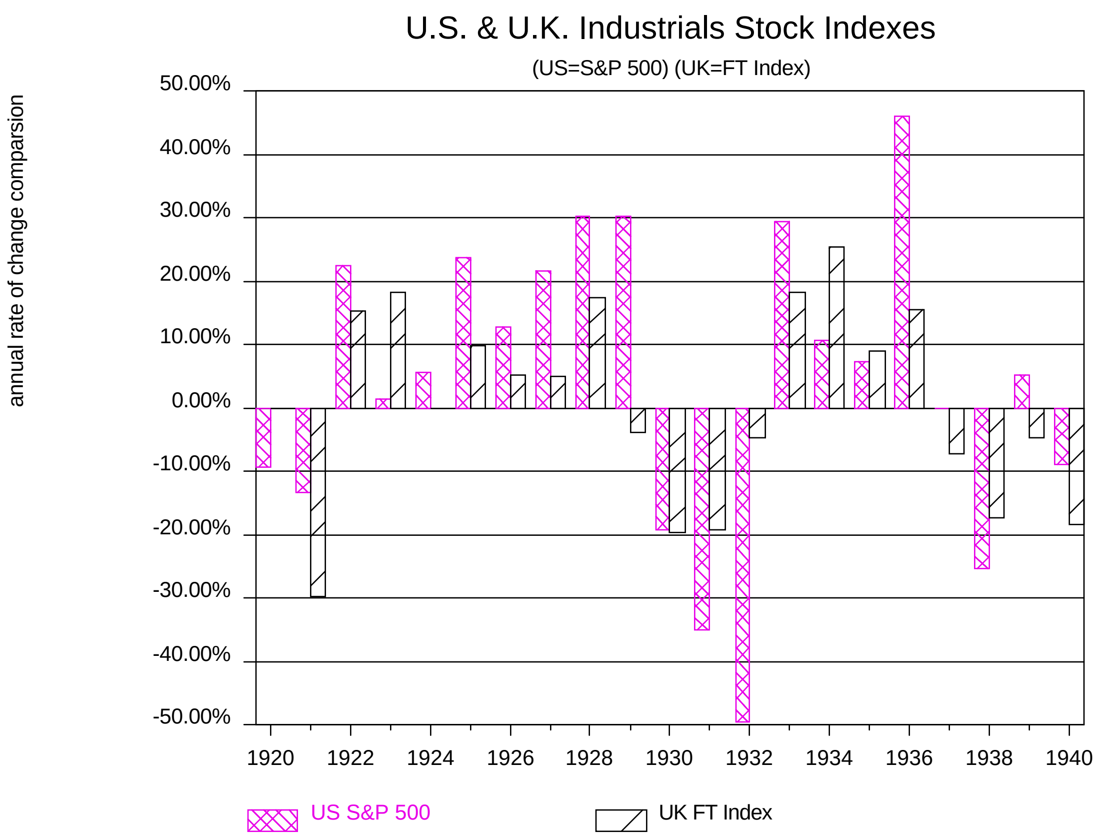
Labour in many respects is similar to a commodity. When the California gold rush came, rooms for rent in 1849 were fetching as high as a $1,000 a month. Gold had become so plentiful that its purchasing power declined drastically. This is what we call inflation. The same is true of labour. The more specialized a job, the more it is worth. Sweeping a street is hardly a skilled task and the job can be filled by a greater quantity of labour and as such it is worth less. When we look at the early 1960s, we will see how real wages outpaced inflation because of expanding technology and a shortage of skilled labour. But in the 1970s, inflation outpaced wages when a shortage in labour was replaced by a shortage in raw materials.

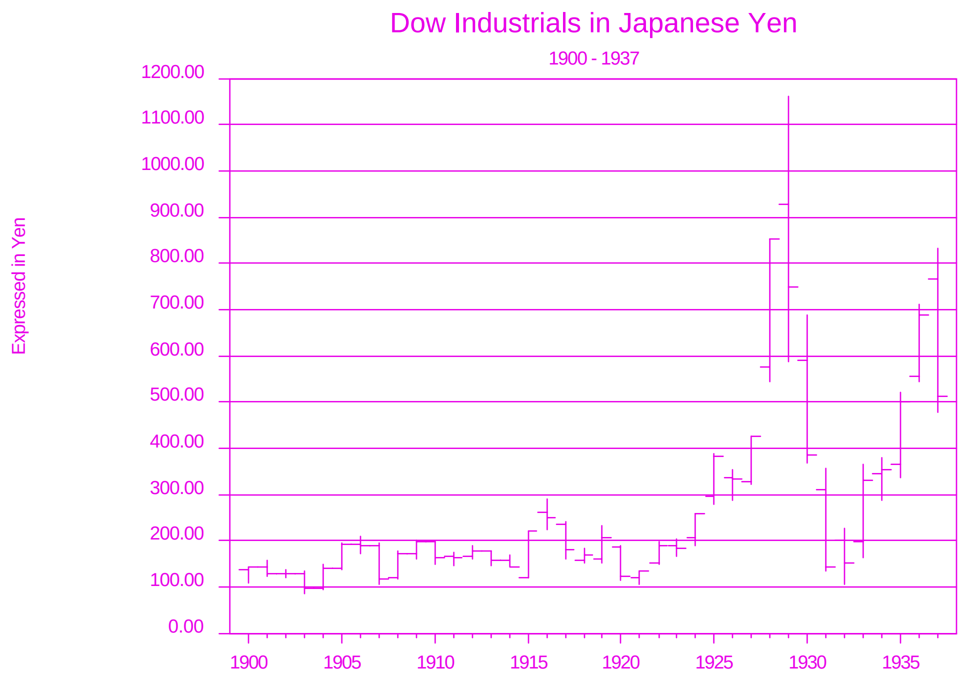
Thus, these natural relationships of supply and demand as Hume explained do work in all aspects of our lives including the price we place upon our own time. The international implications of this are not often understood. They certainly are not popular slogans to preach if you are running for election to the Senate or White House. As a result, politicians give the people what they want through protectionistic legislation, which in the long run will not aid society but in the short run perhaps might stop the immediate bleeding.


Dow Industrials in British Pounds
1900 - 1937
Expressed in British Pounds
120.00
110.00
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
1900
1905
1910
1915
1920
1925
1930
1935


Dow Industrials in French Francs
1900 - 1937
Expressed in French francs
10000.00
9000.00
8000.00
7000.00
6000.00
5000.00
4000.00
3000.00
2000.00
1000.00
0.00
1900
1905
1910
1915
1920
1925
1930
1935


Dow Industrials in U.S. Dollars
1900 - 1937
Expressed in U.S. Dollars
400.00
350.00
300.00
250.00
200.00
150.00
100.00
50.00
0.00
1900
1905
1910
1915
1920
1925
1930
1935


U.S. & U.K. Industrials Stock Indexes
(US=S&P 500) (UK=FT Index)
annual rate of change comparsion
50.00%
40.00%
30.00%
20.00%
10.00%
0.00%
-10.00%
-20.00%
-30.00%
-40.00%
-50.00%
1920
1922
1924
1926
1928
1930
1932
1934
1936
1938
1940
US S&P 500
UK FT Index

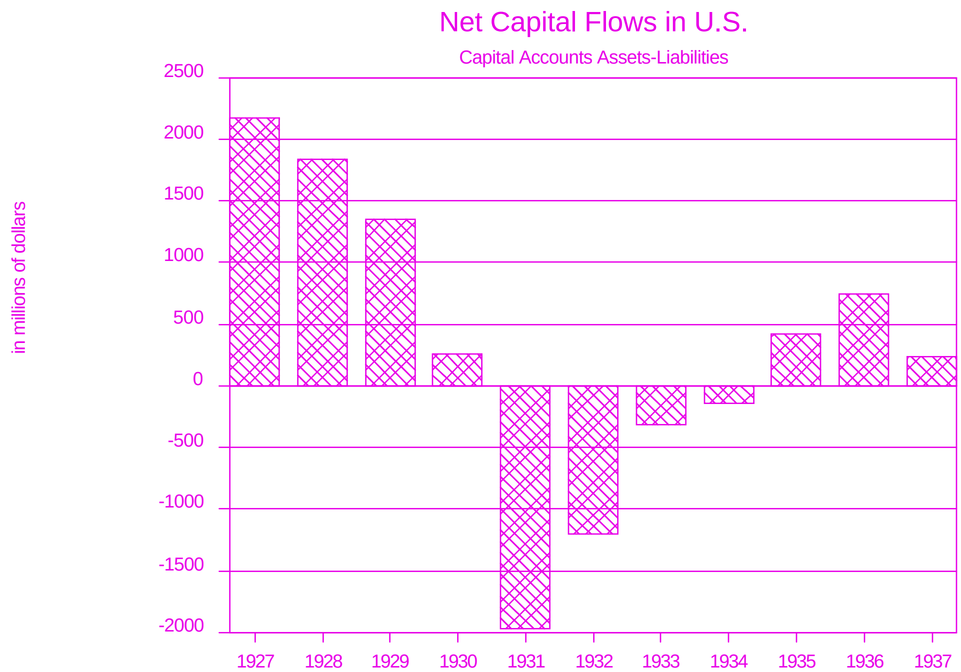


Therefore, despite the fact that labour unions might seek to fix the price of labour or that we might feel that because we are human beings we are above the mere classification of a commodity. It is completely false. We cannot overvalue ourselves any more than OPEC was able to sustain a high price for oil which became far too plentiful. Marx's theory that labour was the source of a nation's true wealth does not withstand the test of reality.

In all due respect, the Roaring 20s and the fabulous bull market were created by several key events. First, by the war which destroyed the productive capability of Europe, leaving the United States as a major source for civilian and military manufactured goods. In addition, the United States was a leading source of agriculture during this period and in simple terms it was as if the U.S. had attained nearly a monopoly upon world trade. This naturally produced a wealth beyond the scope of imagination as gold not merely gravitated toward the U.S. due to trade, but also due to the urge to find a safe port for capital on the part of Europeans.

But in the process of these two emerging forces, American labour became overvalued to a large extent. As the world began to recover, European workers were willing to work for far less. This in turn led to trade wars not merely between Europe and the United States, but within Europe itself. The equilibrium had to once again be restored and the natural effects were merely postponed until the eventful year of 1929.

Thus the Roaring 20s became a period of intense capital flows that followed upon the heels of confidence, which became shaken by both fiscal irresponsibility as well as war. In studying the capital flow accounts within the balance of payments of the United States, it becomes clearly visible how the international capital flows closely paralleled the movements within the equity markets around the world. The closest relationship of the Dow Jones Industrials is with capital flows and foreign exchange



movement more so than anything else, including interest rates.

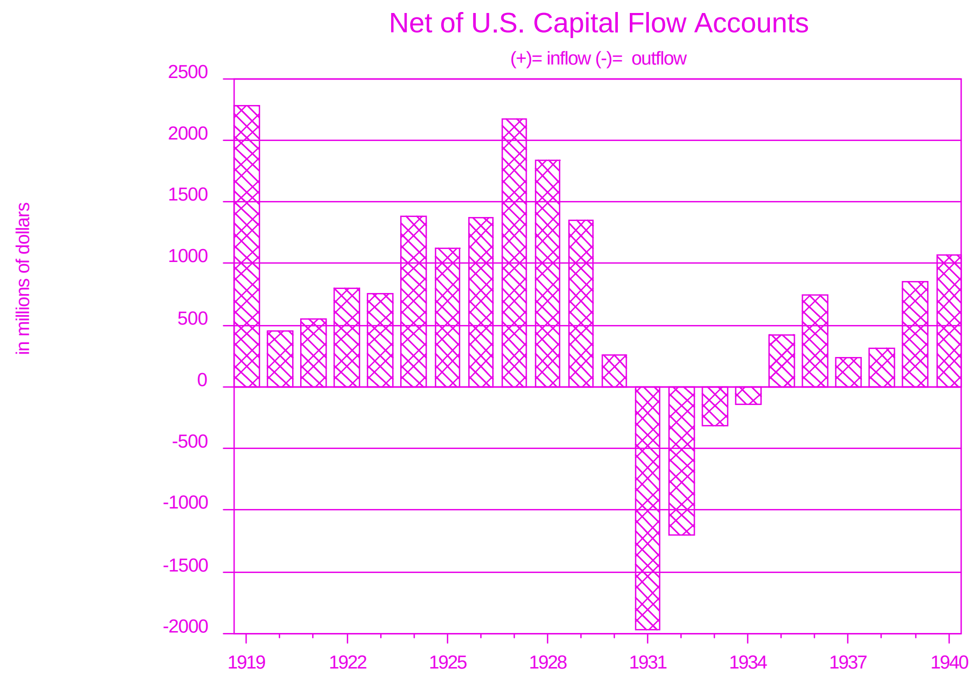
The movement within foreign exchange markets is perhaps the most profound on an international economic basis. To illustrate this statement, I have taken the price of corn and charted its price movements in terms of the British pound, French franc and the U.S. dollar between 1900 and 1933.

Let us look at the chart of corn in terms of U.S. dollars. Here we can see that the actual price high was achieved during 1917. During the speculative rally into 1919, corn did not make a new high although it did achieve the highest yearly closing at that time. Notice also that in 1932 corn had fallen to new lows for this century in terms of U.S. dollars.

Now compare the chart of corn in terms of British pounds. The price high here took place not in 1917 but in 1919. To the British consumer, food was costing more in 1919 than it was in 1917 even though this was not necessarily the case in the United States. Now look at the 1932 low. Corn did **NOT** make a new low intraday during 1932 in terms of pounds. It held above the low of 1900.

Now let us compare these patterns to the third example, which is corn expressed in terms of French francs. Right off the bat we can see that the 1919 high was exceeded and that the peak in corn prices in terms of francs took place in 1927 Not in 1917 nor in 1919. The 1932 low in terms of francs was well above the highs prior to 1915. Although we are looking at the same commodity, the American, British, and the French each saw different patterns when viewed through their own currencies.

Now let us look at corn from an annual rate of change basis using the yearly closing figures in terms of U.S. dollars, British pounds, French francs, and Dutch guilders. We can see that during 1919, corn rose in price the least in terms of dollars whereas



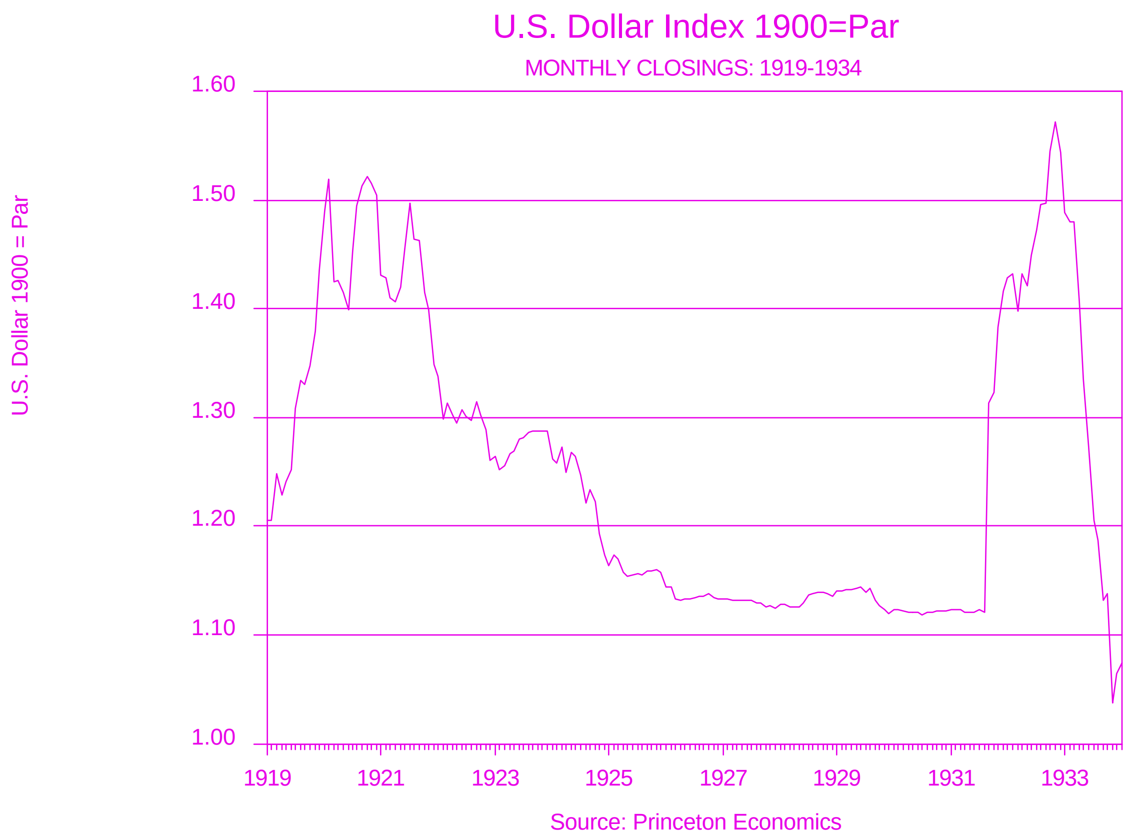
the greatest price rise was in terms of French Francs.

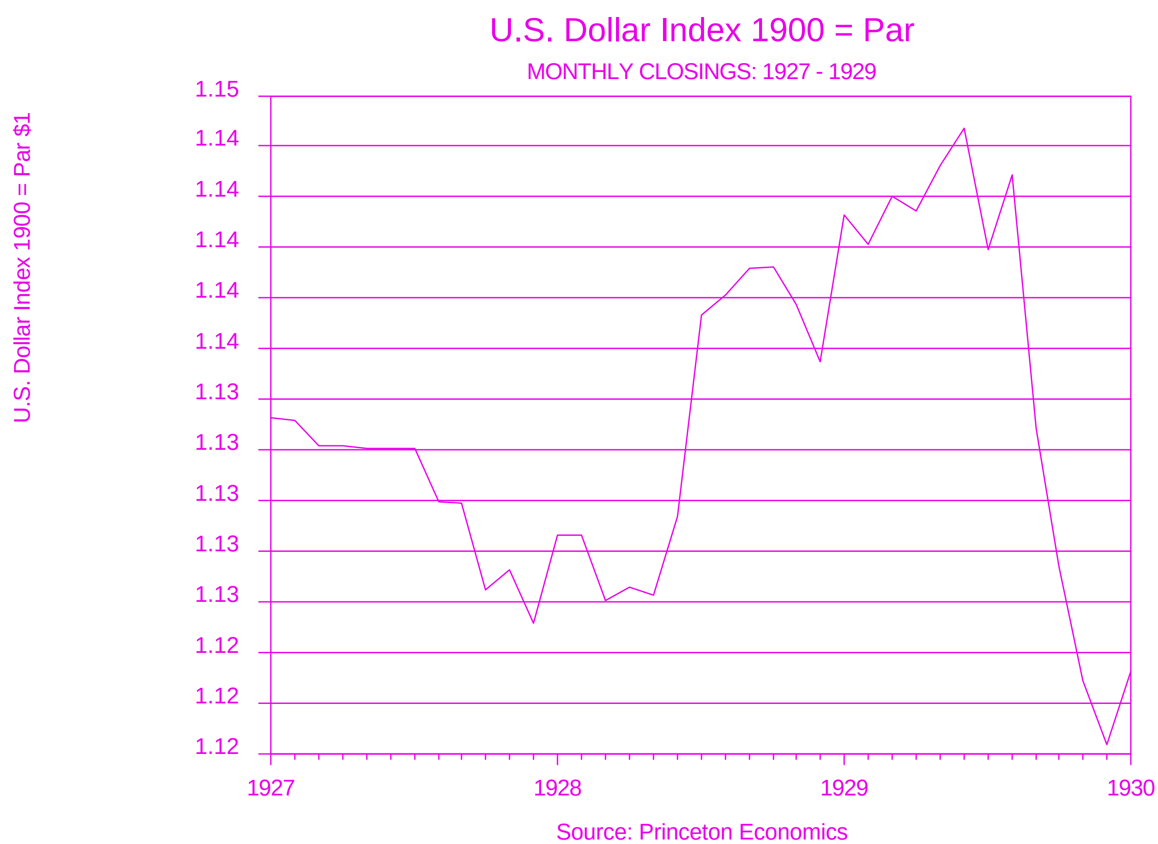
For the most part, corn prices remained more volatile in France than in any other nation. This was not because of corn itself, but because of the swings within the French franc on the foreign exchange markets.

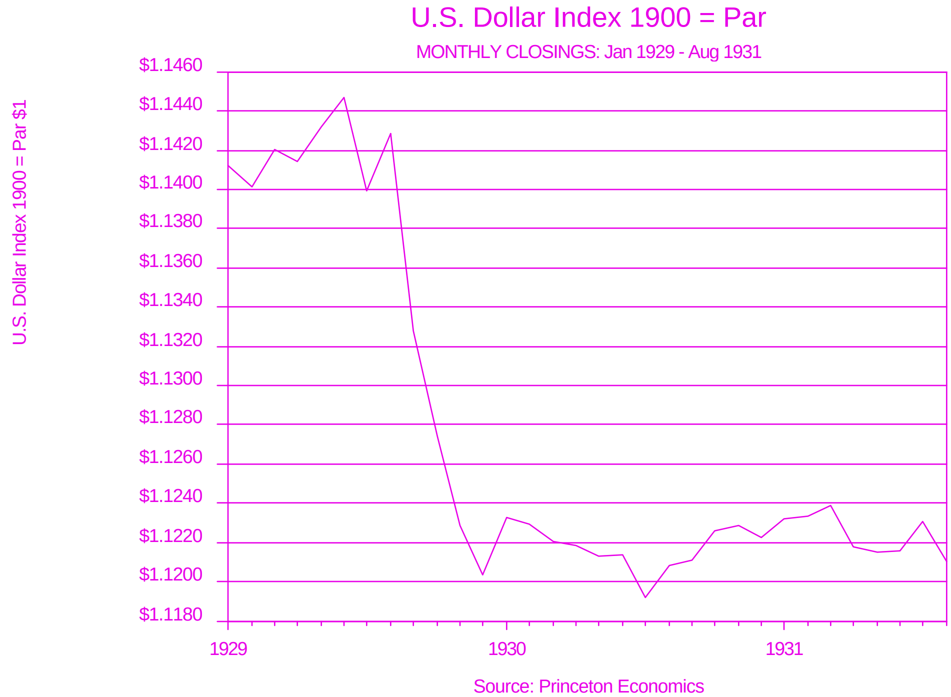
We read for ourselves that the idea of currency inflation under Roosevelt had its goal of creating a rise in the price of commodities in terms of the dollar. If we look at this rate of annual change in corn prices, we will see quite clearly that the highest rate of change in 1933 took place within the price of corn in terms of dollars. Corn rose in terms of dollars nearly 220% whereas in terms of pounds, francs and guilders, corn rose less than half that amount.

Therefore, corn did double in value on an international level while in the eyes of the American it better than tripled by the end of 1933. If one were to ascertain what the true appreciation of a commodity might be, he must not only take into consideration the domestic inflationary pressures, but the depreciation or appreciation of the currency in which he is trying to make his calculations.

Let us now take a look at three charts which have been provided for the Dow Jones Industrials expressed in terms of dollars, pounds, and francs. The chart of the Dow in terms of U.S. dollars illustrates that the high achieved in 1937 virtually bounced off the low which had been established in 1929 at the outset of the famous panic. Now let us compare this same technical point in terms of British pounds and French francs. The Dow in terms of francs illustrates a shocking difference. Here the 1937 high came very close to reaching the 1929 high. This pattern was caused by the drastic decline in the French franc in comparison to the dollar on world foreign exchange markets. Therefore, the French investor in American stocks clearly experienced the wildest swings within his American portfolio.


U.S. Dollar Index 1900=Par
MONTHLY CLOSINGS: 1919-1934
U.S. Dollar 1900 = Par
1.60
1.50
1.40
1.30
1.20
1.10
1.00
1919
1921
1923
1925
1927
1929
1931
1933
Source: Princeton Economics


U.S. Dollar Index 1900 = Par
MONTHLY CLOSINGS: 1927 - 1929
U.S. Dollar Index 1900 = Par $1
1.15
1.14
1.14
1.14
1.14
1.14
1.13
1.13
1.13
1.13
1.13
1.12
1.12
1.12
1927
1928
1929
1930
Source: Princeton Economics

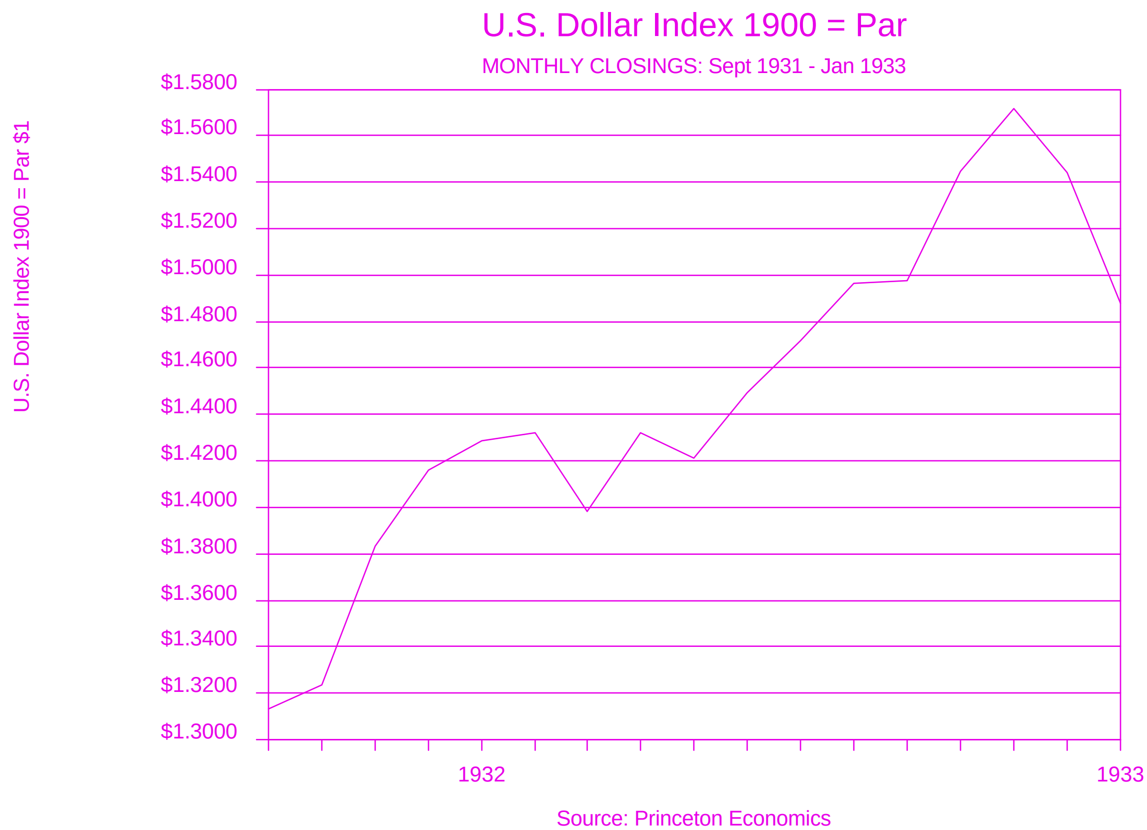


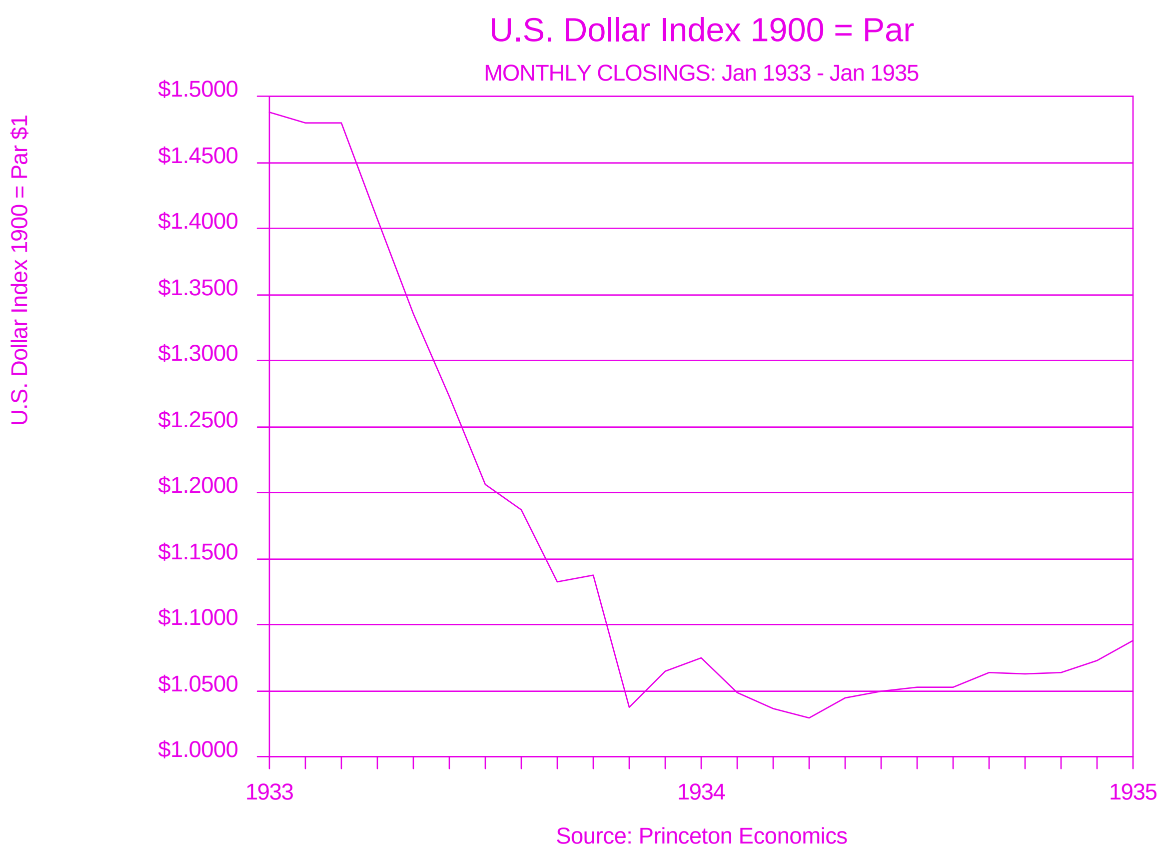
Before we look at the British chart, look again at the French chart and take close note of the pattern which emerged after 1916. Note that while the U.S. stock market collapsed following the peak in 1919 into a major low during 1921, in terms of French francs, the Dow held a fair amount of its gains. The uptrend was clearly intact, affording good reason why French investment looked upon the U.S. market in a very favorable light.

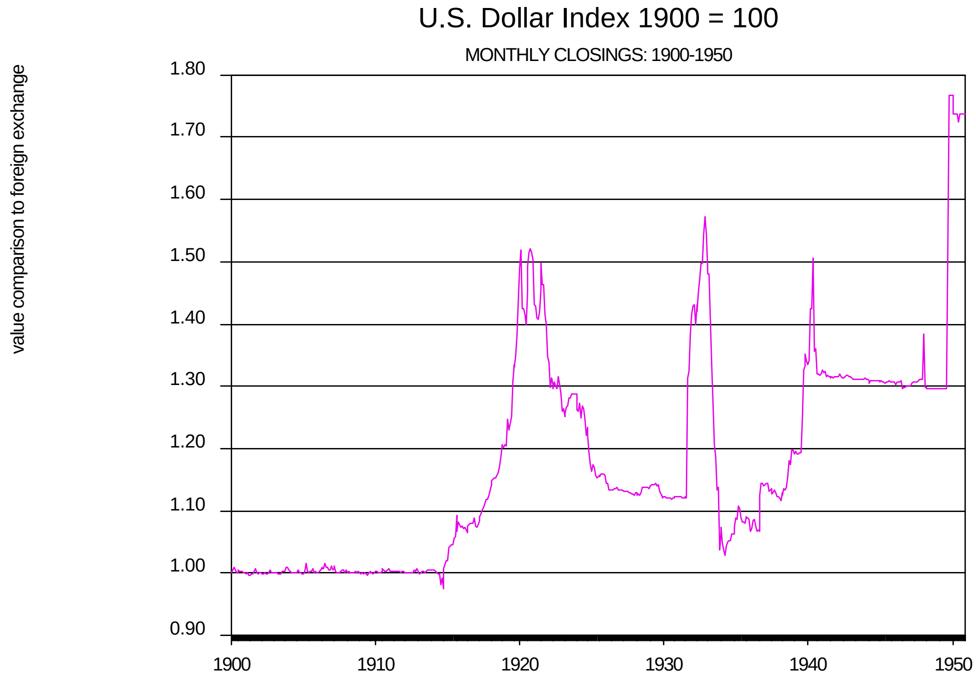
Now let us move on to the Dow expressed in terms of British pounds. Note here that this 1937 high failed to reach the low of 1929. This was caused by the fact that the dollar had actually depreciated against the pound under the inflationary policies of Roosevelt. On an international purchasing power basis, a U.S. investor who sold his stock when the Dow was at 200 in 1929 would have actually been able to purchase more British goods than the investor who sold his stock at 200 points in 1937. On a net tangible basis, the Dow was actually 20% below its same levels of 1929 on a foreign exchange basis when using the British pound as the medium of measure.

Perhaps you can begin to see that foreign exchange plays a very big role in the movement of all markets. We read first hand that for the most part the commentary concerning the U.S. stock market up until 1927 was by and large net bearish. New highs were always questioned largely due to domestic considerations. As a result, the foreign implications which made the U.S. stock market attractive overseas were by and large ignored due to the lack of understanding at the time.

Today we find foreign investment funds boasting of large and impressive returns. But in reality, these returns have again been caused by foreign exchange movement. In Canada, investment funds in Japan have been very popular in 1986. These offshore investment funds have run numerous advertisements headlining 50 to 60 per cent return in a single year. The uninformed investor looks at such returns as an excellent or fantastic investment opportunity.


U.S. Dollar Index 1900 = Par
MONTHLY CLOSINGS: Sept 1931 - Jan 1933
U.S. Dollar Index 1900 = Par $1
$1.5800
$1.5600
$1.5400
$1.5200
$1.5000
$1.4800
$1.4600
$1.4400
$1.4200
$1.4000
$1.3800
$1.3600
$1.3400
$1.3200
$1.3000
1932
1933
Source: Princeton Economics


U.S. Dollar Index 1900 = Par
MONTHLY CLOSINGS: Jan 1933 - Jan 1935
U.S. Dollar Index 1900 = Par $1
$1.5000
$1.4500
$1.4000
$1.3500
$1.3000
$1.2500
$1.2000
$1.1500
$1.1000
$1.0500
$1.0000
1933
1934
1935
Source: Princeton Economics



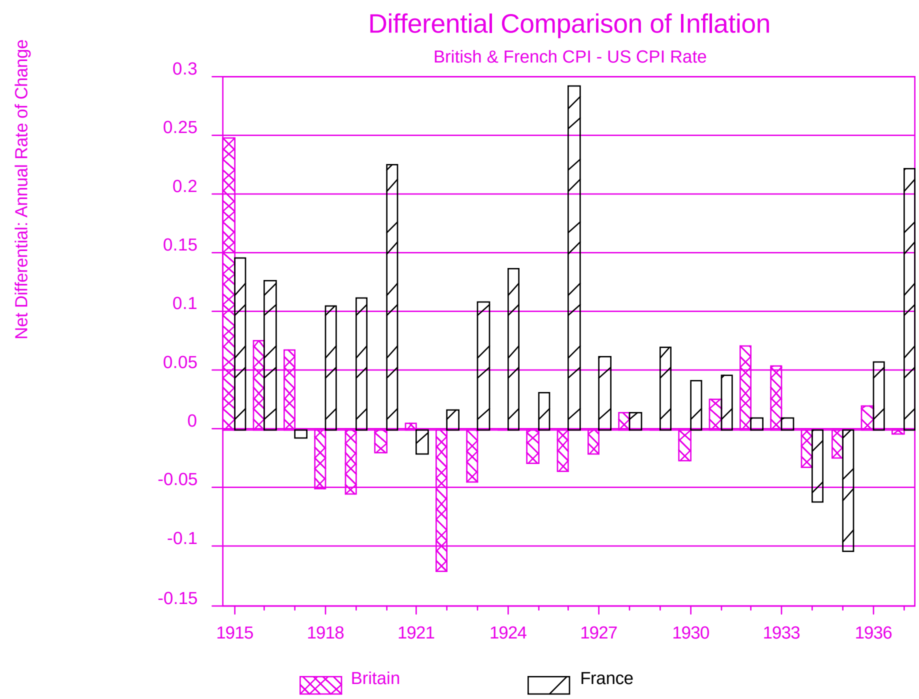
Source: Princeton Economics

However, in reality the Canadian investor did not make a profit because the Japanese investments were better than those in his own country. The Japanese yen advanced 73% between 1985 and the summer of 1986. Therefore, if a stock fund investing in Japan realized a 60% gain, it did not really make a true "net profit" over and above the international purchasing power. In order for the fund to have actually made a true profit, you must subtract the foreign exchange gains of 73%. If no gains were made above the foreign exchange movement, there was no real net profit on an international level.

Nonetheless, the average investor has looked favorably upon foreign investment in 1980 not realizing that in all due respect he has been merely playing the foreign exchange markets and not true foreign investment as long as those gains fell short of the foreign exchange movement. This was also the case during the 1920s but then gains in the U.S. stock market did exceed the foreign exchange gains for the overseas investor. Therefore, the U.S. stock market became an attractive bull market not merely because of the innovation of many new industries, but because the foreign exchange movement yielded an additional plus for the European investor in U.S. markets.

Despite the bearishness which prevailed, we can see that the U.S. stock market remained attractive to foreign investment even though the domestic analysis within the United States did not share in that optimism. If we now look at the U.S. capital accounts, we will find that the actual swings within capital flows between the U.S. and the balance of the world corresponded to the turning points within the Dow Jones Industrials.

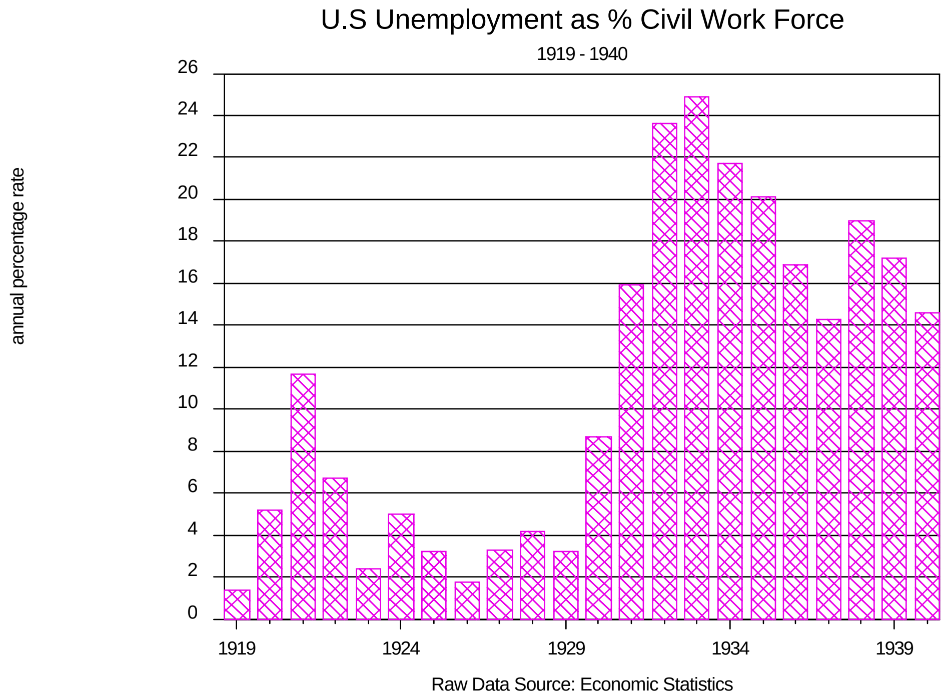
The Net Capital Flows chart covering 1927 to 1937 clearly illustrates several important trends. Note first of all that the central bank intervention came in 1927 at the peak of capital movement into the U.S. economy. From 1927 onward, we find that capital did gradually begin to turn away



from the U.S. but still not significantly until 1930. Foreign buying within the U.S. stock market was at its peak in 1927. However, overall, foreign buyers were active between 1921 and 1927. This activity began to gradually die down and you will recall the commentary in 1929 that it was the foreign selling which initially began to show up in June just prior to the decline from the September 1929 high. The withdrawal of capital continued from 1923 into 1931 but if you refer to the commentary in 1932 once again you will note that it was the foreign buying at the low which provided support in the market. It was not that the foreign buyers had a superior knowledge of when to buy or sell the stock market in the United States. What it really had to do with was their tendency to buy or sell according to foreign exchange considerations. Therefore, it was foreign selling in 1929 which helped to etch the peak in the Dow and foreign buying in 1932 which help to carve the "V" shape bottom.

The second chart illustrating the Net Capital Flows of the U.S. covers the period of 1919 & 1940. Here you will note that the peak in capital flows into the U.S. come in 1919 at the height of the inflationary rally in both commodities as well as stocks. You will note that during the 1921 - 1927 period, not one single year turned toward a negative outflow. Capital investment still drifted steadily toward the U.S. marketplace adding to the confusion of the domestic analytical community as it helped to produce the Greatest Bull Market in History.

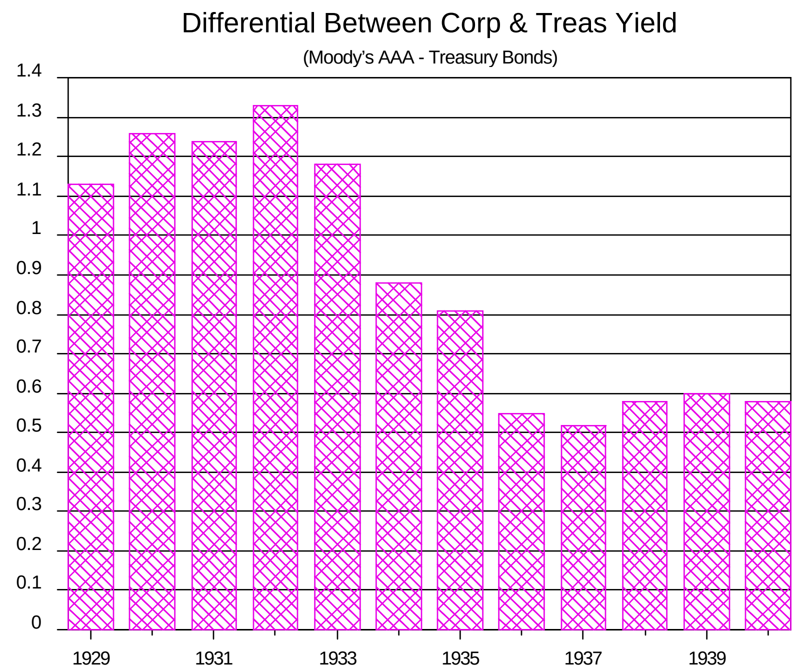
Gresham's Law undoubtedly worked on an international scope far beyond the expectations of the contemporary analysts of the day. The movement of the dollar itself was a key role in the overall trend of the tangible investments within the United States. In trying to obtain a clear perspective of the dollar and its movements during the era, I created what I have called the "U.S. Dollar Index 1900 = Par." In effect, all the various currencies from Europe, South America and the Far East have been gathered together in a basket. The starting point was chosen as 1900 and this point has



been taken to equal $1 or par. This Index does not measure inflation nor any other factors and it is **NOT** weighted according to economic strength. It simply measures the broadest possible basket of currencies and tracks that basket relative to the starting point which is 1900.

Here we can see in the chart provided covering the period of 1919 to 1934, that the volatility within the dollar itself was very drastic. The dollar rose to its first major high during this century in 1920 after the U.S. stock market had peaked the year before. Between 1922 and 1931, the dollar had been manipulated for the most part trying to support the European currencies. This undervaluation of the dollar during this period eventually gave way to reality once it became understood that the U.S. was in fact not going to abandon the gold standard in late 1931. The defaults of foreign government debt issues, including the default of Britain, drove the dollar upward at a pace which far exceeded anything imaginable by today's standards.

There are several other important points which this Dollar Index tends to illustrate. The period of 1927 to 1929 begins with the central bank intervention which attempted to manipulate the dollar downward and ends with a rush into the dollar followed by the stock market panic. Let us now look at a detailed chart of the monthly closings in our Dollar Index for this period. Note the 17% rise in the dollar between December 1927 moving into June 1929. This 17% rise was small in comparison to the drastic swings following World War I and those during the aftermath of the Monetary Crisis of 1931. However, this illustrates that the initial selling which came in at the peak in the stock market from foreign sources early in the summer of '29 corresponded to the peak in the dollar itself which was in June 1929 nearly 3 months prior to the peak in the stock market. We also see that from the June high in the dollar, there was an initial decline into July 1929. That was followed by a small rally into August which in effect was a technical reaction pattern testing the previous high. From there onward, the dol-



lar fell rapidly straight down into December 1929.

Foreign selling in the U.S. stock market during the early summer of 1929 was by and large sparked by the peak in the dollar. This provided the incentive for overseas investors to take profit even though the Dow Jones Industrials continued higher overall.

If we now look at the period from 1929 moving into August 1931 just prior to the British default and the Monetary Crisis of 1931, we can see that the trend in the dollar was fairly steady after the initial panic in 1929. We can see that the lowest point came in July 1930 when the dollar dipped under $1.12. This followed the initial panic low in the Dow which came during June of that year when the Smoot-Hawley Tariff Act was signed. The tariff issue was indeed a stabilizing factor for the dollar itself on foreign exchange markets.

We can also see in the detailed chart covering the September 1931 period on through into December 1932, that the dollar's strength was also an important factor in creating the attraction for overseas investment to return into the U.S. stock market in 1932. The dollar rose out of the Monetary Crisis of 1931 into an initial high established during February 1932. It declined into March, rallied back into April and fell for the last time into May just prior to the low in the stock market. The foreign buying was noted in U.S. equities at the very bottom in the Dow during June of 1932. This buying, coincided with the breakout in the dollar to new highs exceeding the double top pattern established during February and April of that year. The dollar continued to rally into December of 1932 and then began a collapsing pattern as international fears spread over the upcoming inflationary policies of Franklin D. Roosevelt.

Between January 1933 and January 1935, we can see that the trend in the dollar was virtually straight down until it reached bottom during April 1934. This decline was caused by the fears that a devaluation would come about as rumor eventually turned into reality. The devaluation of the dollar in January 1934 through the means of inflating the price of gold from $20.67 to $35, had created nearly a 30% decline in the value of the dollar on world foreign exchange markets.

If we look at the chart of the Dollar Index for the period 1900 to 1950, there is another important point to take note of. The low which was made during the Roosevelt devaluation in 1934 was above the previous lows prior to the peak in 1920. Gold was $20.67 prior to 1920 whereas in 1934 it was $35. Theoretically, the 1934 low should have been under that of even the 1900 par level. Yet it was not! Still the dollar remained well above the major lows prior to the period which illustrated a very important point. The fact that the 1934 low had held above all previous lows during the 20th century indicated that capital world-wide still looked quite favorable upon the U.S. markets despite the short-term considerations. Indeed, the trend in the dollar would continue higher into the decades to come and the long-term confidence for foreign investment in the United States would be a leading factor in creating the modern economic system of today.

Foreign exchange is not the only motivation behind international investment and capital flows among nations. Inflationary trends in one nation compared to another are an important influence as well. Here we have a chart which illustrates the differential between the British and French inflation rates according to their CPI (Consumer Price Index) and that of the United States. The dark bars are Britain and the light are those of France. We can see that up until 1917, the rate of British inflation had remained above that of the U.S. and in 1915 it had been as much as 25% over and above the U.S. domestic inflation rate. The strict deflationary policies taken by Britain killed the pound during the early 1920s as well as their economy. The British were successful in keeping their inflation rate under that of the U.S. until 1928.

But the story in France as in most other European nations was notably different. With the exception of 1917 and 1921, the inflation rate in France had remained above that of the United States. This is also true for most of the Far East and Japan. The simple rate of inflation being greater in other nations was a positive factor in helping to create the bull market of the 1920s in the United States. Capital tends to flow on an international level toward nations where the purchasing power will not erode so rapidly. This tends to be one factor behind not merely market movements, but also influences capital flows and foreign exchange movement as well. The sharply higher rates of inflation in other nations tended to shed a positive light upon U.S. investment during the bull market. It was also the fears of Roosevelt's inflationary policies which carved a peak in the dollar during December 1932 and the low moving into April 1934.

Therefore, David Hume's observations of inflationary trends not merely apply to strict domestic economies but it also plays a major role within the entire international economies. If one nation is experiencing an annual rate of inflation in the area of 100%, then even another nation with a 50% rate of inflation will appear to offer an island of stability by comparison. International capital flows will tend to follow the world inflationary trends as well. This is why when Ronald Reagan was elected to the Presidency of the United States, the "confidence" in the fact that he was serious about ending the inflationary trends in the United States sparked an immediate "anticipation" of such and event and inflation began to subsided right there and then. It was this new level of "confidence" which most misread in the overall trend for the dollar between 1980 and 1985.

It was this anticipation of a trend change with Ronald Reagan in 1981 which altered the events of recent economic history. It was also the anticipation of the change in trend under the Roosevelt administration which sparked the fears of inflation driving the stock market higher along with commodities while the dollar declined. In both cases, the free market forces reacted in "anticipation" prior to any official action being taken. During the Depression, no one anticipated higher prices. They lost their optimism so to speak. This is what not only created the Great Depression from an economic perspective, but also from an emotional perspective as well. Therefore, even though Roosevelt's policies failed to restore a healthy robust economy as evidenced by the 1937 recession, those policies created an anticipation that prices would rise under the guides of devaluation and that they did. Once people believed that prices would rise, speculation returned. Prior to that, speculation had nearly died in so far as no one in 1932 anticipated a change in trend or sharply rising commodity prices.

We can see that the trend in U.S. unemployment began to subside in 1934 from the peak of nearly 25% in 1933. But the inflationary policies of Roosevelt managed to only artificially extract price advances in the marketplace as commodities and equities rose seeking to readjust to their international purchasing power. But the unemployment rate remained high declining to its lowest point in 1937. But that decline left unemployment substantially higher than the previous record high which had been established during 1921. It was not the New Deal which lowered unemployment, but the advent of World War II.

This intangible level of confidence can also be seen in the differential between corporate AAA bond yields and that of the U.S. Treasury. Oddly enough, during robust periods of prosperity where confidence runs high among the private sector, the yield differential between corporate and Treasury yield on long-term bonds narrows. The chart provided here illustrates the net differential between Moody's AAA bond yield and that of Treasury bonds. We can see that the net differential widened during the Depression peaking at above 1.3% in 1932. Note that the differential between corporate and Treasury bond yields declined during the inflationary period bottoming exactly when the stock market itself peaked during 1937. To a large extent, this illustrates that during periods of prosperity and rising market prices, confidence within the private sector rises allowing corporate yields to decline in respect to those of governmental. During periods where confidence in the economy itself declines, corporations are forced to pay higher yields to attract capital away from the perceived safer bonds offered by the Treasury.

But this chart also illustrates another factor in the private versus public confidence game. Note that during the Monetary Crisis of 1931, the differential between corporate and Treasury yields declined once confidence in governmental issues was shaken. Confidence itself is a force which not merely flirts with international considerations, but also with domestic considerations to the point that the private sector tends to compete against the public sector. It is that human element of emotion which tends to judge situations on all levels comparing investment in one nation to that of another as well as between public and private sectors within each nation.

In conclusion, the forces which merged together forging what became not only the Greatest Bull Market In History as well as the Greatest Crash in history, were diverse and invisible to those of the time. There is no doubt that the influences were international and not of domestic origin within the United States nor within any other single nation. They were the combination of many events spurred onward by a distrusting world who was perhaps at peace with the sword but not in the financial arena.

The Crash was not the single-handed result of speculation nor was it delivered by blunders attributed to Hoover. The Crash was not the child of Smoot-Hawley but it was the child of warring financially driven nations. To claim that it could have been prevented by increasing government spending in the United States is as absurd and as impractical as claiming that the bull market was created by shoeshine boys who dabbled in the market toward the end.

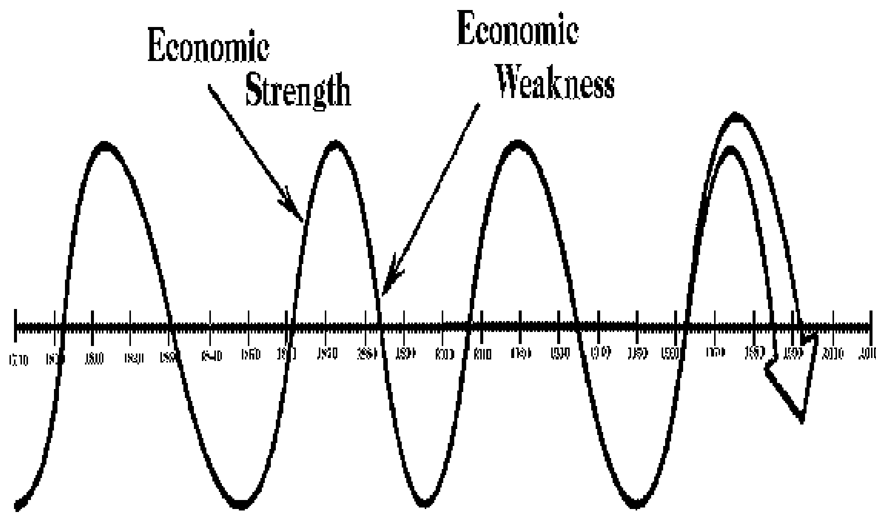
All those who have attempted to blame certain sectors or factions within society have all had their personal biases as fuel for their motives. The press did not make the bull market. As we read for ourselves the majority of commentary had remained bearish even into 1928. As is the case today, when the press finally became impressed and the stock market monopolized the front pages, the end was not far behind.

The Greatest Bull Market in History was created for the most part by war. World War I had torn the very fabric of Europe apart leaving the United States not merely the manufacturer and supplier of food, but also the reservoir for frightened capital. That capital concentration which initially peaked in 1919 within the United States, lined the pockets of American business with the seed capital which began one giant leap forward in economic progress. The birth of the mass produced automobiles and even the airplane brought forth new waves of expansion within the U.S. economy. It was not merely this attraction which lured foreign investment to American shores, but the turmoil which still raged on throughout Europe.

Despite the fact that the war was over, war still was being waged between nations on financial battle grounds. This left an unsettled foundation upon which to build the future. The demands placed upon Germany were unrealistic but this was not recognized until after the Monetary Crisis of 1931.

The Great Depression was an emotional depression sparked by a massive contraction in the value of tangible assets worldwide. The appreciation of dollar denominated assets far exceeded the increase within the money supply itself. When the liquidation began, tangible assets at inflated prices out numbered the money supply by better than 25 to 1. As a result, tangible assets including stocks, bonds and real estate, contracted in price rapidly in an attempt to realign itself with the vastly smaller supply of money. In part, those who sought to blame the Federal Reserve for contracting the money supply and Hoover for not increasing government spending enough, were touching upon this aspect. But this is a double edged sword. If inflation is defined as an increase in the quantity of money versus tangible goods, then one might understand t he fears of the Fed during this period. However, the U.S. tangible assets were inflated in value not because of domestic policies as much as international considerations. Therefore, if it is true that

Nikolai Kondratieff's Wave



the lending ratio as we read earlier was 13 to 1 based upon gold reserves, theoretically the Fed would have had to have increased the money supply 13 times to have stabilized prices at the 1929 levels. You can see that such massive expansion is not only impossible in the space of 1 to 2 years, this understanding of the forces of confidence and leverage were not present.

In reality, the swings within the economy are a constant battle between the forces of public and private confidence. These forces are ongoing and live on as vividly today as they did then during the 1920s as well as within the monetary crisis periods which preceded them during centuries long since forgotten. Whether or not such contractions lie ahead in our future depends greatly upon this balance between the forces of public versus private confidence in combination with the political understanding of the whole. The Great Depression was in reality the break down of the world economy and the leverage obtained through expanded credit turned around into a reverse leverage which came back to haunt society internationally. Whether the over-leveraged debt situation through the alarming outstanding international governmental loans will once again spark a break in world confidence levels seems at least possible in the years ahead. Indeed today manipulation is viewed as a means to an end, but that end may not be any different than in prior scripts.

The blame for the events of the Great Depression does not rest upon the shoulders of one man, nor group of men within society. It does not even rest upon the mantle of any particular sovereign nation. The causes are equally shared among all nations and all political parties. They did not suddenly emerge in 1929 out of the clear blue sky. They festered and grew being multiplied by many and in the end, magnified by all.

Trying to second guess the future is never an easy task. The decisions we often make sometimes grow up and come back to bite us. Getting from point "A" to point "B" may often appear to be a straight line. But when you try to draw that line, there is never a guarantee that the straight edge won't slip. With the passing of time we all tend to grow older. But those changes which take place in our own personal appearance cannot be seen each day when we look at ourselves in the mirror. But pull an old photograph out of the drawer and soon you will see just how much hair has been lost, how much weight gained, or how many wrinkles and bags have gradually formed miraculously before your very eyes.

Such is the case with the long-term effects and trends within society as a whole. Each step we take as a nation or as a group, each decision combines to shape our destiny as in our own lives. Each little decision we personally made in life has fulfilled our own destiny. Who we decided to marry. What courses we took in school. The friends we chose to keep. And the dreams we once used to motivate our goals. It is like standing before a mirror. We cannot see how that particular decision will affect the outcome of our life years ahead. We can only judge it within the context of that very moment. Such was the case during the Great Depression.

Everyone chose to place the blame upon someone else never once trying to understand what was behind the events of the day. Each subtle decision politicians had made to expand world trade through increasing foreign loans to attempting to manipulate foreign exchange, all played a major role in the outcome. No one could step back to view the problems from afar and instead acted rashly with tariffs, embargoes, taxation, political slander and witch hunts which made a mockery of the very dreams which once sparkled in the eyes of a lady who had stood proud and tall in New York harbor.

We pay for our mistakes made rashly or in haste be it within our personal lives or collectively as a society. Circumstances may change and had they been foreseen then perhaps we may have made a different decision. Nonetheless, we all pay dearly for those rash or poor decisions eventually because each and every one of them combines to form our personal destiny. There is never any going back to correct them. Opportunity knocks, but only once and if the door is not opened, the future will be filled with nothing more than a bunch of "what ifs" or "should haves." Once decisions are made, they are made forever!

The future is the product of our personal hopes, dreams, failures, fears and misgivings. Every time we shy away from something which our gut told us we should have done, the price will eventually be paid in the end. We cannot run away from ourselves nor our inner feelings no more than society can run away from the reality of its transgressions.

Collectively, each subtle movement between the markets as they interact with one another is as important to the entire picture of the economic world as those small events in our own personal lives. The combined forces are poised together in harmony which in the end are cast upon the winds of fate.

Society is managed by our politicians who are as human as you or I. They too are not free from their human errors and the decisions which they have made collectively from one administration to the next have indeed combined and molded the world in which we now exist. Their rash decisions for war and power or decisions to raise taxes rather than balance current budgets, have all shaped and molded today's world. It was the over extension of debt in the 1920s which came back to haunt the world during the Monetary Crisis of 1931. Each transgression, each attempted manipulation, all formed a part of the whole. Nothing is too small or insignificant. Nothing exists nor does it take place without some meaning and long-range effect.

Often we seem to think that there is someone in control. Someone who is all powerful in the marketplace deciding whether today shall be an up or down day for us all. But the truth of the matter is that there is no one great demigod in stocks nor in commodities. We are all moved by one another and our lives indeed cross paths. But still nothing takes place in that financial arena nor in our personal lives without shaping and molding our own future.

The events of the Great Depression were tragic. The pain and suffering among those who lived through it goes beyond description. Many who under normal circumstances would have prospered lost everything they had becoming a mere victim in a contracting world obsessed with self preservation.

There have been many analysts in numerous fields. Often they have argued upon one premise or another each based upon a single piece of the entire puzzle. No one has the answers in the palm of his hand because the beast is too large for us to comprehend. There are those who toy with the meaning of life and ponder the alpha and omega never truly understanding much more than what has already been written. The mysteries within the movements of the economy are as profound and as perplexing as life itself because it is not stocks or bonds nor even gold which rises and falls of its own accord. It is the human action and reaction which one charts and attempts to forecast. It is man chasing man in a battle of self preservation in the financial arena of modern survival.

There are rhythms to this perplexing movement even though at times it may seem to have none at all. These rhythms which the markets and the economy possess are endless in their own right and their movements have been tied to everything from the stars and the changes in the tide of the seas to the greed of an entrepreneur. But still nothing has yielded the golden key to their fortune for the secret does not lie in a single resting place. The bonds impact commodities, which in turn impact the bonds. And this is merely the beginning for then the formula grows to include stocks, gold, foreign exchange, real estate, interest rates, foreign trade, taxes, politics, finance, inflation, deflation, recession, boom, prosperity, poverty and war. Then the formula expands even greater for all these things take place within each nation among the world of nations, and in turn each nation then interacts with one another.

The combination of this vast array of variables is beyond the scope of our imagination. Just as a stone cast into the center of a lake sends waves which impact the shoreline on all sides, each movement, no matter how subtle, each decision, no matter how subtle, has a lasting effect upon the destiny of the whole. It is inescapable. This is the answer to why it became possible for the National Debt of the United States to double in less than 5 years during the 1980s while the dollar rose to record highs in 1985 around the world and inflation plummeted until it reached its low in that same year. The text book impossibility became reality because the forces around the world offset our supply demand expectations.

Life itself has its beginning and its end. It is never straight up, for it has its peaks and then there are the deep valleys. Society is merely the combination of many cycles of life itself. No civilization has reached immortality. Man has abused and mismanaged each of his dreams. True freedom and democracy seems to be one of those dreams which has undergone numerous transgressions. Man's jealous nature has always brought the means to a dismal end and the Great Depression was indeed a crisis in democracy. Shifting the blame upon the stock market or the rich did not solve the problems but instead it merely generated others and clouded the true deeper errors made by society as a whole.

No market has ever rallied continually. All booms and fads come to an end. The periods of economic expansion and prosperity are always longer in duration because we as human beings take more time in giving our confidence to someone or some thing. But periods of depression are always swift and to the point with a duration far less than periods of expansion. We may all take our time before we become convinced that gold is really going to rise but we all act quickly out of self preservation when prices begin to tumble. As a result, the economy as a whole has acquired oscillating cycles of boom and bust. For it is man himself which has impressed those actions and reactions upon society as well as the economy as a whole.

Many have recanted the wave theory of Kondratieff while others have laughed in amusement. Does the Kondratieff wave offer a valid road map of the future? Or is it a bunch of wavy lines that add up to nothing? Unfortunately, most people have no idea of what the Kondratieff wave is all about. The wave was discovered by this man after studying the price movements of a basket of commodities. But in 1900 41% of the total U.S. work force was employed in the agricultural sector. In 1950, agriculture accounted for only 11% of the total work force. In 1980, the percentage of agricultural workers had diminished to merely 3%. Obviously, if an economy were 41% dependent upon the mere movement within the commodity prices, the cycles within commodities themselves would closely mirror the economy as a whole.

Those who lack the understanding of all the forces within the economy and how they play a special role within the complete picture have also failed themselves to understand the significance of the cyclical work of Kondratieff. As a result, they have made a rash judgment and then attempted to apply the Kondratieff wave to the stock market, bonds, gold and even the economy. The net result has been dismal failure. Instead of predicting another "Black Tuesday" as in 1869, they have misread the entire overall outlook of what this wave has to offer mankind.

The Kondratieff wave perhaps grew in fame only during the mid-1973s after it accurately portrayed the peak in commodity prices along with the stock market. The wave itself is not indicating an economic crisis as many have tried to read into it. Instead, the Kondratieff wave continues to accurately portray the movement of commodities as a whole for which it was originally based upon. Coincidentally, when an economy during the 1800s was dependent upon commodities for nearly 60% of its employment rate, the economy will follow this cycle accurately. But that relationship is no longer the case today.

The real significance in this wave and its value to us for the future does not lie in its ominous forecast for an economic collapse but for an economic revival. This wave indicates that we are in a bottoming out phase in commodity prices on a whole including oil. The years ahead will not bring disaster in terms of deflation, but instead the other side of the coin will be at hand. The years ahead will begin to show a marked increase in inflation particularly after 1987. Commodities themselves effect price levels overall but when they decline only those directly involved in their production suffer. Users reap the benefit of their lower prices.

The forces of deflation and inflation coexist within the same plane. It is as if they were the elements of heat and cold. When cold becomes severe it too is capable of burning flesh. Although these two forces are opposite, when left to their extremes they both possess the capability of destruction as far as human life is concerned. The forces of deflation and that of inflation may also appear to be opposite trends but when also left to their extremes, they too will destroy an economy.

Therefore, the Kondratieff wave or any other wave need not predict the destruction of an economic order through the sole means of deflation as was the case in the Great Depression. The future may just as easily be faced with an ominous inflationary force. The outcome has been decided by the mistakes of the past.

Just as in our own lives each subtle little decision has merged over time to shape and mold our destiny into what it has become today, the political decisions of many throughout this century have also combined to shape and mold our current situation. It is impossible to unravel such a montage of poor decisions within the economic structure without destroying the very fabric which holds it together. Once the forces have been set in motion, they become impossible to stop.

As we emerge into the years ahead, even stronger events will be seen. The stock market will continue to rise even though inflation itself will rise as well. Hopes for the promise land where interest rates remain forever low will not grace our door steps in the years ahead. All the subtle little mistakes society has made these last few decades will continue to grow bigger adding confusion to the reality of everyday survival. The Kondratieff wave is not warning of a deflationary age which will end in a dismal collapse, but instead it warns of an inflationary age about to dawn. It is calling for the bottoming out of the long- term forces in deflation and the resurgence of inflation.

The rally out of 1932 was one based upon the fears of inflation sparked by Roosevelt. Stocks, said the Wall Street Journal in 1933, were everyone's hedge against inflation.

Perhaps this might sound quite foreign to you in this day and age when we are brainwashed into thinking that stocks only do well with low inflation and low interest rates, but nonetheless it is very true. When inflation takes place, the value of your house rises. So do the assets of corporations as well. We are on the verge of a new era in analysis where the books must be rewritten and understanding broadened. When tomorrow comes, she will bring new relationships between the markets and a new meaning to the word confusion. The thinking process behind the markets which we have reviewed throughout the 1920s will again emerge during the late 1980s. The fears of the Fed and government intervention will give way to the fears of mismanagement and international volatility. Markets around the globe will gyrate with greater frequency and price movement as capital will once again shoot from one nation to another like the loose cannon described by

Herbert Hoover during the Monetary Crisis of 1931.

The public trust or confidence has begun to shift away from the public sector and it will be lured into the private sector as we continue to move into December 1989. Ultimately, the forces of reality will over power the mixed up thinking process of today. The reverse leverage effect by contracting world credit and expanding debt will once again rear its head as it has before.

It has been the sheer confidence which Reagan brought to the office which began the decline in inflation between 1981 and 1985. It was the anticipation of the people who believed that he would turn things around thereby pulling back on their inflationary expectations themselves. In reality, the deficits continued to mount. Not because of defense or any other programs which Reagan instituted. The cancer within is the interest on carrying the National Debt.

If spending were balanced between the various programs and income, with a National Debt approaching $2 trillion, it will double again in 8 years at an annual rate of 8% in interest expense. Spending, therefore, must be cut not merely moderately, but drastically to avoid this ominous situation. But to do that, all the special interests will cry foul. Everyone wants to cut the programs which provide direct employment such as defense while boosting the social benefits which create far less direct employment. If that continues, then the private sector must expand to accommodate the increased unemployment caused by a curtailment in such direct employment expenditures.

It becomes a nasty cycle which continues to move with a subtle momentum all of its own. There is no stopping this cycle unless everyone realizes that it must come to an end. Otherwise, until the worst makes itself known, you will find few who are willing to take the drastic steps necessary to ward off the impending outcome of another reverse leverage situation in world credit and debt.

The best and most accurate forecast which I can offer for the next 4 year period is quite simple. There will be no 1929 style deflation on the horizon before 1990. The next four years will be a period of extreme volatility of unprecedented proportions. The logic of our text books will give way as it has many times in the past. The very fiber of the marketplace will be torn and taxed to its maximum potential. The swings both up and down will become greater with each passing year. 100 point moves in the Dow will become real daily events. The dollar may fall lower but eventually it will rise like a phoenix from the ashes left behind by those who foolishly attempt to artificially manipulate themselves out of the reality of their transgressions.

In the end, the impossible will have not merely become possible, but reality. The once stable years of recent vintage will be looked upon as the staging grounds before the storm. But through it all, opportunity will knock upon our door and should it go unanswered we will look back and weep. The key to the future lies in understanding the past. The debt crisis of the 1920s and 1930s is quite similar to that of today. How it influenced capital is a lesson which should not be forgotten so easily. It will serve us well to remember what once was, could again someday be.

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